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Tel: +86 532 8896 0859, 8896 3167, 8896 3168
Fax: +86 532 8896 0329
[Http://www.catertools.com](http://www.catertools.com)
Email: sales@catertools.com

Dear Customers,

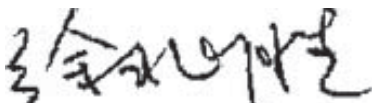
Cater Tools Supply Inc. has more than 20 year experience in the supply of lathes, milling machines, grinding machines, EDM, accessories, cutting tools, precision measuring tools, power tools, woodworking tools, metrology equipments etc. to customers in many countries at very competitive prices. We provide not only good quality products, but also reliable service. We take it as our obligation to help you save time and cost, to make your purchase from us ease.

We keep adding more products to our product line. Visit our website often for new products.

We also provide OEM manufacturing service. In our own factory, we have CNC machining centers, CNC lathes, grinding machines, EDM, milling machines, drilling machines. Our team is able to work you from the prototyping, through sample lot production, to volume production at quantities of the millions.

As always, thank you for your support and your business. Your Comments are always highly appreciated. We continually look for better ways to exceed your expectations.

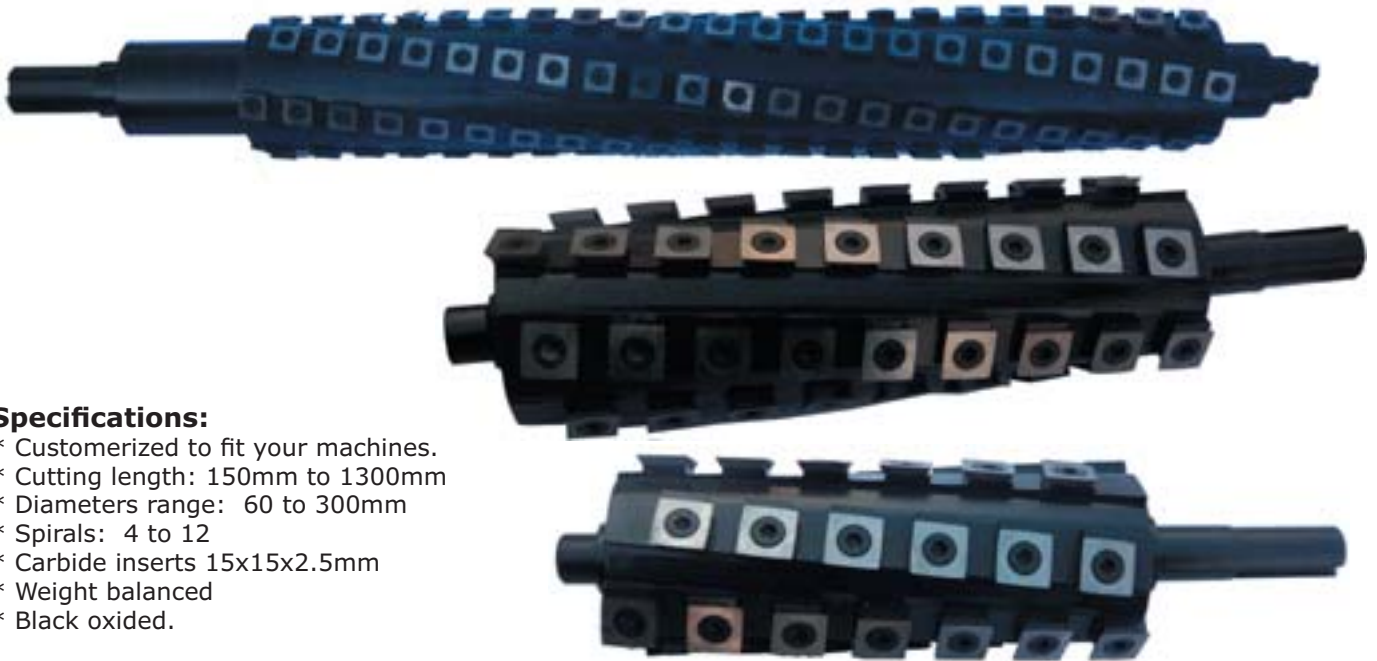
Sincerely,



Mike Xu
President
Cater Tools Supply Inc.
Address: Haier Road, Qingdao,China
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Fax: +86 532 8896 0329
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HELICAL SPIRAL CUTTERHEAD

These true helical spiral cutterheads produce smooth surfaces on the toughest of woods. The unbelievable shear cutting not only greatly reduces the tearout of wood, but also is extremely quiet. The cutterheads produce smaller chips and dust collection is much easier. Replace only the inserts when all four edges are damaged or dull. The carbide inserts are installed onto the cutterheads. Customers' sizes and design are available.



Specifications:

- * Customized to fit your machines.
- * Cutting length: 150mm to 1300mm
- * Diameters range: 60 to 300mm
- * Spirals: 4 to 12
- * Carbide inserts 15x15x2.5mm
- * Weight balanced
- * Black oxidized.

SPIRAL CUTTERHEAD

Features:

- * The cutter heads for for use on wood moulders, shappers or millers.
- * Customers' sizes such as diameters, taper or straight bores, height are available.
- * Shear action cutting
- * Dynamically balanced for smooth running at high speed.
- * Heavy duty cutting and lower horsepower consumption.
- * Minimum noise level, extremely quite.
- * Choice of steel or aluminum alloy cutterhead body.
- * Bore diameter: 30mm to 50mm.
- * Body diameter: 60mm to 125mm.
- * Height: 40mm to 310mm.
- * Sprial: 4 to 12
- * Carbide inserts: 15x15x2.5mm radius



SPIRAL CUTTERHEAD

The cutter heads are made of high grade alloy steel, weight balanced. Carbide inserts with 4 straight edges. Suitable for Single side planer, Double surfaces planer
Customers' sizes such as diameters, taper or straight bores, height are available.

Specifications:

- * Customized to fit your machines.
- * Cutting length: 150mm to 1300mm
- * Diameters range: 60 to 300mm
- * Spirals: 4 to 12
- * Carbide inserts 14x14x2mm.
- * Weight balanced
- * Black oxidized.



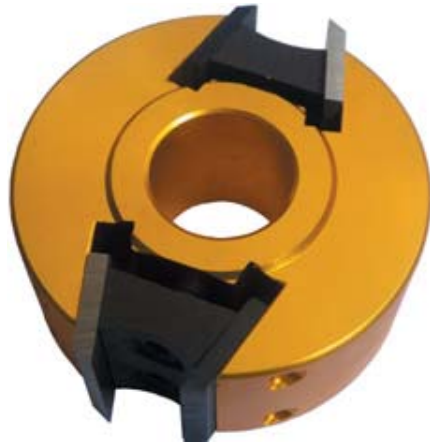
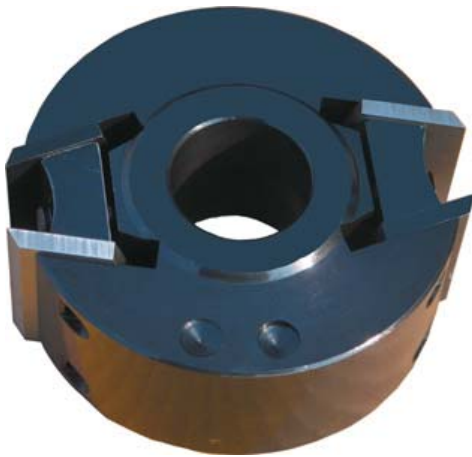
SPIRAL CUTTERHEAD

Features:

- * The cutter heads for use on wood moulders, shappers or millers.
- * Customers' sizes such as diameters, taper or straight bores, height are available.
- * Reduce tearout and leave smooth finish.
- * Less down time.
- * Dynamically balanced for smooth running at high speed.
- * Heavy duty cutting and lower horsepower consumption.
- * Minimum noise level, extremely quite.
- * Choice of steel or aluminum alloy cutterhead body.
- * Bore diameter: 30mm to 50mm.
- * Body diameter: 60mm to 125mm.
- * Height: 40mm to 310mm.
- * Spiral: 4 to 12
- * Carbide inserts 14x14x2mm with four cutting edges.



Universal Profile Cutter Head



Planning Head



Diameter	Bore Dia.	Height	Z	Max. Speed (RPM)	
93	30	40	2	7000-9000	MAN (With limiter)
93	30	50	2	7000-9000	
120	30	40	2	7000-9000	
120	30	50	2	7000-9000	
93	30	40	2	7000-9000	MEC (without limiter)
93	30	50	2	7000-9000	
120	30	40	2	7000-9000	
120	30	50	2	7000-9000	

Customer's sizes are available.

* Kits for Cutter Head, Profile Cutters and Limitors with for 6, 12, 24 and 36, 37 sets.

* knife profile option by the customer's request

D	d	B	Z	Max. RPM
90	30	100	2 or 4	9000
90	30	120	2 or 4	9000
90	30	150	2 or 4	9000
90	30	180	2 or 4	9000
105	30	100	2 or 4	9000
105	30	130	2 or 4	9000
105	30	150	2 or 4	9000
105	30	180	2 or 4	9000
105	30	210	2 or 4	9000
125	40	40	2 or 4	9000
125	40	60	2 or 4	9000
125	40	80	2 or 4	9000
125	40	100	2 or 4	9000
125	40	130	2 or 4	9000
125	40	150	2 or 4	9000
125	40	180	2 or 4	9000
125	40	230	2 or 4	9000
125	40	240	2 or 4	9000
140	50	60	4 or 6	8000
140	50	80	4 or 6	8000
140	50	100	4 or 6	8000
140	50	130	4 or 6	8000
140	50	180	4 or 6	8000
140	50	230	4 or 6	8000
160	50	60	6 or 8	8000
160	50	80	6 or 8	8000
160	50	100	6 or 8	8000
160	50	130	6 or 8	8000
160	50	180	6 or 8	8000
160	50	230	6 or 8	8000

Woodworking



Order No. 1002000
40MM width 4mm Thickness



Order No. 1002001
40MM width 4mm Thickness



Order No. 1002002
40MM width 4mm Thickness



Order No. 1002003
40MM width 4mm Thickness



Order No. 1002004
40MM width 4mm Thickness



Order No. 1002005
40MM width 4mm Thickness



Order No. 1002006
40MM width 4mm Thickness



Order No. 1002007
40MM width 4mm Thickness



Order No. 1002008
40MM width 4mm Thickness



Order No. 1002009
40MM width 4mm Thickness



Order No. 1002010
40MM width 4mm Thickness



Order No. 1002011
40MM width 4mm Thickness



Order No. 1002012
40MM width 4mm Thickness



Order No. 1002013
40MM width 4mm Thickness



Order No. 1002014
40MM width 4mm Thickness



Order No. 1002015
40MM width 4mm Thickness



Order No. 1002016
40MM width 4mm Thickness



Order No. 1002017
40MM width 4mm Thickness



Order No. 1002018
40MM width 4mm Thickness



Order No. 1002019
40MM width 4mm Thickness



Order No. 1002020
40MM width 4mm Thickness



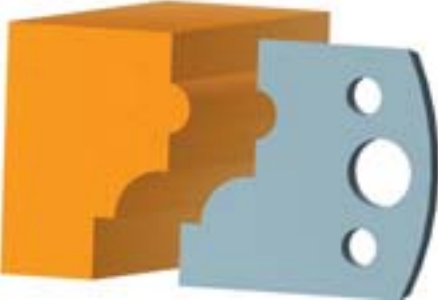
Order No. 1002021 40MM
width 4mm Thickness



Order No. 1002022
40MM width 4mm Thickness



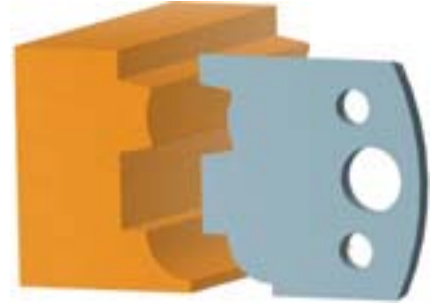
Order No. 1002023
40MM width 4mm Thickness



Order No. 1002024
40MM width 4mm Thickness



Order No. 1002025
40MM width 4mm Thickness



Order No. 1002026
40MM width 4mm Thickness



Order No. 1002027
40MM width 4mm Thickness



Order No. 1002028
40MM width 4mm Thickness



Order No. 1002029
40MM width 4mm Thickness



Order No. 1002045
40MM width 4mm Thickness



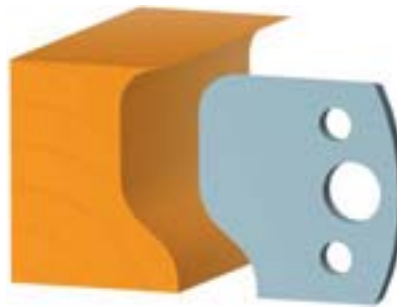
Order No. 1002046
40MM width 4mm Thickness



Order No. 1002047
40MM width 4mm Thickness



Order No. 1002048
40MM width 4mm Thickness



Order No. 1002049
40MM width 4mm Thickness



Order No. 1002050
40MM width 4mm Thickness



Order No. 1002051
40MM width 4mm Thickness



Order No. 1002052
40MM width 4mm Thickness



Order No. 1002053
40MM width 4mm Thickness



Order No. 1002054
40MM width 4mm Thickness



Order No. 1002055
40MM width 4mm Thickness



Order No. 1002056
40MM width 4mm Thickness



Order No. 1002057
40MM width 4mm Thickness



Order No. 1002058
40MM width 4mm Thickness



Order No. 1002059
40MM width 4mm Thickness

Woodworking



Order No. 1002060
40MM width 4mm Thickness



Order No. 1002061
40MM width 4mm Thickness



Order No. 1002062
40MM width 4mm Thickness



Order No. 1002063
40MM width 4mm Thickness



Order No. 1002064
40MM width 4mm Thickness



Order No. 1002065 40MM
width 4mm Thickness



Order No. 1002066 4
40MM width 4mm Thickness



Order No. 1002067
40MM width 4mm Thickness



Order No. 1002068
40MM width 4mm Thickness



Order No. 1002069
40MM width 4mm Thickness



Order No. 1002070
40MM width 4mm Thickness



Order No. 1002071
40MM width 4mm Thickness



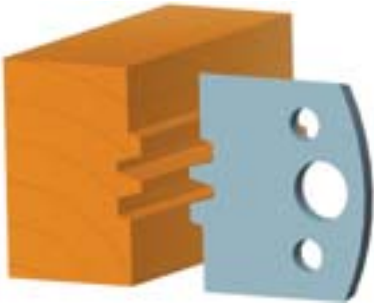
Order No. 1002072
40MM width 4mm Thickness



Order No. 1002073
40MM width 4mm Thickness



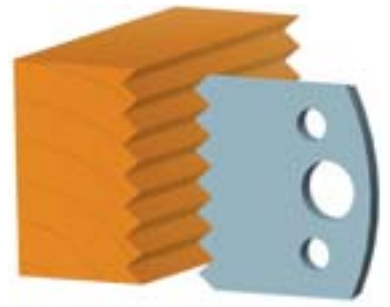
Order No. 1002074
40MM width 4mm Thickness



Order No. 1002075
40MM width 4mm Thickness



Order No. 1002076
40MM width 4mm Thickness



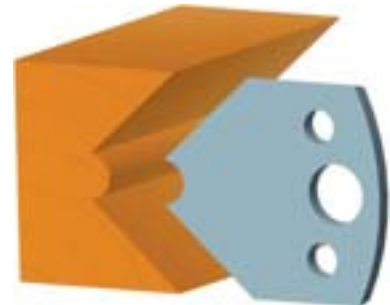
Order No. 1002077
40MM width 4mm Thickness



Order No. 1002078
40MM width 4mm Thickness



Order No. 1002079
40MM width 4mm Thickness



Order No. 1002080
40MM width 4mm Thickness



Order No. 1002081 40mm
Order No. 1002281 50mm



Order No. 1002082 40mm
Order No. 1002282 50mm



Order No. 1002083 40mm
Order No. 1002283 50mm



Order No. 1002084
40mm width 4mm Thickness



Order No. 1002085
40mm width 4mm Thickness



Order No. 1002086
40mm width 4mm Thickness



Order No. 1002087
40mm width 4mm Thickness



Order No. 1002088
40mm width 4mm Thickness



Order No. 1002089
40mm width 4mm Thickness

Woodworking



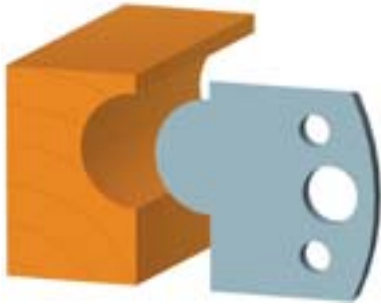
Order No. 1002090
40mm width 4mm Thicknes



Order No. 1002091
40mm width 4mm Thicknes



Order No. 1002092
40mm width 4mm Thicknes



Order No. 1002093
40mm width 4mm Thicknes



Order No. 1002094
40mm width 4mm Thicknes



Order No. 1002095
40mm width 4mm Thicknes



Order No. 1002096
40mm width 4mm Thicknes



Order No. 1002097
40mm width 4mm Thicknes



Order No. 1002098
40mm width 4mm Thicknes



Order No. 1002099
40mm width 4mm Thicknes



Order No. 1002100
40mm width 4mm Thicknes



Order No. 1002101
40mm width 4mm Thicknes



Order No. 1002102
40mm width 4mm Thicknes



Order No. 1002103
40mm width 4mm Thicknes



Order No. 1002104
40mm width 4mm Thicknes



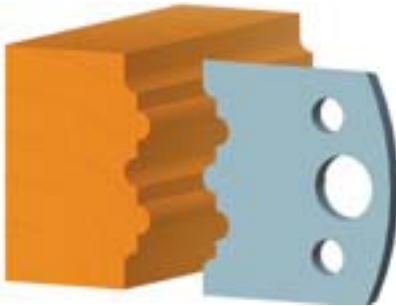
Order No. 1002105
40mm width 4mm Thicknes



Order No. 1002106
40mm width 4mm Thicknes



Order No. 1002107
40mm width 4mm Thicknes



Order No. 1002108
40mm width 4mm Thicknes



Order No. 1002109
40mm width 4mm Thicknes



Order No. 1002110
40mm width 4mm Thicknes



Order No. 1002111
40mm width 4mm Thicknes



Order No. 1002112
40mm width 4mm Thicknes



Order No. 1002113
40mm width 4mm Thicknes



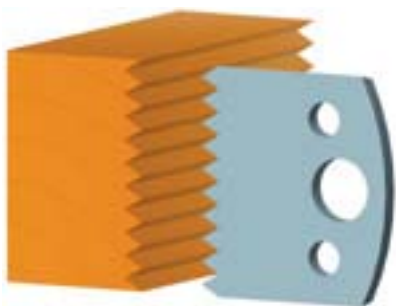
Order No. 1002114
40mm width 4mm Thicknes



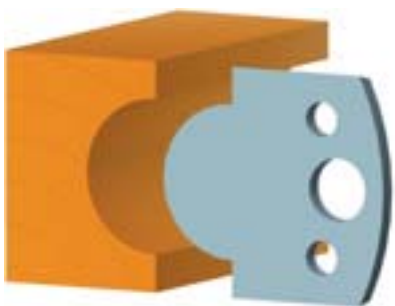
Order No. 1002115
40mm width 4mm Thicknes



Order No. 1002116
40mm width 4mm Thicknes



Order No. 1002117
40mm width 4mm Thicknes



Order No. 1002118
40mm width 4mm Thicknes



Order No. 1002119
40mm width 4mm Thicknes



Order No. 1002120
40mm width 4mm Thicknes



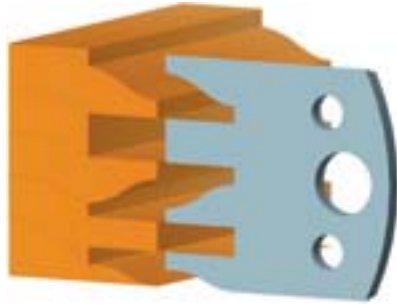
Order No. 1002121
40mm width 4mm Thicknes



Order No. 1002122
40mm width 4mm Thicknes



Order No. 1002123
40mm width 4mm Thicknes



Order No. 1002124
40mm width 4mm Thicknes



Order No. 1002125
40mm width 4mm Thicknes



Order No. 1002126
40mm width 4mm Thicknes



Order No. 1002127
40mm width 4mm Thicknes



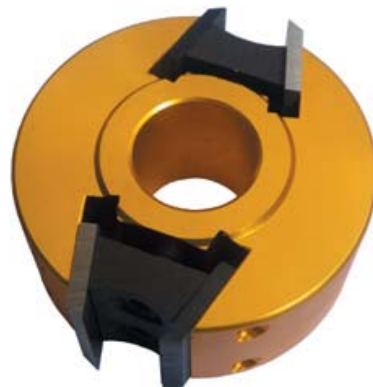
Order No. 1002128
40mm width 4mm Thicknes



Order No. 1002129
40mm width 4mm Thicknes

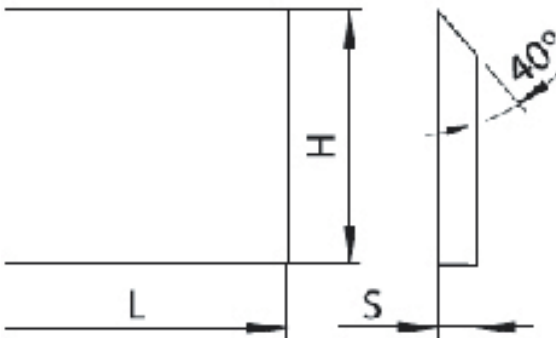
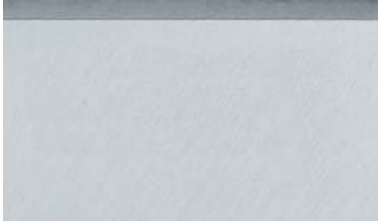
Universal Cutterhead Kits

- * One aluminium or steel cutterhead
- * One allen wrench
- * One fitted case
- * 6, 12, 24, 36, 37 sets
- * 130 profiles at customer's choice.



Planer Knives

- * For wood planer and thicknessers.
- * High speed steel, M2
- * size in imperial sizes are available.
- * Hardend to HRC 58 to 64.
- * Customized sizes are available.

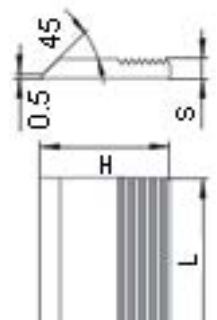


LxHxS (mm)			
100x35x3.0	100x30x3.0	100x25x3.0	100x20x3.0
120x35x3.0	120x30x3.0	120x25x3.0	120x20x3.0
130x35x3.0	130x30x3.0	130x25x3.0	130x20x3.0
150x35x3.0	150x30x3.0	150x25x3.0	150x20x3.0
180x35x3.0	180x30x3.0	180x25x3.0	180x20x3.0
210x35x3.0	210x30x3.0	210x25x3.0	210x20x3.0
240x35x3.0	240x30x3.0	240x25x3.0	240x20x3.0
260x35x3.0	260x30x3.0	260x25x3.0	260x20x3.0
310x35x3.0	310x30x3.0	310x25x3.0	310x20x3.0
400x35x3.0	400x30x3.0	400x25x3.0	400x20x3.0
410x35x3.0	410x30x3.0	410x25x3.0	410x20x3.0
450x35x3.0	450x30x3.0	450x25x3.0	450x20x3.0
500x35x3.0	500x30x3.0	500x25x3.0	500x20x3.0
510x35x3.0	510x30x3.0	510x25x3.0	510x20x3.0
530x35x3.0	530x30x3.0	530x25x3.0	530x20x3.0
610x35x3.0	610x30x3.0	610x25x3.0	610x20x3.0
640x35x3.0	640x30x3.0	640x25x3.0	640x20x3.0
710x35x3.0	710x30x3.0	710x25x3.0	710x20x3.0
810x35x3.0	810x30x3.0	810x25x3.0	810x20x3.0
910x35x3.0	910x30x3.0	910x25x3.0	910x20x3.0
1000x35x3.0	1000x30x3.0	1000x25x3.0	
1010x35x3.0	1010x30x3.0	1010x25x3.0	
1050x35x3.0	1050x30x3.0	1050x25x3.0	
1220x35x3.0	1220x30x3.0	1220x25x3.0	

- * High speed steel.
- * For wood shapers, profile cutting millers, planers and thicknessers.
- * Serrated back knives in metric and inch sizes
- * Hardened to 58 to 63 HRC.
- * 60° or 90° serration.
- * Standard 45°cutting angle
- * Customized sizes, angles, hardness available.

Serrated Back Knives

LxHxS (mm)								
30x50x8	30x60x8	30x40x8	30x80x8	30x40x6	30x50x6	30x60x6	30x30x4	30x40x4
40x50x8	40x60x8	40x40x8	40x80x8	40x40x6	40x50x6	40x60x6	40x30x4	40x40x4
50x50x8	50x60x8	50x40x8	50x80x8	50x40x6	50x50x6	50x60x6	50x30x4	50x40x4
60x50x8	60x60x8	60x40x8	60x80x8	60x40x6	60x50x6	60x60x6	60x30x4	60x40x4
70x50x8	70x60x8	70x70x8	70x80x8	70x40x6	70x50x6	70x60x6	70x30x4	70x40x4
80x50x8	80x60x8	80x70x8	80x80x8	80x40x6	80x50x6	80x60x6	80x30x4	80x40x4
100x50x8	100x60x8	100x70x8	100x80x8	100x40x6	100x50x6	100x60x6	100x30x4	100x40x4
130x50x8	130x60x8	130x70x8	130x80x8	130x40x6	130x50x6	130x60x6	130x30x4	130x40x4
150x50x8	150x60x8	150x70x8	150x80x8	150x40x6	150x50x6	150x60x6	150x30x4	150x40x4
180x50x8	180x60x8	180x70x8	180x80x8	180x40x6	180x50x6	180x60x6	180x30x4	180x40x4
210x50x8	210x60x8	210x70x8	210x80x8	210x40x6	210x50x6	210x60x6	210x30x4	210x40x4
230x50x8	230x60x8	230x70x8	230x80x8	230x40x6	230x50x6	230x60x6	230x30x4	230x40x4
260x50x8	260x60x8	260x70x8	260x80x8	260x40x6	260x50x6	260x60x6	260x30x4	260x40x4
500x50x8	500x60x8	500x70x8	500x80x8	500x40x6	500x50x6	500x60x6	500x30x4	500x40x4
600x50x8	600x60x8	600x70x8	600x80x8	600x40x6	600x50x6	600x60x6	600x30x4	600x40x4
635x50x8	635x60x8	635x70x8	635x80x8	635x40x6	635x50x6	635x60x6	635x30x4	635x40x4
650x50x8	650x60x8	650x70x8	650x80x8	650x40x6	650x50x6	650x60x6	650x30x4	650x40x4

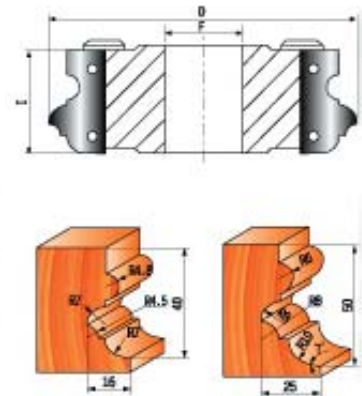


Cutter Head with Changeable Knives

Order No.	D	I	F	Z	n/min-1
803-0015	120	40	30	2	6400-10000
803-0016	160	50	30	2	4800-8000

REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0701	40×25×2
803-0702	50×27×2



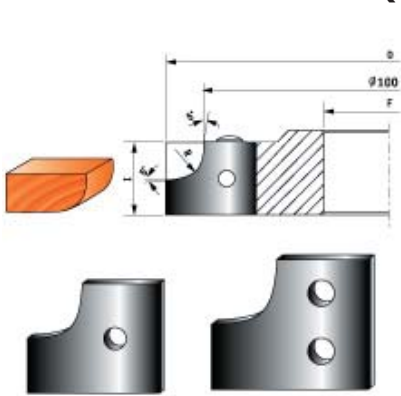
Cutter Head with Changeable Knives



Order No.	D	I	F	R	Z	n/min-1
803-0017	120	20	35	3-4-5-6-8-10	2	5800-9000
803-0018	140	30	35	12-15-18-20	2	5000-8000

Order No.	D	I	F	Z/V	n/min-1
803-0031	100	40	30	2/2+2	7600-12000
803-0032	100	50	30	2/2+2	7600-12000
803-0033	125	50	35	2/2+2	6100-10300
803-0034	125	50	35	4/2+2	6100-10300

REVERSIBLE KNIVES(HW)



Order No.	SIZE(mm)
803-0703	20×24×2×R3
803-0704	20×24×2×R4
803-0705	20×24×2×R5
803-0706	20×24×2×R6
803-0707	20×24×2×R8
803-0708	20×24×2×R10
803-0709	20×34×2×R12
803-0710	20×34×2×R15
803-0711	20×34×2×R18
803-0712	20×34×2×R20



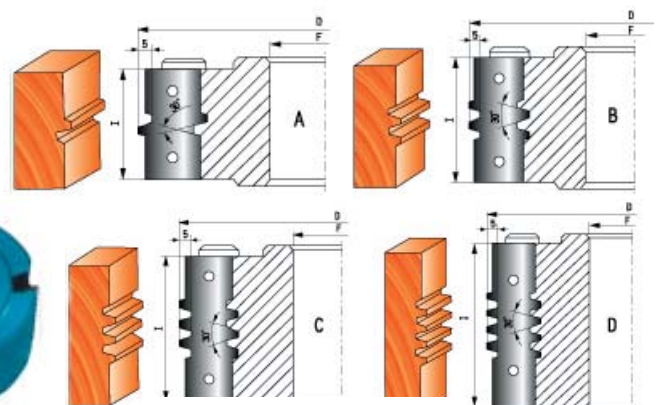
REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0728	12×40×1.5
803-0734	14×50×1.5
803-0783	14×14×2.0



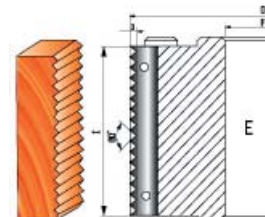
Cutter Head with Changeable Knives

Order No.	D	I	F	Type	Z	n/min-1
803-0022	135	40	35	A	2	6000-9500
803-0023	135	50	35	B	2	6000-9500
803-0024	135	60	35	C	2	6000-9500
803-0025	135	80	35	D	2	6000-9500
803-0026	130	80	35	E	2	6000-9500



REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0721	25×40×2-N1
803-0722	25×50×2-N2
803-0723	25×60×2-N3
803-0724	25×80×2-N4
803-0725	13×80×2.2



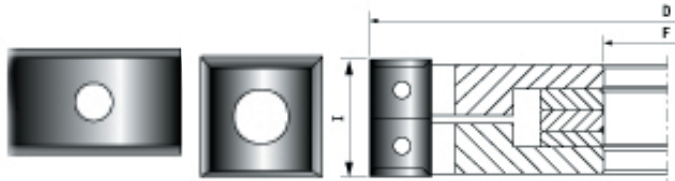
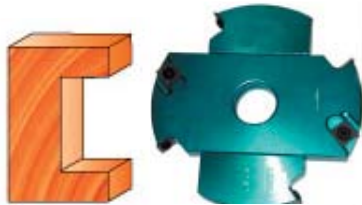
Cutter Head with Changeable Knives

Order No.	D	I	F	Z/V	n/min-1
803-0027	140	14/28	30	2+2/2+2	5000-8000
803-0028	150	14/28	30	2+2/2+2	5000-8000
803-0029	150	20/39	30	2+2/2+2	5000-8000
803-0030	170	20/39	30	2+2/2+2	5000-8000

Order No.	D	I	F	Z/V	n/min-1
803-0035	125	50	35	4/2+2	6000-11000
803-0036	125	60	35	4/2+2	6000-11000
803-0037	150	50	35	4/2+2	5500-10000
803-0038	150	60	35	4/2+2	5500-10000

REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0726	12×20×1.5
803-0783	14×14×2.0



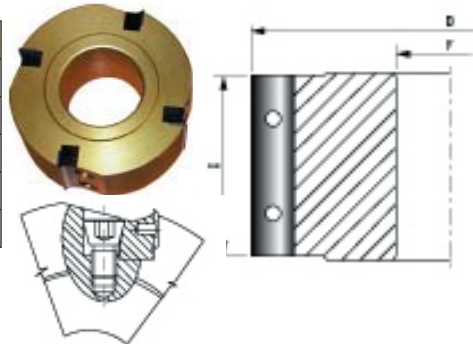
REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0729	12×50×1.5R
803-0730	12×50×1.5L
803-0731	12×60×1.5R
803-0732	12×60×1.5L
803-0783	14×14×2.0



Cutter Head with Changeable Knives

Order No.	D	I	F	Z	n/min-1
803-0039	100	50	30	4	7000-11000
803-0040	110	50	30	4	7000-11000
803-0041	115	50	35	4	6000-9500
803-0042	125	50	50	4	6000-9000
803-0043	125	60	50	4	6000-9000



REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0734	12×50×1.5
803-0733	12×60×1.5



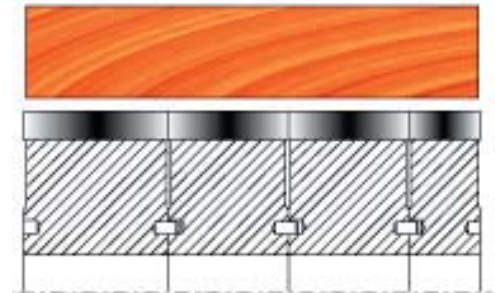
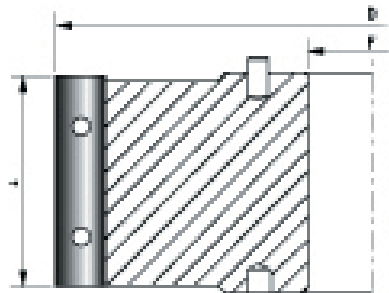
Cutter Head with Changeable Knives

Order No.	D	I	F	Z	n/min-1
803-0044	125	30	35	4	7000-11000
803-0045	125	40	35	4	7000-11000
803-0046	125	50	35	4	6000-9500
803-0047	125	60	35	4	6000-9000
803-0048	150	50	50	4	6000-9000
803-0049	150	60	50	4	6000-9000

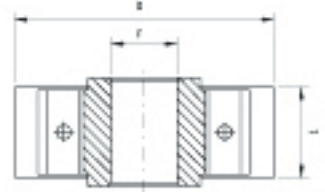
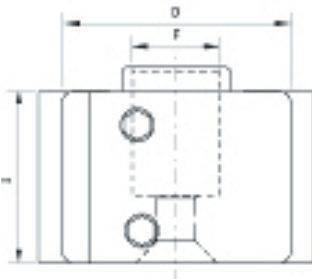
REVERSIBLE KNIVES(HW)



Order No.	SIZE(HW)
803-0784	12×30×1.5
803-0728	12×40×1.5
803-0734	12×50×1.5
803-0733	12×60×1.5



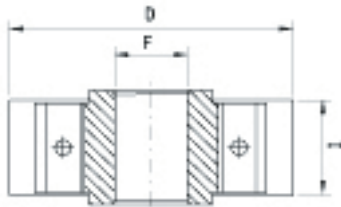
Cutter Head with Changeable Knives



Order No.	D	I	F	Z	n/min-1
803-0000	53	40	20	2	7000-9000

Order No.	D	I	F	Z	n/min-1
803-0001	78	40	30	2	7000-9000
803-0002	100	40-50	30	2	5800-9000
803-0003	100	40-50	35	2	5800-9000
803-0004	120	40-50	50	2	5100-9000

Cutter Head with Changeable Knives

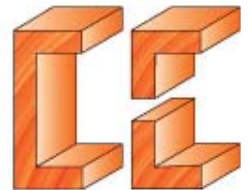
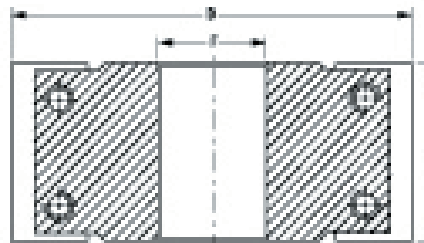


Order No.	D	I	F	Z	n/min-1
803-0005	78	40	30	2	7000-9000
803-0006	100	40-50	30	2	5800-9000
803-0007	100	40-50	35	2	5800-9000
803-0008	120	40-50	50	2	5100-9000

Order No.	D	I	F	Z/V	n/min-1
803-0009	90	40	30	2/1+1	7000-11000
803-0010	100	40	30	2/1+1	7000-11000
803-0011	120	40	50	2/1+1	7000-11000
803-0012	90	50	30	2/1+1	7000-11000
803-0013	100	50	30	2/1+1	7000-11000
803-0014	120	50	30	2/1+1	7000-11000

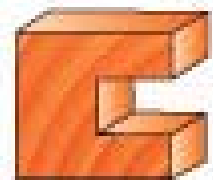
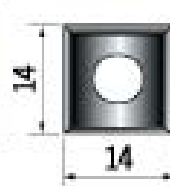
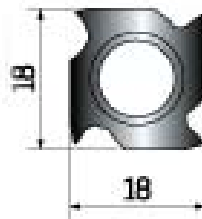
REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0728	12x40x1.5
803-0734	12x50x1.5
803-0783	14x14x2.0



Cutter Head with Changeable Knives

Order No.	D	I	F	Z/V	n/min-1
803-0110	150	4-7.5	35	8/4	5000-8300
803-0111	150	8-16	35	4/4	5000-8300
803-0112	150	12-24	35	4/4	5000-8300
803-0113	160	4-7.5	35	8/4	5000-8300
803-0114	160	8-16	35	4/4	5000-8300
803-0115	160	12-24	35	4/4	5000-8300
803-0116	180	4-7.5	35	8/4	4200-7800
803-0117	180	8-16	35	4/4	4200-7800
803-0118	180	12-24	35	4/4	4200-7800
803-0119	200	8-16	40	4/4	4200-7800
803-0120	200	12-24	40	4/4	4200-7800

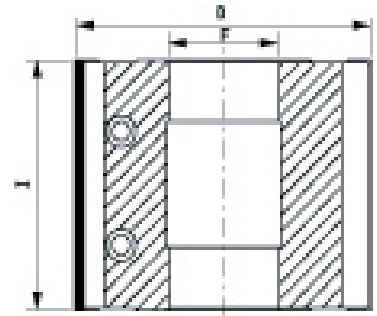


REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0771	18x18x1.95
803-0783	14x14x2.0
803-0774	12x08x1.5
803-0776	12x12x1.5

Cutter Head with Changeable Knives

Order No.	D	I	F	Z	n/min-1
803-0052	95	40	35	4	800-15000
803-0053	95	60	35	4	800-15000
803-0054	95	80	35	4	800-15000
803-0055	95	100	35	4	800-15000
803-0056	95	120	35	4	800-15000
803-0057	125	40	35	4	7500-13000
803-0058	125	60	35	4	7500-13000
803-0059	125	80	35	4	7500-13000
803-0060	125	100	35	4	7500-13000
803-0061	125	120	35	4	7500-13000

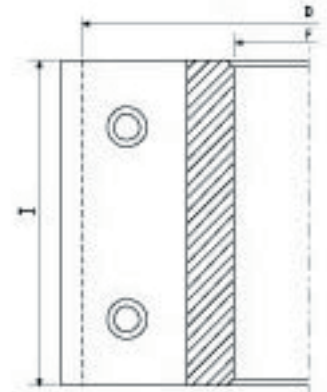
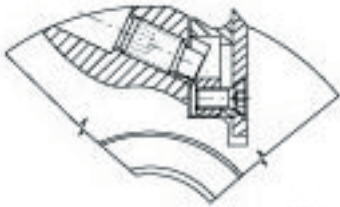


REVERSIBLE KNIVES(HW)

Order No.	SIZE(mm)
803-0735	8×40×1.5
803-0736	8×60×1.5
803-0737	8×80×1.5
803-0738	8×100×1.5
803-0739	8×120×1.5



PLANING CUTTER HEAD



Order No.	D	I	F	Z	n/min-1
803-0888	125	40	40	4	4200-7200
803-0889	125	60	40	4	4200-7200
803-0890	125	80	40	4	4200-7200
803-0891	125	100	40	4	4200-7200
803-0892	125	120	40	4	4200-7200
803-0893	125	130	40	4	4200-7200
803-0894	125	150	40	4	4200-7200
803-0895	125	160	40	4	4200-7200
803-0896	125	180	40	4	4200-7200
803-0897	125	200	40	4	4200-7200
803-0898	125	230	40	4	4200-7200
803-0899	150	40	40	6	4200-7200
803-0900	150	60	40	6	4200-7200
803-0901	150	80	40	6	4200-7200
803-0902	150	100	40	6	4200-7200
803-0903	150	120	40	6	4200-7200
803-0904	150	130	40	6	4200-7200
803-0905	150	150	40	6	4200-7200
803-0906	150	160	40	6	4200-7200
803-0907	150	180	40	6	4200-7200
803-0908	150	200	40	6	4200-7200
803-0909	150	230	40	6	4200-7200

REVERSIBLE KNIVES(HW)

L	W	T	Order No.
40	32	3.2	803-1575
60	32	3.2	803-1576
80	32	3.2	803-1577
100	32	3.2	803-1578
120	32	3.2	803-1579
130	32	3.2	803-1580
150	32	3.2	803-1581
160	32	3.2	803-1582
180	32	3.2	803-1583
200	32	3.2	803-1584
230	32	3.2	803-1585



Wooden Work Bench

Specifications

Overall Dimension: 126x61x84CM
Packing Size: 132x53x17CM
Gross Weight: 29KG
Net Weight: 26KG
Container Qty: 500PCS/40FT, 250PCS/20FT
Material: GERMANY BEECH
Packing Inner packing: 1parts/epe;air cushion film.
Outer packing: in carton.

Order No.700-0050



Wooden Work Bench

Specifications

Overall Dimension: 152x62x85CM
Packing Size: 143x53x15CM
Gross Weight: 35KG
Net Weight: 32KG
Container Qty: 532PCS/40FT, 256PCS/20FT
Material: GERMANY BEECH
Packing Inner packing: 1parts/epe;air cushion film.
Outer packing: in carton.

Order No.700-0051



Wooden Work Bench

Specifications

Overall Dimension: 126x61x84CM
Packing Size: 132x53x23CM
Gross Weight: 60KG
Net Weight: 56KG
Container Qty: 360PCS/40FT, 175PCS/20FT
Material: GERMANY BEECH
Packing Inner packing: 1parts/epe;air cushion film.
Outer packing: in carton.

Order No.700-0052



Wooden Work Bench

Specifications

Overall Dimension: 210x78x81.5CM
Packing Size: 215x67x21CM
Net Weight: 68KG
Gross Weight: 76KG
Container Qty: 168PCS/40FT, 84PCS/20FT
Material: Germany Beech
Packing Inner packing: 1parts/epe;air cushion film.
Outer packing: in carton.

Order No.700-0053



Wooden Work Bench

Specifications

Overall Dimension: 163x163x81.5CM
Packing Size: 167x135x22CM
Net Weight: 102KG
Gross Weight: 110KG
Container load: 112PCS/40FT; 52PCS/20FT
Material: Germany Beech
Packing Inner packing: 1parts/epe;air cushion film.
Outer packing: in carton.

Order No.700-0054



Wooden Work Bench

Specifications

Overall Dimension: 183x115x81.5CM
Packing Size: 186x85x23CM
Net Weight: 78KG
Gross Weight: 85KG
Container Qty: 130PCS/40' GP;65PCS/20' GP
Material: Germany Beech
Packing Inner packing: 1parts/epe;air cushion film.
Outer packing: in carton.

Order No.700-0055



Wooden Work Bench

Specifications

Overall Dimension: 210x78x81.5CM
Packing Size: 216x67x25CM
Net Weight: 127KG
Gross Weight: 135KG
Container Qty: 156PCS/40' GP;75PCS/20' GP
Material: Germany Beech
Packing Inner packing: 1parts/epe,air cushion film.
Outer packing: in carton.

Order No.700-0056



Wooden Work Bench

Specifications

Overall Dimension: 160x60x86CM
Packing Size: 170x52x21CM
Net Weight: 58KG
Gross Weight: 64KG
Container Qty: 280PCS/40' GP;140PCS/20' GP
Material: Germany Beech
Packing Inner packing: 1parts/epe;air cushion film.
Outer packing: in carton.

Order No.700-0057

Foldable Work Bench

Specifications

- * Germany Beech
- * Overall Dimension: 123x77x120CM (Before folding)
123x24x120CM (After folding):
- * Shipping size: 125x116x25CM
- * Net Weight: 47KG
- * Gross Weight: 53KG
- * 20FT Container Load: 78PCS/20' GP

Order No.700-0058



Jewelry Work Bench

- * Pine Wood
- * Overall dimension: L99xW49.5xH96CM
- * Shipping Size: L102xW52xH21CM, L60xW47xH21CM
- * Net Weight: 34KG
- * Gross Weight: 37KG
- * Container Load: 350PCS/40'GP, 160PCS/20'GP
- * Inner packing: 1parts/epe, air cushion film.
- * Outer packing: in carton.

Order No.700-0063



Jewelry Stand



* German Beech.

Order No.700-0065

Jewelry Pallet



* Beech wood paper

Order No.700-0067

Wood Jointer

Features:

- * Precision ground cast iron table easily adjustable by the handwheel.
- * Safety cutterhead guard pivots out of the way of work during operation.
- * Fence is attached in the front of the infeed table.
- * TEFC motor.
- * Closed ladder-shaped stand with four rubber feet.
- * Three HSS blades fitted right in with cutterhead.



Optional spiral cutterhead

Order No.	800-0041	800-0067	800-0071	800-0085
Maximum width of cut	102mm	152mm	175mm	200mm
Motor Input Power	3/4HP	1HP	1hp	2hp
Cutterhead speed	4400rpm/50HZ or 5200rpm/60HZ.	4400rpm/50HZ or 5200rpm/61HZ.	4400rpm/50HZ or 5200rpm/62HZ.	4400rpm/50HZ or 5200rpm/63HZ.
Number of Knives	3	3	3	3
Cutterhead Diameter	61mm	61mm	61mm	65mm
Table size	900mmx130mm	1030mmx180mm	1080x210mm	1340mmx230mm
Maximum depth of cut	3.175mm	3.175mm	3.175mm	3.175mm
Rabbeting capacity	12.7mm	12.7mm	12.7mm	10mm
Fence Size	630mmx78mm	875x98mm	875x98mm	875x98mm
Fence Tilt	45°in and out	45°in and out	45°in and out	45°in and out
Cutting Width	102mm	152mm	175mm	200mm
Max. Cutting Depth	3.175mm	3.175mm	3.175mm	3.175mm
Reabbeting	12.7mm	12.7mm	12.7mm	10mm
Net Weight	65kg	83.8kg	98kg	130kg
Shipping Weight	70kg	90kg	105kg	146kg
20FT container load	260pcs	198pcs	160pcs	90pcs

Wood Jointer 6"

Features:

- * Precision ground cast iron table.
- * Precision gib adjustment on dovetailed ways.
- * Cabinet stand with built-in Chip chute.
- * Handwheels for convenient table adjustment.
- * Spring loaded front and rear blade guard for operator protection.

Specifications:

Motor: 1HP, 110/220V with paddle switch.
 Cutterhead: 4400 rpm 50HZ or 5200 rpm 60HZ.
 Number of Knives: 3
 Cutterhead Diameter: 61mm
 Table size: 1215mmx184mm
 Maximum depth of cut: 3.175mm
 Maximum width of cut: 152mm
 Rabbeting capacity: 12.7mm
 Fence: 708mmx98mm with positive stops
 at +/-45° and 90°
 Shipping Weight: 85kg (jointer); 31kg (stand)
 20FT container load: 140pcs



Optional spiral cutterhead



Order NO. 800-0063

Wood Jointer 6"

Features:

- * Precision ground cast iron table.
- * Precision gib adjustment on dovetailed ways.
- * Closed stand with four rubber feet.
- * Handwheels for convenient table adjustment.
- * Spring loaded front and rear blade guard for operator protection.

Specifications:

Motor: 1HP, 110/220V with paddle switch.
 Cutterhead: 4400 rpm 50HZ or 5200 rpm 60HZ.
 Number of Knives: 3
 Cutterhead Diameter: 61mm
 Table size: 1215mmx184mm
 Maximum depth of cut: 3.175mm
 Maximum width of cut: 152mm
 Rabbeting capacity: 12.7mm
 Fence: 708mmx98mm with positive stops at +/-45° and 90 °
 Shipping Weight: 118kg
 20FT container load: 140pcs



Optional spiral cutterhead



Order NO. 800-0064

Wood Jointer 6"

Features:

- * Precision ground cast iron table.
- * Totally enclosed fan colled motor.
- * Standard 4" Chip chute.
- * Adjustment dials under both tables for accurate and easy adjusment.

Specifications:

Motor: 1HP, 110/220V with paddle switch.
 Cutterhead: 4400 rpm 50HZ or 5200 rpm 60HZ.
 Number of Knives: 3
 Cutterhead Diameter: 61mm
 Table size: 1168mmx184mm
 Maximum depth of cut: 3.175mm
 Maximum width of cut: 152mm
 Rabbeting capacity: 12.7mm
 Fence: 708mmx98mm with positive stops at +/-45° and 90°
 Shipping Weight: 104kg (jointer)
 20FT container load: 160pcs



Optional spiral cutterhead



Order NO. 800-0065

Wood Jointer 6"

Features:

- * Precision ground cast iron table.
- * Precision gib adjustment on dovetailed ways.
- * Cabinet stand with built-in Chip chute.
- * Handwheels for convenient table adjustment.
- * Spring loaded front and rear blade guard for operator protection.



Optional spiral cutterhead



Specifications:

- * Motor: 1HP, 110/220V
- * Cutterhead: 4400 rpm 50HZ or 5200 rpm 60HZ.
- * Number of Knives: 3
- * Cutterhead Diameter: 61mm
- * Table size: 1415mmx184mm
- * Maximum depth of cut: 3.175mm
- * Maximum width of cut: 152mm
- * Rabbeting capacity: 12.7mm
- * Fence: 708mmx98mm with positive stops at +/-45° and 90 °
- * Shipping Weight: 97kg (jointer); 33kg (stand)
- * 20FT container load: 130pcs

Order No. 800-0061

Wood Jointer 6"

- * Totally enclosed fan cooled motor for long life.
- * Center mounted fence positively stops at 90° and 45° in and out.
- * Twin adjustable dials under table.
- * Tables are rabbetted ledged.
- * Built-in dust collection hoop-up.

Specifications:

- * Motor: 1HP, 110/220V
- * Cutterhead: 4400 rpm 50HZ or 5200 rpm 60HZ.
- * Number of Knives: 3
- * Cutterhead Diameter: 61mm
- * Table size: 1168mmx184mm
- * Maximum depth of cut: 3.175mm
- * Maximum width of cut: 152mm
- * Rabbeting capacity: 12.7mm
- * Fence: 708mmx98mm with positive stops at +/-45° and 90 °
- * Shipping Weight: 104kg
- * Machine weight: 97.7kg
- * Shipping size: 122x48x28cm
- * 20FT container load: 160pcs



Order No. 800-0069

Wood Jointer 6"

Features:

- * Portable wood jointer with series mc
- * Precision moulded plastic base.
- * Die aluminium casting table.
- * Push block for easy work.
- * Light weight.

Specifications:

- * Motor input power: 1.5HP
- * Table size: 710mmx155mm
- * Cutterhead: 8000-16000rpm
- * Number of Knives: 2
- * Cutterhead Diameter: 52mm
- * Table size: 498x67mm
- * Tilt: 45° out.
- * Maximum depth of cut: 3.175mm
- * Maximum width of cut: 155mm
- * Weight: 13/15kg
- * Shipping Size: 78x35x33cm.
- * 20FT container load: 340pcs

Order NO. 800-0070

Wood Jointer 8"



Fence Adjust Device



Optional spiral cutterheads

Feed handwheel with lock device



Optional HSS blade (3)

Features:

- * Precision ground cast iron table.
- * Fully 8" wide cutting capacity.
- * Enclosed steel stand with a 2HP TEFC motor.
- * Extra large center-mounted cast iron fence provides max. work support.
- * Precision gib adjustment on dovetailed ways.
- * Three-knife cutterhead rapidly cuts to produce superior finish.
- * Infeed and outfeed tables are easily adjusted by a handwheel with a convenient locking bar.

Order NO. 800-0083

Specifications:

- Motor: 2HP, 110/220V.
- Cutterhead: 4800 rpm 50HZ or 5900 rpm 60HZ.
- Number of Knives: 3
- Cutterhead Diameter: 75mm
- Table size: 1800mmx230mm
- Maximum depth of cut: 3.175mm
- Maximum width of cut: 200mm
- Rabbeting capacity: 12.7mm
- Fence: 1010mmx120mm with positive stops at -45° in and out.
- Shipping Weight: 158kg (jointer), 50kg (stand)
- Shipping size: 185x43x305cm (Plywood)
- Stand: 66x46x61cm (carton)
- 20FT container load: 70pcs

Wood Jointer 12"



Optional spiral cutterhead

Order No.	800-0121	800-0122
Maximum width of cut	305mm	305mm
Motor Input Power	3HP	3HP
Cutterhead speed	4600rpm/50HZ or 5500rpm/60HZ.	
Number of Knives	3	3
Cutterhead Diameter	98mm	98mm
Table size	2250mmx320mm	1830mmx320mm
Maximum depth of cut	3.175mm	3.175mm
Rabbeting capacity	12.7mm	12.7mm
Fence Size	1050mmx105mm	1050mmx105mm
Fence Tilt	45° in and out	45° in and out
Max. Cutting Depth	3.175mm	3.175mm
Reabbeting	16mm	16mm
Net Weight	390kg	347kg
Shipping Weight	450kg	393kg
Shipping Size	230x61x91cm	190x61x91cm
20FT container load	16pcs	16pcs

Wood Jointer 8"

Features:

- * Precision ground cast iron table.
- * Fully 8" wide cutting capacity.
- * Enclosed steel stand with a 2HP TEFC motor.
- * Extra large center-mounted cast iron fence provides max. work support.
- * Precision gib adjustment on dovetailed ways.
- * Three-knife cutterhead rapidly cuts to produce superior finish.
- * Infeed and outfeed tables are easily adjusted by a handwheel with a convenient locking bar.

Specifications:

Motor: 2HP, 110/220V.
 Cutterhead: 4800 rpm 50HZ or 5900 rpm 60HZ.
 Number of Knives: 3
 Cutterhead Diameter: 75mm
 Table size: 1880mmx225mm
 Maximum depth of cut: 3.175mm
 Maximum width of cut: 204mm
 Rabbeting capacity: 12.7mm
 Fence: 890mmx128mm with positive stops at +/-45° and 90 °.
 Shipping Weight: 260kg
 20FT container load: 65pcs



Optional spiral cutterhead

Rack and pin system

Infeed handle lever and locking adjustment

Order NO. 800-0082

Wood Jointer 6"

Features:

- * Compact bench top design.
- * Machined cast-iron surface and steel base.
- * A mine impeller sucks the chips away.
- * Built in dust collector.
- * Quick knife adjustment.

Specifications:

Motor: 1200w input power, 110/220V.
 Cutterhead: 8000 rpm 50HZ or 1000 rpm 60HZ.
 Number of Knives: 2
 Cutterhead Diameter: 50mm
 Table size: 730mmx160mm
 Maximum depth of cut: 3.175mm
 Maximum width of cut: 155mm
 Fence: 580mmx106mm
 Fence: Tilt 45° in and out.
 Shipping Weight: 42kg
 Shipping Size: 84x38x28cm
 20FT container load: 330pcs



Optional spiral cutterhead



BACK VIEW OF FENCE ADJUSTMENT DEVICE

Optional Stand

Order NO. 800-0068

Wood Planer/Moulder 13"



Features:

- * Adequately strong feeding mechanism.
- * Precision ground cast iron table.
- * Rubberized steel feed rollers.
- * Powder coated paint.
- * Special gauge for easy molding work setup.

Motor Power: 1.5HP
 Table Size: 450mmx358mm
 Cutterhead Speed: 5000rpm
 Number of knives: 3
 Knife Diameter: 68mm
 Cutting speed: 15000 cuts/min
 Max. Cutting Width: 13"/325mm
 Max. Cutting Height: 6"/150mm
 Max. Cutting Depth: 1/8"/3.175mm
 Max. Profile Depth: 3/4"/19mm
 Shipping Weight: 120kg
 Shipping Size: 71x48x71cm



Optional spiral cutterheads

Order No: 800-0130

Wood Planer 15"

Features:

- * Two-speed gear box.
- * Four precision ground steel columns adjusted by handwheel.
- * Precision ground cast iron table with adjustable bed rollers.
- * Gearbox features an automatic chain tension device.
- * 4" dust port angled to the side for efficient chip removal.



Order No.	800-0150	800-0152
Motor Input	2HP	2HP
Table Size	450x382mm	450x382mm
Cutterhead Speed	5000rpm	5000rpm
Cutterhead Dia.	75mm	75mm
Number of Knives	3	3
Cutting Width/Depth	381/4.8mm	381/4.8mm
Lift Distance	200mm	200mm
Shipping Weight	245kg	253kg
Shipping Size	81x62x82cm	81x62x113cm

Wood Planer

Features:

- * Chain driven automatic feed rollers.
- * Device prevents board kick-back.
- * 2 automatic feed speed.
- * Built in dust exhaust hood.
- * Quick and accurate table adjustment with the handwheel on the positive gear drive system.
- * Precision ground and polished table.
- * Overload protection switch.
- * Digital readout guarantees accurate thickness.



Order No.	800-0151	800-0160	800-0200
Motor Input	3HP	2HP	3HP
Table Size	508×382mm	446×406mm	446×406mm
Cutterhead Speed	5000rpm	5000rpm	5000/6000rpm
Cutterhead Dia.	76mm	75mm	3.15"
Number of Knives	3	3	3
Cutting Width/ Depth	381/3mm	406/4.8mm	508mm
Lift Distance	152mm	200mm	204mm
Shipping Weight	200kg	272kg	375kg
Shipping Size	86×56×66cm	81×62×82cm	96×71×109cm

Features:

- * Powerful 3HP TEFC motor.
- * Four precision ground steel columns driven by chain adjustment.
- * Adjustable steel feed roller extension table.
- * Serrated infeed and polyurethane outfeed roller.
- * Precision ground handle wheel with locking bar.

Order No. 800-0151



Optional spiral cutterheads

WOOD SHAPER

800-0140



800-0147



Features:

- * Extra loge cast iron table with standard wing.
- * Heavy duty interchangeable spindles.
- * Protection device.
- * TEFC heavy duty 3HP motor.
- * Cast iron cabinet stand.

Order No.	800-0140	800-0147
Motor	Input 3HP	Input 3HP
Table Size	695×555mm	695×555mm
Spindle Speed 50Hz	3500 or 7000rpm	3500 or 7000rpm
Spindle Speed 60Hz	4300 or 8900rpm	4300 or 8900rpm
Spindle Diameter	30 or 35mm	30 or 35mm
Max. Lifting Height	90mm	90mm
Shipping Weight	225kg	200kg
Shipping Size	76×61×114cm	81×67×110cm



Optional cutterheads

10" Planer Thicknesser



Order No.	800-0145
Input Motor	1.5HP
Cutterhead speed 50/60Hz	5200rpm/6400rpm
Number of Knives	3
Cutterhead Diameter	64mm
Fence Size/Tilt	610×110mm/45°out
Cutting Width/ Depth	260mm/3mm
Cutting Table Size	1060×340mm
Thicknesser Width/Depth/Height	260mm/1mm/160mm
Thicknesser Table Size	425×266mm

WOOD SHAPER



800-0141



Optional cutterheads



800-0142

Order No.	800-0141	800-0142
Motor	Input 1.5HP	Input 1.5HP
Table (LxW)	610x534mm	610x534mm
Spindle Speed 50Hz	5800/8300rpm	5800/8300rpm
Spindle Speed 60Hz	7000/10000rpm	7000/10000rpm
Spindle Diameter	1/2" or 3/4"	1"
Mortising capacity (Lift Distance)	75mm	75mm
Weight	118/140kg	138/160kg
Packing Size	655x575x1100mm	655x575x1100mm

3/4" Wood Shaper

- * Interchangeable 1/2 and 3/4 cutter spindle.
- * Router bit spindles accepts 1/4" and 1/2".
- * Magnetic switch with thermal overload protector.
- * Shielded and lubricated ball bearings.
- * Large and precision ground cast iron table.

10" Planer Thicknesser



Optional spiral cutterhead



Order No.	800-0146
Input Motor	2HP
Cutterhead speed 50/60Hz	5200rpm/6400rpm
Number of Knives	3
Cutterhead Diameter	64mm
Fence Size/Tilt	610x110mm/45°out
Cutting Width/ Depth	260mm/3mm
Cutting Table Size	1060x340mm
Thicknesser Width/Depth/Height	260mm/1mm/160mm
Thicknesser Table Size	425x266mm

WOOD SHAPER



800-0144



Optional cutterheads



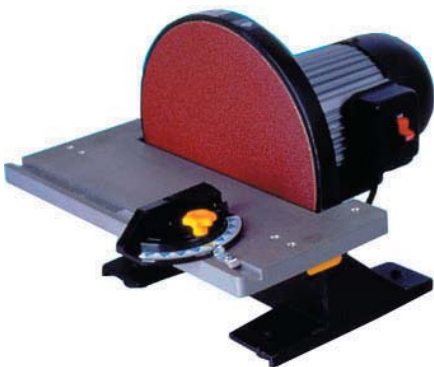
800-0143

1/2" Wood Shaper

- * Router bit spindles accepts 1/4" and 1/2".
- * Paddle switch.
- * Heavy duty miter gauge.
- * Steel open stand.
- * Powder coated paint and ball bearing construction.
- * Includes 5 spindle bushings for adjusting cutter spacing.
- * Large and precision ground cast iron table.

Order No.	800-0143	800-0144
Motor	Output 3/4HP	Output 1HP
Table (LxW)	452x395mm	452x395mm
Spindle Speed 50Hz	7050rpm	11000rpm
Spindle Speed 60Hz	8500rpm	13200rpm
Spindle Diameter	1/2"	1/2"
Mortising capacity (Lift Distance)	22mm	22mm
Weight	73/77kg	91/95kg
Packing Size	640x500x585mm	700x660x585mm

DISC SANDER



Order No.:800-0308
 Motor: 1HP
 Table size:439x210mm
 Dust port:56mm
 Approval:CE/ROHS

BELT & DISC SANDER



Order No.	800-0307
Motor	550W
Speed 50/60Hz	2850/3450
Disc Size	9"
Belt Size	6"×48"
Table Size	314×158mm

BELT & DISC SANDER



800-0303



800-0305



800-0306

Order No.	800-0303	800-0305	800-0306
Motor	1/2HP	1/3HP	1/3HP
Speed 50/60Hz	2850/3450	2850/3450	2850/3450
Disc Size	6"	5"	6"
Belt Size	4"×36"	1"×30"	2"×27"
Table Size	226×160mm		183×122mm

BELT AND DISC SANDER



800-0301



800-0302



800-0304

Order No.	800-0301	800-0302	800-0304
Motor	1/2HP	1/2HP	1/2HP
Speed 50/60Hz	2850/3450	2850/3450	2850/3450
Disc Size	6"	6"	8"
Belt Size	4"×36"	4"×36"	4"×36"
Table Size	215×146mm	226×160mm	215×146mm

BELT & DISC SANDER

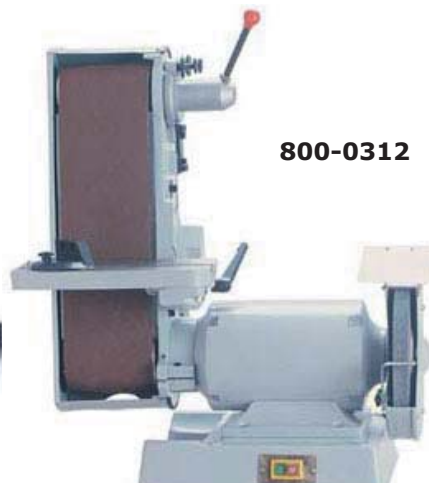


Features:

- *Convenient, quick-release lever makes belt changed and adjustment snap
- *Steel pulley cover
- *Precision ground cast iron table
- *Ball bearing construction
- *Heavy duty miter gauge
- *Powder coated paint

Order No.	800-0318	800-0319	800-0313	800-0312
Motor Input	3/4HP	3/4HP	1HP	1HP
Belt Speed 50/60Hz	1020/1240fpm	1020/1240fpm	550/670mpm	550/670mpm
Disc Speed 50/60Hz	1400/1700rpm	1400/1700rpm	1400/1700rpm	(Grinder)1400/1700rpm
Belt Size (W×L)	6"×48"	6"×48"	6"×48"	6"×48"
Disc Diameter	9"	9"	9"	(Grinder)9"
Packing Weight	53kg	55kg	70kg	70kg
Packing Size (mm)	695×430×445	695×430×445	765×730×430	765×730×430

DISC SANDER



Order No.:800-0309
 Motor: 1.25HP
 Table size:417×226mm
 Dust port:70mm

EDGE SANDER



800-0315



800-0314

Order No.	800-0314	800-0315
Motor Input	1.5HP	1.5HP
Speed 50/60Hz	1500/1800FPM	1500/1800FPM
Belt Size (W×L)	6"×80"	6"×80"
Front Table Size	560×265mm	560×265mm
Side Table Size	195×118mm	195×118mm
Table Tilting	+60° to -60°	+60° to -60°
Dust Chute Dia.	4"	4"
Packing Weight	140kg	107kg
Packing Size	119×54×115cm	114×79×34cm

Feature for 800-0317:

- *T-slot table and miter gauge
- *Precision ground cast iron table
- *Quick release belt tension lever
- *Oscillating sanding belt
- *Graphite coated platen
- *Shielded & lubricated ball bearing
- *3 spindle sanding drums

Order No.	800-0317
Motor Input	2HP
Speed 50/60Hz	2625/3150FPM
Belt Size (W×L)	6"×108"
Front Table Size	905×305mm
Side Table Size	290×259mm
Table Tilting	0 to 90°
Dust Chute Dia.	4"
Packing Weight	280kg
Packing Size	147×80×108cm



800-0317

EDGE SANDER

- *Powder coated paint
- *Shielded & lubricated ball bearing
- *Both horizontally and vertically use
- *Graphite coated platen
- *Table tilts from +60° to -60°

DUST COLLECTOR

- * Ideal for sanders, router tables, shapers etc.
- * Portable for site where big-size regular shop vacuum cannot handle.
- * Balanced radial steel impeller.



Order No.	800-0001	800-0002	800-0003	800-0004	800-0005	800-0006	800-0007
Motor Size	1HP/750W	1HP/750W	1HP/750W	1.5HP/750W	1.5HP/750W	2HP/1500W	3HP/2200W
Inlet Diameter	100mm	100mm	100mm	125mm	125mm	125mm	150mm
Intake Hole Size	1x100mm	1x100mm	1x100mm	2x100mm	2x100mm	2x100mm	3x100mm
Impeller Diameter	230mm	230mm	230mm	250mm	250mm	300mm	305mm
Portable Base Size	650x420mm	845x380mm	830x380mm	850x560mm	850x560mm	850x560mm	850x560mm
Bag Size (DxH)	380x530mm	370x640mm	370x640mm	500x850mm	370x610mm	500x850mm	500x850mm
Bag Capacity	2CBF	2CBF	2CBF	5.4CBF	2CBF	5.4CBF	10.8CBF
Air Speed (50HZ)	500CFM	500CFM	500CFM	750CFM	650CFM	1490CFM	2300CFM
Air Speed (60HZ)	600CFM	600CFM	600CFM	900CFM	690CFM	1790CFM	2760CFM
Packing Size (cm)	44x41x42	76x45x46	76x45x46	92x58x58	75x45x46	92x58x58	117x56x57

DUST COLLECTOR

Order No.:800-0009

Motor Size:5HP/3750W,400V
 Inlet Dia.:1x180-4x100mm
 Impeller Dia.:356mm
 Air Suction Capacity:2683CFM
 Upper Bag Size(DxH):500x1200mm
 Lower Bag Size(DxH):500x1000mm
 Overall Size:2184x2355x582mm
 Bag Capacity:15CBF
 Packing Size:1160x840x665mm



Order No. 800-0008

Motor Size: 5HP/3750W
 Inlet Diameter: 150mm
 Intake Hole Size: 3x100mm
 Impeller Diameter: 305mm
 Portable Base Size: 850x560mm
 Bag Size (DxH): 500x1100mm
 Bag Capacity: 15CBF
 Air Speed(50/60HZ): 2500/CF
 Packing Size: 117x56x57cm

DUST COLLECTOR



Motor Size: 1.5HP/750W
 Inlet Diameter: 100mm
 Intake Hole Size: 1x100mm
 Impeller Diameter: 230mm
 Bag Size (DxH): 380x530mm
 Bag Capacity: 2CBF
 Air Speed(50/60HZ): 500/600CFM
 Packing Size (cm): 44x41x42

Order No. 800-0010

PANEL SAW

- * Fit for processing various density boards, shaving boards, woo-based panels, ABS panels, PVC panels, organic glass plates and solid wood and others with wood structure and similar hardness.
- * Table surface oxidation treatment, beautiful and hardwearing.

801-0050



**Steel Bar structure
Sliding Table**

801-0051



Order No.	801-0050	801-0051
Sliding table structure	Steel Bar	Ball Bearing
Dimension sliding table	2800x310mm	3000x310mm
Cross cut capacity	2800mm	3000mm
Width of cut between saw blade and rip fence	1250mm	1250mm
Saw blade diameter	300mm(250-350)	300mm(250-350)
Height of cut ø300mm	80mm	80mm
Speed of spindle	4500/6000rpm	4500/6000rpm
Spindle diameter	30mm	30mm
Tiling saw blade	90°	90°
Main motor	4kw	4kw
Scoring saw blade	120mm	120mm
Speed of scoring saw	8000rpm	8000rpm
Spindle of scoring saw	20mm	20mm
Overall dimension	280x255x90cm	300x255x90cm

PANEL SAW

* Fit for processing various density boards, shaving boards, woo-based panels, ABS panels, PVC panels, organic glass plates and solid wood and others with wood structure and similar hardness.

* Table surface oxidation treatment, beautiful and hardwearing.

801-0062



801-0064

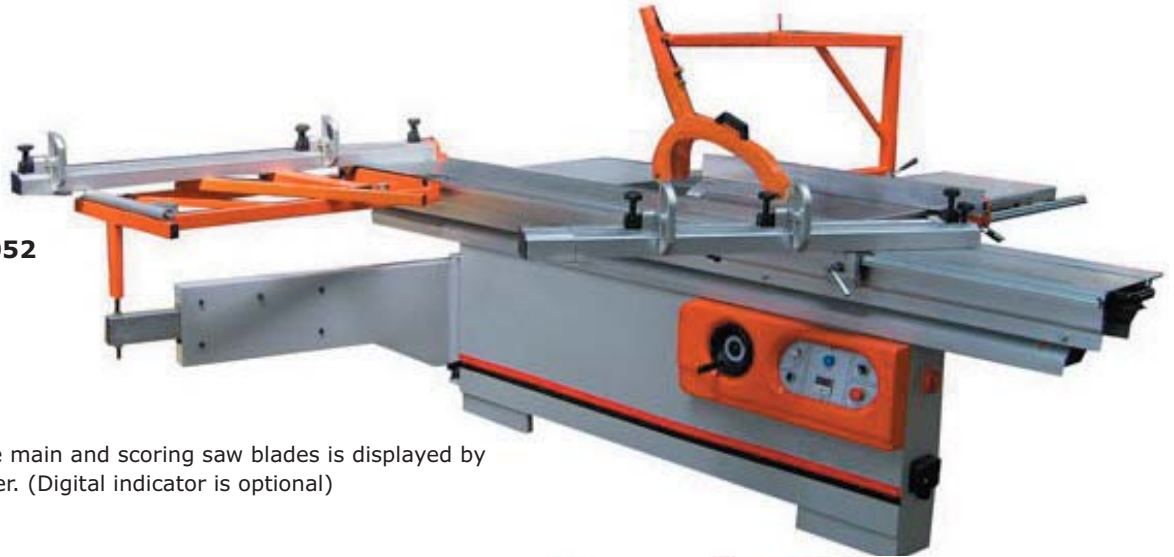


**Ball Bearing structure
Sliding Table**

Order No.	801-0062	801-0064
Sliding table structure	Ball Bearing	Ball Bearing
Dimension sliding table	2800x310mm	1500x310mm
Cross cut capacity	2800mm	1500mm
Width of cut between saw blade and rip fence	900mm	900mm
Saw blade diameter	300mm(250-300)	300mm(250-300)
Height of cut ø300mm	70mm	70mm
Speed of spindle	4500/6000rpm	6000rpm
Spindle diameter	30mm	30mm
Tiling saw blade	90°	90°
Main motor	3kw	3kw
Scoring saw blade	120mm	120mm
Speed of scoring saw	8000rpm	8000rpm
Spindle of scoring saw	20mm	20mm
Overall dimension	280x255x90cm	150x245x90cm

PANEL SAW

801-0052



Tilting angle of the main and scoring saw blades is displayed by precision inclinometer. (Digital indicator is optional)

801-0054



Moving of the main and scoring saw blades is electrical controlled and displayed by digital indicator.

Order No.	801-0052	801-0054
Sliding table structure	Steel bar	Steel bar
Dimension sliding table	3200x370mm	3200x370mm
Cross cut capacity	3200mm	3200mm
Width of cut between saw blade and rip fence	1250mm	1250mm
Saw blade diameter	300mm(250-300)	300mm(250-350)
Height of cut ø300mm	70mm	70mm
Height of cut ø300mm at 45°	55mm	55mm
Speed of main saw	4000/6000rpm	3000/4000/5000rpm
Spindle diameter	30mm	30mm
Tilting of saw blade	0-45°	0-45°
Main motor	4kw	5.5kw
Scoring saw blade	120mm	120mm
Speed of scoring saw blade	8000rpm	9000rpm
Spindle of scoring saw	20mm	20mm
Weight (wooden case)	1150kg	1150kg
Overall dimensions	325x315x90cm	325x315x90cm

PANEL SAW

* Moving of the main and scoring saw blades is electrical controlled and displayed by digital indicator.

801-0055



801-0056



Order No.	801-0055	801-0056
Sliding table structure	Ball Bearing / Steel bar	Steel Bar
Dimension sliding table	3800x360mm / 370mm	3200x370mm
Cross cut capacity	3800mm	3200mm
Width of cut between saw blade and rip fence	1250mm	1250mm
Saw blade diameter	300mm(250-350)	300mm(250-300)
Height of cut ø300mm	80mm	70mm
Height of cut ø300mm at 45°	55mm	55mm
Speed of main saw	4000/6000rpm	4000/6000rpm
Spindle diameter	30mm	30mm
Tilting of saw blade	0-45°	0-45°
Main motor	5.5kw	4kw
Scoring saw blade	120mm	120mm
Speed of scoring saw blade	8000rpm	8000rpm
Spindle of scoring saw	20mm	20mm
Weight (wooden case)	1280kg	1150kg
Overall dimensions	380x315x90cm	325x315x90cm

PANEL SAW

●**801-0057**: Moving of the main and scoring saw blades is electrical controlled and displayed by digital indicator.



801-0053
801-0059
801-0060
801-0061

Order No.	801-0053	801-0057	801-0059	801-0060	801-0061
Sliding table structure	Ball bearing				
Dimension sliding table	3200x360mm	3200x370mm	2800x360mm	3800x360mm	3000x360mm
Cross cut capacity	3200mm	3200mm	2800mm	3800mm	3000mm
Width of cut between saw blade and rip fence	1250mm				
Saw blade diameter	300mm(250-300)				
Height of cut ø300mm	70mm				
Height of cut ø300mm at 45°	55mm				
Speed of main saw	4000/6000rpm				
Spindle diameter	30mm				
Tilting of saw blade	0-45°				
Main motor	4kw				
Scoring saw blade	120mm				
Speed of scoring saw	8000rpm				
Spindle of scoring saw	20mm				
Weight (wooden case)	1150kg	1150kg	1000kg	1250kg	1050kg
Overall dimensions (cm)	325x315x90	325x315x90	280x315x90	380x315x90	305x315x90

PANEL SAW

- * Tilting angle of the main and scoring saw blade is displayed by precision incliometer.
- * Digital indicator is optional.

Technical Data:

Sliding table structure: Steel bar
 Dimension sliding table: 3200x370mm
 Cross cut capacity: 3200mm
 Width of cut between saw blade and rip fence: 1250mm
 Saw blade diameter: 300-400mm
 Height of cut ø300mm: 70-80mm
 Height of cut ø300mm at 45°: 55mm
 Speed of main saw: 4000/6000rpm
 Spindle diameter: 30mm
 Tilting of saw blade: 0-45°
 Main motor: 4kw
 Scoring saw blade: 120mm
 Speed of scoring saw: 8000rpm
 Spindle of scoring saw: 20mm
 Weight (wooden case): 1150kg
 Overall dimensions: 325x315x90cm

Order No. 801-0058



PANEL SAW

- **801-0063:** Tilting angle of the main and scoring saw blade is displayed by precision incliometer. (Digital indicator is optional)



Order No.	801-0063	801-0065
Sliding table structure	Ball Bearing	
Dimension sliding table	1600x360mm	1300x360mm
Cross cut capacity	1600mm	1300mm
Cutting Width between saw blade and rip fence	900mm	
Saw blade diameter	300mm(250-350)	
Height of cut ø300mm	70mm	
Speed of main saw	4000/6000rpm	6000rpm
Spindle diameter	30mm	
Tilting of saw blade	45°	
Main motor	3kw	
Scoring saw blade	120mm	
Speed of scoring saw	8000rpm	
Spindle of scoring saw	20mm	
Weight (wooden case)	1000kg	800kg
Overall dimensions	160x245x90cm	130x245x90cm

BAND SAW



With Quick Clamping

Order No.	801-0001	801-0002	801-0003	801-0004
Motor Power	1HP	1HP	1.5HP	1.5HP
Saw Wheel Diameter	315mm	315mm	350mm	350mm
Motor speed	1400rpm	1400rpm	1400rpm	1400rpm
Table Pivot Capacity	0-45°	0-45°	0-45°	0-45°
Max Height	160mm	160mm	160mm	200mm
Max Width	300mm	305mm	335mm	335mm
Length of Saw Blade	2240mm	2240mm	2400mm	2490mm
Liner Speed of Saw Blade	12:6m/s	12:6m/s	12;10m/s	12;10m/s
Table Size	400x500mm	400x500mm	400x500mm	400x500mm
Dust Extraction Outlet	100mm	100mm	100mm	100mm
Gross Weight/Net Weight	83kg/77kg	83kg/77kg	92/85kg	92kg/85kg
Shipping Size	110x50x42cm	110x50x42cm	123x50x42cm	127x52x44cm
Qty per 20FT/40FT container	110pcs/230pcs	110pcs/230pcs	95pcs/200pcs	95pcs/200pcs

Band Saws



Order No.	801-0005
Motor Power	2HP
Saw Wheel Diameter	355mm
Motor speed	1400rpm
Table Pivot Capacity	0-45°
Max Height	235mm
Max Width	345mm
Length of Saw Blade	2750mm
Liner Speed of Saw Blade	12;10m/s
Table Size	535×435mm
Dust Extraction Outlet	100mm
Gross Weight/Net Weight	96kg/90kg
Shipping Size	140x58x45cm
Stand weight	20kg/75kg
Stand Shipping Size	65x48x26cm
Qty per 20FT/40FT container	66pcs/132pcs



Band Saws

Order No.	801-0006	801-0007
Motor Power	2.2KW	3HP
Motor	230V, 50Hz, 1400rpm	
Saw Wheel Diameter	420mm	470mm
Table Pivot Capacity	-10°~45°	-10°~45°
Max Height	250mm	280mm
Max Width	410mm	465mm
Length of Saw Blade	3345mm	3607mm
Liner Speed of Saw Blade	14;7m/s	14;7m/s
Table Size	435x535mm	630x480mm
Dust Extraction Outlet	100mm	100mm
Gross Weight/Net Weight	140kg/126kg	180kg/162kg
Shipping Size	72x53x190mm	83x55x205cm
Qty per 20FT/40FT container	35pcs/70pcs	28/56pcs

BAND SAW



Order No.	801-0008
Motor Power	1/2HP
Saw Wheel Diameter	254mm
Motor speed	1400rpm
Table Pivot Capacity	0-20°
Max Height	100mm
Max Width	245mm
Length of Saw Blade	1750mm
Liner Speed of Saw Blade	13m/s or 15.6m/s
Table Size	350×330mm
Dust Extraction Outlet	60mm
Gross Weight/Net Weight	38kg/35kg
Shipping Size	83x32x44cm
Qty per 20FT/40FT container	237pcs/482pcs

Heave Duty Band Saws



Order No.	801-0009	801-0010	801-0011
Motor Power	3.5KW	4KW	4KW
Motor	380V, 50Hz, 1400rpm		
Saw Wheel Diameter	510mm	610mm	710mm
Table Pivot Capacity	0-45°	0-45°	0-45°
Max Height	350mm	430mm	430mm
Max Width	500mm	600mm	700mm
Length of Saw Blade	4100mm	4590mm	5020mm
Liner Speed of Saw Blade	22m/s	26m/s	26m/s
Table Size	640×500mm	700×610mm	1000×700mm
Dust Extraction Outlet	100mm	100mm	100mm
Gross Weight/Net Weight		310kg/280kg	365kg/330kg
Shipping Size		93x73x214cm	103x73x222cm
Qty per 20FT/40FT container		18/36pcs	15pcs/33pcs

TABLE SAW



801-0020



**801-0023
801-0026**

Order No.	801-0020	801-0023	801-0026
Saw blade bore dia.	25.4/30mm	16mm	25.4mm
Saw blade diameter	254mm	254mm	305mm
Main table size	800×600mm	686×508mm	800×578mm
Extension table(2pcs)	800×305mm	686×305mm	800×305mm
Motor power	3HP	3HP	3HP
Max. depth of cut at 0°	75mm	85mm	105mm
Max. depth of cut at 45°	60mm	57mm	74mm
Dust extraction outlet	100mm	50mm	50mm



801-0021



801-0022

Order No.	801-0021	801-0022
Saw blade bore dia.	25.4/30mm	25.4/30mm
Saw blade diameter	254mm	254mm
Main table size	800×600mm	800×560mm
Extension table	800×305mm	800×305mm
Sliding table size	500×600mm	500×480mm
Max. timber width	630mm	630mm
Max. timber length	1220mm	1300mm
Motor power	3HP	3HP
Max. depth of cut at 0°	75mm	75mm
Max. depth of cut at 45°	60mm	60mm
Dust extraction outlet	100mm	100mm

TABLE SAW

CE

801-0024



801-0025



Order No.	801-0024	801-0025
Saw blade bore dia.	25.4/30mm	30mm
Saw blade diameter	254mm	315mm
Main table size	800×560mm	800×600mm
Extension table	800×305mm	800×440mm
Rip extension table size	600×530mm	600×530mm
Sliding table size	500×400mm	600×480mm
Max. timber width	630mm	1220mm
Max. timber length	1300mm	1300mm
Motor power	3HP	4HP
Max. depth of cut at 0°	75mm	100mm
Max. depth of cut at 45°	60mm	75mm
Dust extraction outlet	100mm	100mm

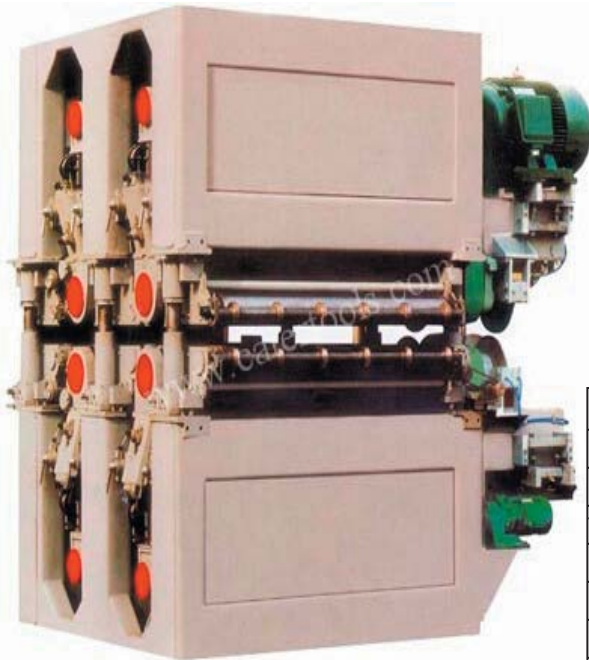
DOUBLE SURFACE SANDER



This machine is a double-belt two surface sander, it is used for shaving board, wooden board, MDF, veneer board, high pressure board, cement board, solid board. Equipped with calibrating sanding unit and fine sanding unit. This machine has two combined sanding unit, it is not only can be used to polish by giving thickness, but also can be used to fine sanding with the sanding pad. Therefore, the surface qualification of the board is in high degree. The polishing roller of this machine is transacted strictly, dynamically balanced precisely. This can ensure the roller can be used for a long time. The surface of the roller have large spiral groove , reduce the interface ,add pressure, emit heat. This machine has more adjusting unit. Through adjustment, the two surface of the board can be polished with equal data and in high precision. It can remain the precision through compensate mode. The system of feeding adopt stepless speed regulation, it can improve producing efficiency on the basis of the required precision.

Order No.	800-0330	800-0331
Width of sanded panel	60-1300mm	60-1300mm
Min.panellength	550mm	700mm
Thickness of sanded panel	5-150mm	5-150mm
Speed abrasive belt	19.5m/s	19.5m/s
Motor power	163.24KW	163.24kw
Working air pressure	0.6-0.8Mpa	0.6-0.8Mpa
Cosumption of compressed air	2m ³ /min	2m ³ /min
Size of abrasive belt	1330x2620mm	1330x2620mm
Overall dimensions	1950x3600x3210mm	2100x3600x3210mm
Weight	about 11T	about 11T

DOUBLE SURFACE SANDER



This machine is a double-belt two surface sander, it is used for shaving board, wooden board, MDF, veneer board, high pressure board, cement board, solid board. Equipped with calibrating sanding unit and fine sanding unit.

This machine has two combined sanding unit, it is not only can be used to polish by giving thickness, but also can be used to fine sanding with the sanding pad. Therefore, the surface qualification of the board is in high degree.

The polishing roller of this machine is transacted strictly, dynamically balanced precisely. This can ensure the roller can be used for a long time. The surface of the roller have large spiral groove , reduce the interface ,add pressure, emit heat. This machine has more adjusting unit. Through adjustment, the two surface of the board can be polished with equal data and in high precision. It can remain the precision through compensate mode. The system of feeding adopt stepless speed regulation, it can improve producing efficiency on the basis of the required precision

Order No.	800-0332	800-0333
Width of sanded panel	60-1300mm	60-1300mm
Min.panellength	610mm	700mm
Thickness of sanded panel	5-150mm	5-150mm
Speed abrasive belt	19.5m/s	19.5m/s
Motor power	273.24kw	273.24kw
Working air pressure	0.6-0.8Mpa	0.6-0.8Mpa
Cosumption of compressed air	2m ³ /min	2m ³ /min
Size of abrasive belt	1330x2620mm	1330x2620mm
Overall dimensions	2910x3600x3210mm	2910x3600x3210mm
Weight	about 20T	about 20T

SEGMENTED PAD SANDER



- .Can polish flat board and uneven board, maximum difference is 1.8mm
- .Imported photoelectric switch
- .Imported Micro-computer table height control
- .Automatic brake for belt breakage, miss trace and power failure
- .Imported Italy conveyor belt
- .New type of press roller and press board, effectively improving the polishing precision
- .Air jet belt cleaning device
- .Rotating brush to clean the board
- .Feeding speed is controlled by inverter
- .Tape strap wheel are easily dismountable and stable performance
- .Electronic sectional pad
- .Second sanding belt with two speed, not only normal polishing but also laquer polishing
- .Infeed table and outfeed table

Order No.	800-0334
Width of sanded panel	40-1300mm
Thickness of sanded panel	3-150mm
Speed of conveyor belt	Max 16m/min
Speed of abrasive belt on 1st unit	18m/s
Speed of abrasive belt on 2nd unit	8m/s , 16m/s
Size of abrasive belt	1380*2620mm
Total motor power	40kw
First belt motor	22kw-2p
Second belt motor	15kw-2p
Feeding motor	2.2kw-4p
Rise and decline motor	0.25kw
Brush motor	0.37kw
Working pressure	0.4-0.8Mpa
Consumption of compressed air	1.5m ³ /min
Overall dimensions	2750x1972x2250mm
Weight	3100kg

ROLLER CONVEYOR

The integral frame is used for the machine body with high rigidity to improve the service life of the machine. The rollers have been balanced in dynamic precisely, which leads to stable sanding precision and good sanding performance. Use the frequency-controlled drive to feed, this can improve the productive efficiency. The thickness of sanded board is determined by light grids rule to improve the sanding precision.



Order No.	800-0335
Width of sanded panel	40-1300mm
Thickness of sanded panel	2.5-110mm
Size Of Abrasive Belt	1330×2620mm
Feeding speed	8~75m/min
Main motor	37.30KW
Feeding motor	4KW
Working pressure	0.55Mpa
Speed of sucked air	25~30m/s
Consumption of sucked air	12000m ³ /h
Overall dimensions	2545×2820×2400mm
Weight	9000Kg

SINGLE-BELT LACQUER SANDER

This machine is a new developed lacquered panel sander which take advanced technology from abroad. The polishing roller adopt soft material is dynamically balanced precisely. The belt speed is controlled by frequency inverter, providing wide range of belt speed to match the variety of different paints. The conveyor belt speed is controlled by a variable speed unit, Feed speed can be varied as desired to suit all types of work-piece material, assuring superior sanding quality. The brush roller built at out feed end of the machine can clean powder on the sanded panel. The air jet cleaner place at the top of the belt can clean dust. the conveyor table height adjustment to thickness by means of micro-accurate setting of work digital read-out, data entered via the keyboard easily that enable rapid and accurate setting of work piece thickness. This machine is one of the necessary equipment for manufacturing furniture?bamboo floor and wood floor.



Order No.	800-0336	800-0337
Width of sanded panel	600mm	600mm
Thickness of sanded panel	2.5-110mm	2.5-110mm
Feeding speed	5~21m/min	5~21m/min
Speed of abrasive belt	Max 10m/sec	Max 10m/sec
Size of abrasive belt	635x1470mm	635x1470mm
Overall dimensions	1500x1080x1700mm	1300x1080x1700mm
Total motor power	50HZ 8.09KW	50HZ 6.8KW
Main motor	5.5KW-4P	5.5KW-4P
Wheel motor	1.1KW-6p	/
Feeding motor	0.75KW	0.75KW
Lifting & lowering motor	0.37KW	0.37KW
Brush motor	0.37KW	0.18KW
Working pressure	0.4~0.8Mpa	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min	0.5m ³ /min
Weight	900Kg	850kg

SINGLE BELT SANDER

This machine is a double-belt sander which take advanced technology from abroad. The max. sanding width is 1000mm. Equipped automatic. thickness adjustment unit and electronic control unit. This machine index is advanced and it,s in high precision, reasonable composition. modern construction and convenient operation, It has the world advanced level. This machine is one of the necessary equipment for manufacturing fibreboard, shaving board, piywood and panel-type furniture.



Order No	800-0338
Width of sanded panel	40-630mm
Thickness of sanded panel	2.5-160mm
Speed of abrasive belt	20m/s
Size of abrasive belt	660*1900mm
Speed of conveyor belt	6-24m/min
Total motor power	17.24kw
Working pressure	0.4-0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25-30m/s
Overall dimensions	1670x1310x1940mm
N. W.	1250kg

Wide Double-belt Sander

This machine is a double-belt sander which take advanced technology from abroad. The max. sanding width is 1000mm. Equipped automatic. thickness adjustment unit and electronic control unit. This machine index is advanced and it,s in high precision, reasonable composition. modern construction and convenient operation, It has the world advanced level. This machine is one of the necessary equipment for manufacturing fibreboard, shaving board, piywood and panel-type furniture.



Order No.	800-0339	800-0340	800-0341
Width of sanded panel	40~630mm	40~630mm	40~630mm
Thchness of sanded panel	2.5-160mm	2.5-160mm	2.5-160mm
Speed of avrasive belt on 1st unit	20m/s	20m/s	20m/s
Speed of avrasive belt on 2nd unit	16m/s	16m/s	14m/s
Speed of conveyor belt	6~24m/min	6~24m/min	6~24m/min
Size of abrasive belt	660x1900mm	660x1900mm	660x1900mm
Total motor power	24.74KW	24.74KW	24.74KW
First motor	15KW	15KW	15KW
Second motor	7.5KW	7.5KW	7.5KW
Feeding motor	1.5KW	1.5KW	1.5KW
Lifting & lowering motor	0.37KW	0.37KW	0.37KW
Brush motor	0.37KW	0.37KW	0.37KW
Working pressure	0.4~0.8Mpa	0.4~0.8Mpa	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min	0.5m ³ /min	0.5m ³ /min
Average speed of sucked air	25~30m/s	25~30m/s	25~30m/s
Overall dimensions	1670x1310x1940mm	1670x1310x1940mm	1670x1310x1940mm
N.W.	2050Kg	2050Kg	2050Kg

SINGLE BELT SANDER WITH WATER

This machine is a double-belt sander which take advanced technology from abroad. The max. sanding width is 1000mm. Equipped automatic. thickness adjustment unit and electronic control unit. This machine index is advanced and it,s in high precision, reasonable composition,modern construction and convenient operation, It has the world advanced level. This machine is one of the necessary equipment for manufacturing fibreboard, shaving board,plwood and panel-type furniture.



Order No.	800-0342	800-0343
Width of sanded panel	40~1000mm	40~1000mm
Thchness of sanded panel	2-100mm	2.5~100mm
Speed of avrasive belt on 1st unit	19.5m/s	19.5m/s
Speed of conveyor belt	6-30m/min	6-30m/min
Size of abrasive belt	1030x2200mm	1030x2200mm
Total motor power	24.94KW	24.77KW
Main motor	22KW	22KW
Feeding motor	2.2KW	2.2KW
Lifting & lowering motor	0.37KW	0.37KW
Water pump motor	/	0.2KW
Brush motor	0.37KW	/
Working pressure	0.4~0.8Mpa	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min	0.5m ³ /min
Average speed of sucked air	25~30m/s	25~30m/s
Overall dimensions	1700x1650x2220mm	1700x1650x2220mm
N.W.	2200Kg	2200Kg

WIDE DOUBLE-BELT SANDER

This machine is a double-belt sander which take advanced technology from abroad. The max. sanding width is 1000mm. Equipped automatic. thickness adjustment unit and electronic control unit. This machine index is advanced and it,s in high precision, reasonable composition,modern construction and convenient operation, It has the world advanced level. This machine is one of the necessary equipment for manufacturing fibreboard, shaving board,plwood and panel-type furniture.



Order NO.	800-0344	800-0345
Width of sanded panel	40~1000mm	40~1000mm
Thchness of sanded panel	2.5-100mm	2.5-100mm
Speed of avrasive belt on 1st unit	20m/s	19.5m/s
Speed of avrasive belt on 2nd unit	16m/s	14m/s
Speed of conveyor belt	6~30m/min	6~30m/min
Size of abrasive belt	1030x2200mm	1030x2200mm
Total motor power	39.94KW	35.94KW
First motor	22KW	22kw
Second motor	15KW	11kw
Feeding motor	2.2KW	2.2kw
Lifting motor	0.37KW	0.37kw
Brushing motor	0.37KW	0.37kw
Working pressure	0.4~0.8Mpa	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min	0.5m ³ /min
Average speed of sucked air	25~30m/s	25~30m/s
Overall dimensions	1970x1650x2220mm	1970x1650x2220mm
N.W.	2600Kg	2500Kg

WIDE DOUBLE-BELT SANDER



Order NO.	800-0346
Width of sanded panel	40-1000mm
Thickness of sanded panel	2.5-100mm
Speed of abrasive belt on 1st unit	19.5m/s
Speed of abrasive belt on 2nd unit	15m/s
Speed of conveyor belt	7-38m/min
Size of abrasive belt	1030x2200mm
Total motor power	56.74kw
Working pressure	0.4-0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25-30m/s
Overall dimensions	2390x2310x2060mm
N.W.	3000kg

SINGLE BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order NO.	800-0347
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5~150mm
Speed of avrasive belt	20m/s
Speed of conveyor belt	7~25m/min
Size of abrasive belt	1330x2200mm
Total motor power	39.94KW
Main motor	37KW-4p
Feeding motor	2.2KW~6P
Lifting motor	0.37KW
Brushing motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	2070x2600x2200mm
N.W.	2800kg

SINGLE-BELT LAQUER SANDER

This series sander mainly used to polish furniture surface paint, including door, window etc. and they are also used to fine sanding various board, such as solid board, veneer board, shaving board etc. in order to meet the sanding requirement, we can supply contact roller with soft rubber in various shore hardness, aim at various kinds and characters of coating.



Order NO.	800-0348	800-0349
Width of sanded panel	40-1300mm	40-1000mm
Thickness of sanded panel	2.5-160mm	2.5-160mm
Speed Of Abrasive Belt	<9.5m/sec	<9.5m/sec
Speed Of Conveyor Belt	6-30m/min	6-30m/min
Size Of Abrasive Belt	1330x1900mm	1030x1900mm
Total Motor Power	25.44KW	17.94kw
Working pressure	0.4~0.8Mpa	0.4-0.8Mpa
Consumption of compressed air	0.5m ³ /min	0.5m ³ /min
Overall dimensions	2425x2005x2070mm	2325x1705x2070mm
Weight	2100kg	1950kg

SINGLE BELT SANDER WITH WATER

- .This machine with water cooling device, specially designed for polishing steel, stainless steel, man-made stone, etc.
- .Water circulation device can provide enough cooling water, which can get the best polishing result and prolong sanding belt use life
- .Waste filter system can ensure cooling water repeatedly usement, which can save water
- .Sponge wheel on the outfeed, which can absorb water on the panel surface effectively
- .Raster scale measure workpiece thickness, precision is 0.01mm
- .Special structure of the feeding table, which can cleanup the bottom of the conveyor belt completely
- .Sanding belt cleaning device
- .Double pressure roller make the panel more stably



Order NO.	800-0350
Width of sanded panel	40-1300mm
Thickness of sanded panel	1-100mm
Speed of abrasive belt	18.5m/s
Speed of conveyor belt	2.5-12m/min
Size of abrasive belt	1330x1900mm
Total motor power	34.75kw
Working pressure	0.4-0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25-30m/s
Overall dimensions	2520x2300x2535mm
N.W.	2600kg

WIDE DOUBLE-BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order No.	800-0351
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5~100mm
Speed of avrasive belt on 1st unit	19.5m/s
Speed of avrasive belt on 2nd unit	14m/s
Speed of conveyor belt	6~30m/min
Size of abrasive belt	1330x2200mm
Total motor power	35.94KW
First motor	22KW-2p
Second motor	11KW-2p
Feeding motor	2.2KW~4P
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	1970x1950x2220mm
N.W.	3000kg

DOUBLE-BELT SANDER

This machine can be used to polish various boards by giving thickness and it suits to polish solid board, veneer board, veneer board, shaving board, middle-density fibrous board etc.



Order No.	800-0352
Width of sanded panel	40-1300mm
Thickness of sanded panel	2.5-150mm
Speed of abrasive belt on 1st unit	19.5m/s
Speed of abrasive belt on 2nd unit	15m/s
Feeding speed	7-38m/min
Size of abrasive belt	1330x2200mm
Total motor power	49.74kw
Working pressure	0.4-0.8mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25-30m/s
Overall dimensions	2170x2600x2200mm
Weight	About 3600kg

TRIPLE-HEAD WIDE-BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order NO.	800-0355
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5~150mm
Speed of avrasive belt on 1st unit	19.5m/s
Speed of avrasive belt on 2nd unit	19.5m/s
Speed of avrasive belt on 3rd unit	16m/s
Speed of conveyor belt	7~25m/min
Size of abrasive belt	1330x2200mm
Total motor power	91.90KW
First motor	37KW
Second motor	30KW
Third motor	22KW
Feeding motor	2.2KW~6P
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	2600x2600x2200mm
N.W.	4800kg

CHAIR SANDING MACHINE

This machine is special designed for finish sanding uneven boards, especially for chair legs and chair backrest. Import inverter control the feeding speed. Import inverter control the sanding speed. Press rollers are controlled by compressed air.



Order NO.	800-0356
Working width	260mm
Work piece thickness	5-100mm
Working arc	R> 130mm
Work piece length	≥300mm
Speed of abrasive belt	<8m/s
Feeding speed	Max 50r/min
Working height	900±20mm
Total motor power	2.57kw
Working pressure	0.4-0.8Mpa
Overall dimensions	1200x700x1400mm
Weight	400kg

TRIPLE-HEAD WIDE-BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order No.	800-0353
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5~150mm
Speed of avrasive belt on 1st unit	19.5m/s
Speed of avrasive belt on 2nd unit	19.5m/s
Speed of avrasive belt on 3rd unit	14m/s
Speed of conveyor belt	7~25m/min
Size of abrasive belt	1330x2200mm
Total motor power	91.90KW
First motor	37KW
Second motor	30KW
Third motor	22KW
Feeding motor	2.2KW~6P
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	2600x26000x2200mm
N.W.	4800kg

WIDE DOUBLE-BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order NO.	800-0354
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5-150mm
Speed of avrasive belt on 1st unit	19.5m/s
Speed of avrasive belt on 2nd unit	15m/s
Speed of conveyor belt	7~38m/min
Size of abrasive belt	1330x2200mm
Total motor power	56.74KW
First motor	30KW-2p
Second motor	22KW-4p
Feeding motor	4KW~4P
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	2170x2600x2200mm
N.W.	4000kg

WIDE DOUBLE-BELT SANDER

This machine is a new developed double-head sander which take advanced technology from abroad. The first head is iron roll which use high quality alloy, dynamic balance strictly. It can be easily adjusted up and down through Lack of impartiality device. The second head is roll and pad reunite structure. The roller is soft rubber roller (also may be changed to hard rubber roller or iron roller). The air sanding pad can be easily adjusted up and down through Lack of impartiality device. It is mainly used to polish manufacturing fiberboard, solid board by give thickness



Order No.	800-0359	800-0360
Width of sanded panel	40-1300mm	40-1300mm
Thickness of sanded panel	2.5-100mm	2.5-130mm
Feeding speed	Max 24m/min	Max 24m/min
Speed of first abrasive belt	19.5m/sec	20m/sec
Speed of third abrasive belt	16m/sec	16m/sec
Size of abrasive belt	1330x2200mm	1330x1900mm
Total motor power	58.24KW	43.24kw
First motor	30kw	22kw
Second motor	22kw	15kw
Feeding motor	5.5kw(hydraulic pressure motor)	5.5kw(hydraulic pressure motor)
Lifting & lowering motor	0.37kw	0.37kw
Brush motor	0.37kw	0.37kw
Working pressure	0.4~0.8Mpa	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min	0.5m ³ /min
Overall dimensions	2212x2102x2220mm	2160x2000x2100mm
Weight	about 4000Kg	3600Kg

SPECIAL CURVE SURFACE SANDER

Compact Finishing Sander at a Compact Price

Hexagonal shafts for direct power transfer

Removable shafts for quicker tool change

For finish sanding of louver-shutters- raised panel doors-frames

For sanding finishing of Hard wood-Softwood-MDF-Veneer-Plywood

All speeds adjustable

Conveyor belt as wide-wide with vacuum-dual adjustable

Order No.	800-0361
Height max of workpiece	150mm
Width max of workpiece	800mm
Length	infinite
Throughfeed	2-12m/min
Rotation speed	2-12RPM
Spindle speed	350-1150RPM
Number of spindles	4
Diameter of tools max	440mm
Total motor power	13.5kw
Main motor	1.5kw(2 pieces)
Rotation motor	1.1kw
Conveyor motor	1.5kw
Lifting & lowering motor	0.37kw
Vacuum pump for RO 1 Vac	7.5kw
Dust collection duct	4xdia.150mm
Exhaust capacity	2000cubm/h
Dimensions	2050x1600x2120mm
Net weight	appr.1800kg



TRIPLE-HEAD WIDE BELT SANDER

This machine is a new developed triple-head sander which take advanced technology from abroad. The first and second roller can adjust in order to sand different material panel. The third sanding pad can be used to fine sanding. This machine adopt new style of swing belt, the belt swing is more convenient.the conveyor table height adjustment to thickness by means of micro-computer control with digital read-out, data entered via the keyboard easily that enable rapid and accurate setting of work piece and convenient operation. This machine is one of the necessary equipment for manufacturing furniture?bamboo floor and wood floor.



Order No.	800-0357
Width of sanded panel	40-600mm
Thckness of sanded panel	2.5-120mm
Feeding speed	Max 24m/min
Speed of first avrasive belt	20m/sec
Speed of second avrasive belt	20m/sec
Speed of third avrasive belt	15m/sec
Size of abrasive belt	630x1900mm
Total motor power	50.74KW
First belt motor	18.5KW~2P
Middle belt motor	15KW~4P
Third belt motor	11KW~2P
Feeding motor	5.5KW
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Overall dimensions	2530x1355x1960mm
Weight	about 3500kg

TRIPLE-HEAD WIDE BELT SANDER

This machine is a new developed triple-head sander which take advanced technology from abroad. It is mainly used to polish solid wood floor by give thickness and fine sanding for shutter.



Order No.	800-0358
Width of sanded panel	40-900mm
Thckness of sanded panel	2.5-120mm
Feeding speed	Max 24m/min
Speed of first avrasive belt	20m/sec
Speed of second avrasive belt	20m/sec
Speed of third avrasive belt	15m/sec
Size of abrasive belt	930x1900mm
Total motor power	61.74KW
First belt motor	22KW-2p
Middle belt motor	18.5KW-4P
Third belt motor	15KW-2P
Feeding motor	5.5KW(hydraulic pressure motor)
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Overall dimensions	2530x1655x1960mm
Weight	about 4000kg

TRIPLE-HEAD WIDE-BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order NO.	800-0355
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5~150mm
Speed of avrasive belt on 1st unit	19.5m/s
Speed of avrasive belt on 2nd unit	19.5m/s
Speed of avrasive belt on 3rd unit	16m/s
Speed of conveyor belt	7~25m/min
Size of abrasive belt	1330x2200mm
Total motor power	91.90KW
First motor	37KW
Second motor	30KW
Third motor	22KW
Feeding motor	2.2KW~6P
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	2600x2600x2200mm
N.W.	4800kg

CHAIR SANDING MACHINE

This machine is special designed for finish sanding uneven boards, especially for chair legs and chair backrest. Import inverter control the feeding speed. Import inverter control the sanding speed. Press rollers are controlled by compressed air.



Order NO.	800-0356
Working width	260mm
Work piece thickness	5-100mm
Working arc	R> 130mm
Work piece length	≥300mm
Speed of abrasive belt	<8m/s
Feeding speed	Max 50r/min
Working height	900±20mm
Total motor power	2.57kw
Working pressure	0.4-0.8Mpa
Overall dimensions	1200x700x1400mm
Weight	400kg

WIDE DOUBLE-BELT SANDER

This machine is a new developed double-head sander which take advanced technology from abroad. The first head is iron roll which use high quality alloy, dynamic balance strictly. It can be easily adjusted up and down through Lack of impartiality device. The second head is roll and pad reunite structure. The roller is soft rubber roller (also may be changed to hard rubber roller or iron roller). The air sanding pad can be easily adjusted up and down through Lack of impartiality device. It is mainly used to polish manufacturing fiberboard, solid board by give thickness



Order No.	800-0359	800-0360
Width of sanded panel	40-1300mm	40-1300mm
Thickness of sanded panel	2.5-100mm	2.5-130mm
Feeding speed	Max 24m/min	Max 24m/min
Speed of first abrasive belt	19.5m/sec	20m/sec
Speed of third abrasive belt	16m/sec	16m/sec
Size of abrasive belt	1330x2200mm	1330x1900mm
Total motor power	58.24KW	43.24kw
First motor	30kw	22kw
Second motor	22kw	15kw
Feeding motor	5.5kw(hydraulic pressure motor)	5.5kw(hydraulic pressure motor)
Lifting & lowering motor	0.37kw	0.37kw
Brush motor	0.37kw	0.37kw
Working pressure	0.4~0.8Mpa	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min	0.5m ³ /min
Overall dimensions	2212x2102x2220mm	2160x2000x2100mm
Weight	about 4000Kg	3600Kg

SPECIAL CURVE SURFACE SANDER

Compact Finishing Sander at a Compact Price
 Hexagonal shafts for direct power transfer
 Removable shafts for quicker tool change
 For finish sanding of louver-shutters- raised panel doors-frames
 For sanding finishing of Hard wood-Softwood-MDF-Veneer-Plywood
 All speeds adjustable
 Conveyor belt as wide-wide with vacuum-dual adjustable

Order No.	800-0361
Height max of workpiece	150mm
Width max of workpiece	800mm
Length	infinite
Throughfeed	2-12m/min
Rotation speed	2-12RPM
Spindle speed	350-1150RPM
Number of spindles	4
Diameter of tools max	440mm
Total motor power	13.5kw
Main motor	1.5kw(2 pieces)
Rotation motor	1.1kw
Conveyor motor	1.5kw
Lifting & lowering motor	0.37kw
Vacuum pump for RO 1 Vac	7.5kw
Dust collection duct	4xdia.150mm
Exhaust capacity	2000cubm/h
Dimensions	2050x1600x2120mm
Net weight	appr.1800kg



TRIPLE-HEAD WIDE-BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order No.	800-0353
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5~150mm
Speed of avrasive belt on 1st unit	19.5m/s
Speed of avrasive belt on 2nd unit	19.5m/s
Speed of avrasive belt on 3rd unit	14m/s
Speed of conveyor belt	7~25m/min
Size of abrasive belt	1330x2200mm
Total motor power	91.90KW
First motor	37KW
Second motor	30KW
Third motor	22KW
Feeding motor	2.2KW~6P
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	2600x26000x2200mm
N.W.	4800kg

WIDE DOUBLE-BELT SANDER

This machine can be used to polish various board by giving thickness and it suits to polish solid board, veneer board, shaving board, middle-density fibrous board etc. This machine index is advanced and it is in high precision, reasonable composition, modern construction and convenient operation. It has the world advance level.



Order NO.	800-0354
Width of sanded panel	40~1300mm
Thickness of sanded panel	2.5-150mm
Speed of avrasive belt on 1st unit	19.5m/s
Speed of avrasive belt on 2nd unit	15m/s
Speed of conveyor belt	7~38m/min
Size of abrasive belt	1330x2200mm
Total motor power	56.74KW
First motor	30KW-2p
Second motor	22KW-4p
Feeding motor	4KW~4P
Lifting & lowering motor	0.37KW
Brush motor	0.37KW
Working pressure	0.4~0.8Mpa
Consumption of compressed air	0.5m ³ /min
Average speed of sucked air	25~30m/s
Overall dimensions	2170x2600x2200mm
N.W.	4000kg

SPECIAL CURVE SURFACE SANDER

Compact Finishing Sander at a Compact Price
 Removable shafts for quicker tool change
 For finish sanding of louver-shutters- raised panel doors-frames
 For sanding finishing of Hard wood-Softwood-MDF-Veneer-Plywood
 All speeds adjustable
 Conveyor belt as wide-wide with vacuum-dual adjustable



Order No.	800-0362
Height max of workpiece	150mm
Width max of workpiece	1100mm
Length	infinite
Throughfeed	2-12m/min
Rotation speed	2-12RPM
Spindle speed	Max 750RPM
Number of spindles	8
Diameter of tools max	370mm
Total motor power	25.07kw
Main motor	1.5kw(4 pieces)
Rotation motor	1.5kw
Conveyor motor	1.5kw
Lifting & lowering motor	0.37kw
Feeding motor	2.2kw
Vacuum pump for RO 1 Vac	7.5kw
Dust collection duct	4xdia.150mm
Exhaust capacity	4000cubm/h
Dimensions	2850x2200x2200mm
Net weight	appr.3500kg

WOOD MILL



Order No.	801-0041
Spindle Diameter	30mm
Spindle Travel	100mm
Spindle Speed	9000,6000,3000,1800rpm
Blade Diameter	200mm
Main Table Size	690x480mm
Table Height	900mm
Sliding Table Size	500x480mm
Sliding Table Travel	530mm
Motor Power	2800W
Spindle Tilting Angle	-10° to 30°

WOOD MILL

Order No.	801-0040
Spindle Diameter	30mm
Spindle Travel	100mm
Spindle Speed	9000,6000,3000,1800rpm
Blade Diameter	200mm
Main Table Size	690x480mm
Table Height	900mm
Sliding Table Size	500x480mm
Sliding Table Travel	530mm
Motor Power	2800W
Spindle Tilting Angle	



800-0040

MULTI-PURPOSE WOODWORKING MACHINE



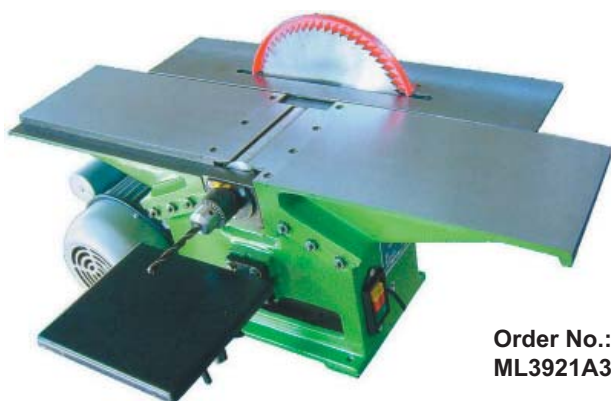
Order No.:
ML392F

Order No.	ML392C	ML392F
Max. planing width	200mm	250mm
Max. planing capacity	3mm	3mm
Max. rabbet cutting depth	10mm	
Max. sawing thickness	70mm	70mm
Press planing thickness	6-90mm	6-120mm
Min. press planing length	150mm	150mm
Max. tenon & drilling dia.	12mm	12mm
Cutter spindle speed	3500r/min	4000r/min
Press planing feeding speed	6.5m/min	6.5m/min
Milling cutting dia.	20mm	20mm
Max. milling width	40mm	40mm
Sawing arbor speed	3500r/min	3500r/min
Max. cross-cutting width	270mm	300mm
Index ruler adjustment	±45°	±45°
Motor power	1.5kw	1.5 or 2.2kw



Order No.: ML392C

MULTI-PURPOSE WOODWORKING MACHINE



Order No.:
ML3921A3



Order No.:
ML292F5

Order No.	ML291A3	ML292A3	MQ432W/III	ML292w9	ML292F5	MQ432U/II
Max. planing width	150mm	200mm	200mm	200mm	200mm	200mm
Max. planing depth	3mm	3mm	3mm	3mm	3mm	3mm
Max. sawing thickness	50mm	50mm	50mm	50mm	50mm	50mm
Tenoning technical			10;13;16	10;13;16	10;13;16	10;13;16
Max. drilling dia.	13mm	13mm	13mm	13mm	13mm	13mm
Max. rabbeting depth	15×10mm	15×10mm	15×10mm	15×10mm	15×10mm	15×10mm
Max. milling width	50mm	50mm	45mm	50mm	50mm	50mm
Max. milling depth			10mm	10mm	10mm	10mm
Moter power	1.1kw	1.1kw	1.1kw	1.1kw	1.1kw	1.1kw
Weight	68kg	76kg	100kg	100kg	125kg	130kg



Order No.:
MQ432U/II



Order No.: ML392A-1



Order No.: MQ443A

Order No.	ML392A-1	MQ443A
Max. planing width	200mm	300mm
Max. planing depth	3mm	3mm
Planing thickness	6-120mm	6-125mm
Min. planing length	150mm	130mm
Max. sawing thickness	85mm	95mm
Max. drilling dia.	13mm	13mm
Max. tenoning length	100mm	100mm
Max. mortising depth	90mm	100mm
Moter power	1.5kw	1.5kw
Weight	160kg	210kg

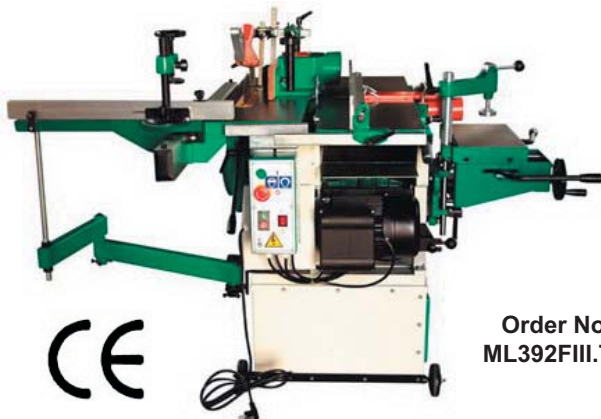
COMBINED UNIVERSAL MACHINE



Order No.: ML393E



Order No.: ML392FI



Order No.: ML392FIII.TGI



Order No.: ML392CI



Order No.: ML392E



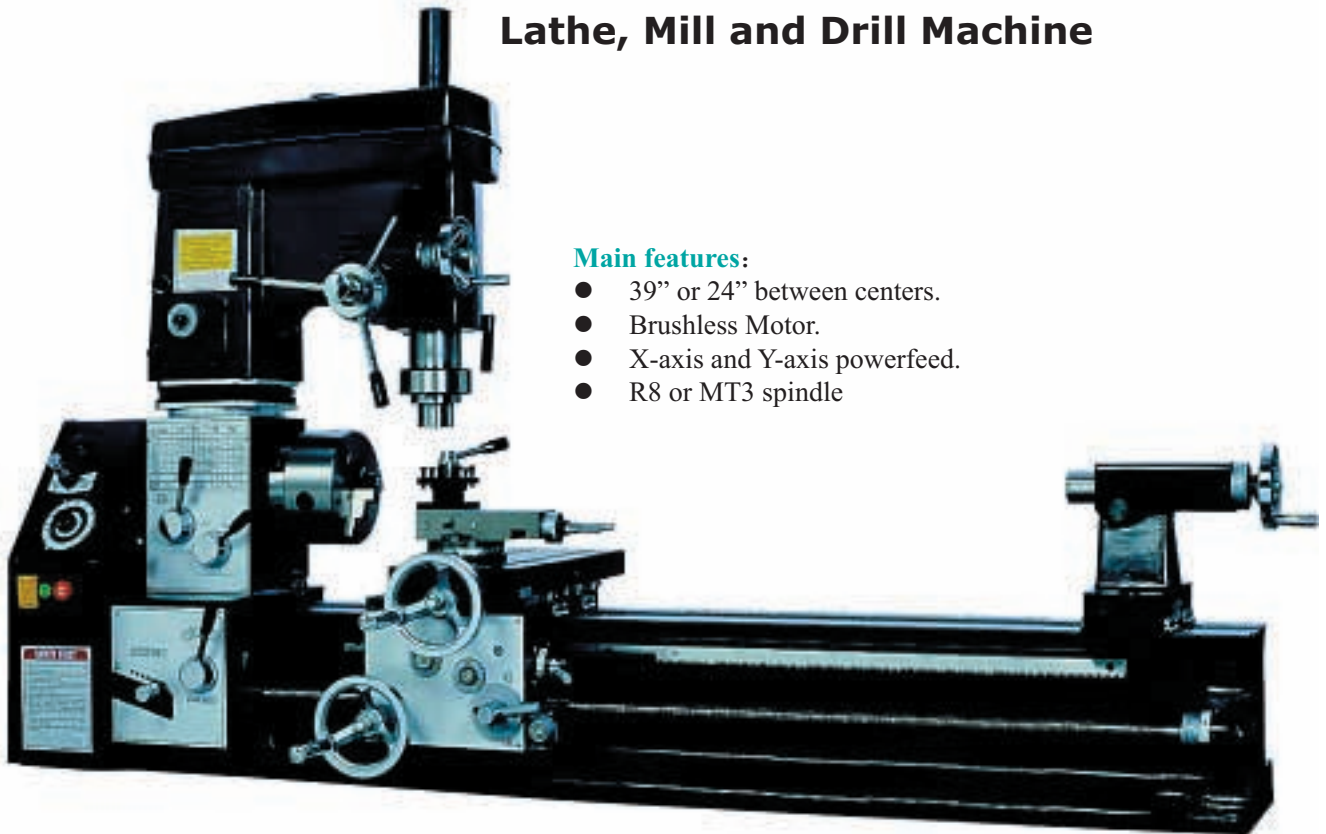
Order No.: ML393C



Order No.	ML392CI	ML392FI	ML392FIII.TGI	ML392E	ML393C	ML393E
Surface unit						
Working width of surface tables	200mm	250mm	250mm	250mm	300mm	350mm
Length of surface tables	850mm	960mm	960mm	1120mm	1300mm	1700mm
Thickening unit						
Range of thickness	6-90mm	6-120mm	6-120mm	6-140mm	6-240mm	6-240mm
Circular saw						
Max. blade dia.	250mm	250mm	250mm	250mm	305mm	305mm
Max. sawing thickness	70mm	70mm	70mm	70mm	90mm	90mm
Max. crosscutting width	270mm	300mm	300mm	500mm	1250mm	1250mm
Arbor speed	3500r/min	3500r/min	8100r/min	4500r/min	1750/3500/6700r/min	
Max. spindle working height			40mm	65mm	85mm	85mm

3-in-1 Lathe, Mill and Drill Machine

Lathe, Mill and Drill Machine



Main features:

- 39" or 24" between centers.
- Brushless Motor.
- X-axis and Y-axis powerfeed.
- R8 or MT3 spindle

Order No.	904-1340	904-1324
Lathe:		
Swing over bed:	339mm	339mm
Swing over table:	190mm	190mm
Distance between centers:	990.6mm	609.60mm
Spindle	D1-4 Camlock	D1-4 Camlock
Spindle bore:	28.58mm	28.58mm
Headstock taper:	MT4	MT4
Tailstock taper:	MT3	MT3
Thread:	inches:7-52 tpi; metric:0.35-6.5 mm	
Cross-slide travel:	194mm	194mm
Mill:		
Millhead taper:	R-8 or MT3	R-8 or MT3
Table:	451 x 165mm	451 x 165mm
T-slot width:	11.11mm	11.11mm
Spindle diameter:	70mm	70mm
Working height:	100 min, 340mm max to faceplate: 178mm	
Drill:		
Drill Capacity:	16mm	16mm
Chuck arbor taper:	R-8 to JT3	R-8 to JT3
Spindle to table distance:	100mm min, 340mm max	
Spindle to support column:	241.3mm	241.3mm
Motor DC	1.1KW or 1.5HP	
Speed Range:	50-1500 rpm / 600-3000 rpm	
Weight:	350kg/300kg	280kg/240kg
Crate Size:	1263x578x1100mm	1170*578*980mm

3-in-1 Lathe, Mill and Drill Machine

Lathe, Mill and Drill Machine



Technical Data:

Lathe

Swing over bed: 420mm
Distance between centers: 500mm
Max.longitudinal travel: 440mm
Max.cross travel: 200mm
Taper of spindle: MT4
Spindle bore dia.: 28mm
No. of speed: 7
Range of speed: 160-1360r.p.m
Barrel travel: 70mm

Taper of center: MT3

Metric threads: 0.2mm-6mm

Inch threads: 4-120TPI

Longitudinal range of automatic feeding:

0.05-0.35mm/0.002"-0.014"

Cross range of automatic feeding:

0.05-0.35mm/0.002"-0.014"

Drill and Mill

Drilling capacity: dia. 22mm

Table size(LxW): 475x160mm

End mill capacity: dia. 28mm

Face mill capacity: dia. 80mm

Max.distance between spindle and column: 285mm

Max.distance between spindle nose and table: 306mm

Spindle travel: 110mm

Spindle taper: MT3

Steps and speed range of spindle: 16steps / 120-3000r.p.m.

Swivel angle of headstock: +/- 180 degree

MOTOR

Lathe Motor: 0.55KW

Drill and Mill Motor: 0.55KW

Voltage/Frequency: Ascustomer'srequirement

Motor speed: 1400r.p.m.

Overall size: 1460 x 580 x 965mm

Package Size: 1130 x 580 x 1100mm

Net weight/Gross weight: 245kg/280kg

20 FT container load: 40pcs

Order No.904-1620

Tel: 86 532 88960859 Fax: 86 532 88960329 Email: sales@catertools.com

3-in-1 Lathe, Mill and Drill Machine

Lathe, Mill and Drill Machine



Technical Data

Lathe

Swing over bed: 420mm
Distance between centers: 800mm
Max.longitudinal travel: 740mm
Max.cross travel: 200mm
Taper of spindle: MT4
Spindle bore dia.: 28mm
No. of speed: 7
Range of speed: 160-1360r.p.m
Barrel travel: 70mm
Taper of center: MT3
Metric threads: 0.2mm-6mm
Inch threads: 4-120TPI
Longitudinal range of automatic feeding
0.05-0.35mm/0.002"-0.014"
Cross range of automatic feeding
0.05-0.35mm/0.002"-0.014"

Drill and Mill

Drilling capacity: dia. 22mm
Table size(LxW): 475x160mm
End mill capacity: dia. 28mm
Face mill capacity: dia.80mm
Max.distance between spindle and column: 285mm
Max.distance between spindle nose and table: 306mm
Spindle travel: 110mm
Spindle taper: MT3
Steps and speed range of spindle: 16steps / 120-3000r.p.m.
Swivel angle of headstock: +/- 180 degree

MOTOR

Lathe Motor: 0.55kw
Drill and Mill Motor: 0.55k2
Voltage/Frequency: As customer's requirement

MOTOR

Lathe Motor: 0.55kw
Drill and Mill Motor: 0.55k2
Voltage/Frequency: As customer's requirement
Motor speed: 1400r.p.m.
Overall size: 1760x580x965mm
Package Size: 1430x580x1100mm
Net weight/Gross weight: 275kg/325kg
20 FT container load: 26pcs

Order No.904-1632

3-in-1 Lathe, Mill and Drill Machine

Lathe, Mill and Drill Machine



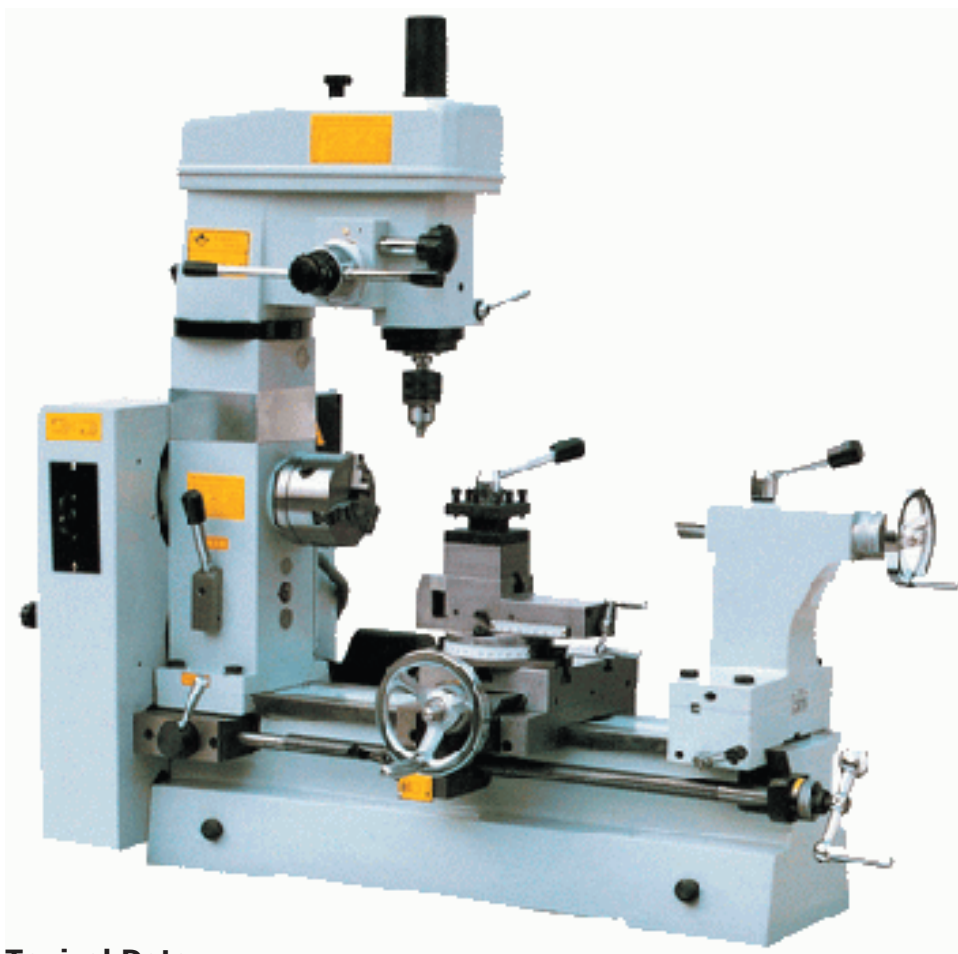
Technical Data:

Swing over bed: 420mm
Distance between centers: 500mm
Max.longitudinal travel 480mm
Max.cross travel: 120mm
Taper of spindle: MT3
Spindle hole: Dia. 20mm
Step of speed: 7
Range of speed: 160-1360RPM
Barrel travel: 70mm
Taper of center: MT3
Metric thread range: 0.2-3mm
Inch thread range: 8-120TPI
Range of longitudinal power feeding: .05-0.175mm / 0.002-0.007"
Drilling capacity: DIA. 15MM
Table size(LxW): 200mmx150mm
End mill capacity: Dia. 20mm
Face mill capacity: 63mm
Spindle travel dia. 85mm
Spindle taper: MT3
Steps of spindle speed: 14
Range of spindle speed: 117-1300rpm
Swivel angle of headstock: +/-360 degrees
Headstock Travel: 80mm
Motor power: 0.55Kw
Voltage/Frequency: As customer's requirement
Motor speed: 1400rpm
Overall size: 70x580x965mm
Packing size: 1032x580x1100mm
Net weight/Gross weight: 185kg/226kg
20FT container load: 40pcs

Order No.904-1516

Tel: 86 532 88960859 Fax: 86 532 88960329 Email: sales@catertools.com

Lathe, Mill and Drill Machine



Technical Data:

Swing over bed 420mm
Distance between centers: 400mm
Max.longitudinal travel 380mm
Max.cross travel: 120mm
Taper of spindle: MT3
Spindle hole: Dia. 20mm
Step of speed: 7
Range of speed: 160-1360rPM
Barrel travel: 70mm
Taper of center: MT3
Metric thread range: 0.2-3mm
Inch thread range: 8-120TPI
Range of longitudinal power feeding: 0.05-0.175mm / 0.002-0.007"
Drilling capacity: DIA. 15MM
Table size(LxW) 200mmx150mm
End mill capacity: dia. 20mm
Face mill capacity: dia.63mm
Spindle travel: dia. 85mm
Spindle taper: MT3
Steps of spindle speed: 14
Range of spindle speed: 117-1300rpm
Swivel angle of headstock: +/-360 degrees
Motor power: 0.55Kw
Voltage/Frequency: As customer's requirement
Motor speed: 1400rpm
Overall size: 970x580x965mm
Packing size: 1032x580x1100mm
Net weight/Gross weight: 180kg/215kg
20FT container load: 40pcs

Order No.904-1616

3-in-1 Lathe, Mill and Drill Machine

Lathe, Mill and Drill Machine



Technical Data:

Swing over bed 420mm
Distance between centers: 400mm
Max.longitudinal travel: 380mm
Max.cross travel: 120mm
Taper of spindle: MT3
Spindle hole Dia.: 20mm
Step of speed: 7
Range of speed: 160-1360rPM
Barrel travel: 70mm
Taper of center: MT3
Metric thread range: 0.2-3mm
Inch thread range: 8-120TPI
Range of longitudinal power feeding: 0.05-0.175mm / 0.002-0.007"
Drilling capacity: DIA. 15MM
Table size(LxW): 200mmx150mm
End mill capacity: 20mm
Face mill capacity: 63mm
Spindle travel: 85mm
Spindle taper: MT3
Steps of spindle speed: 14
Range of spindle speed: 117-1300rpm
Headstock Travel: 80mm
Swivel angle of headstock: +/-360 degrees
Motor power: 0.55Kw
Voltage/Frequency: As customer's requirement
Motor speed: 1400rpm
Overall size: 970x580x965mm
Packing size: 1032x580x1100mm
Net weight/Gross weight: 180kg/215kg
20FT container load: 40pcs

Order No.904-1416

Tel: 86 532 88960859 Fax: 86 532 88960329 Email: sales@catertools.com

Vertical Milling Machine

Features:

- * Spindle feed.
- * Rigid, rectangular table guideways.
- * Automatic X, Y axis feed.
- * Power driven table lifting control.
- * Table surface and guideways hardened at ultrasonic frequency.
- * 35 degree mill head swivel at both sides.

Specifications:

- * Table Size: 1320x320mm
- * T slot size: 14mm
- * X Travel: 800mm (750mm)
- * Y Travel: 300mm
- * Spindle Taper: ISO50
- * Distance from Spindle Nose to Table Surface: 45 to 445mm
- * Distance between spindle axis and column guideways: 360mm
- * Spindle Speed Range: 58 to 1710rpm
- * Motor Power: 4kw
- * Machine Weight: 2300kg
- * Overall Size: 1770x1820x1880mm

Order No. 905-0134



Vertical Milling Machine

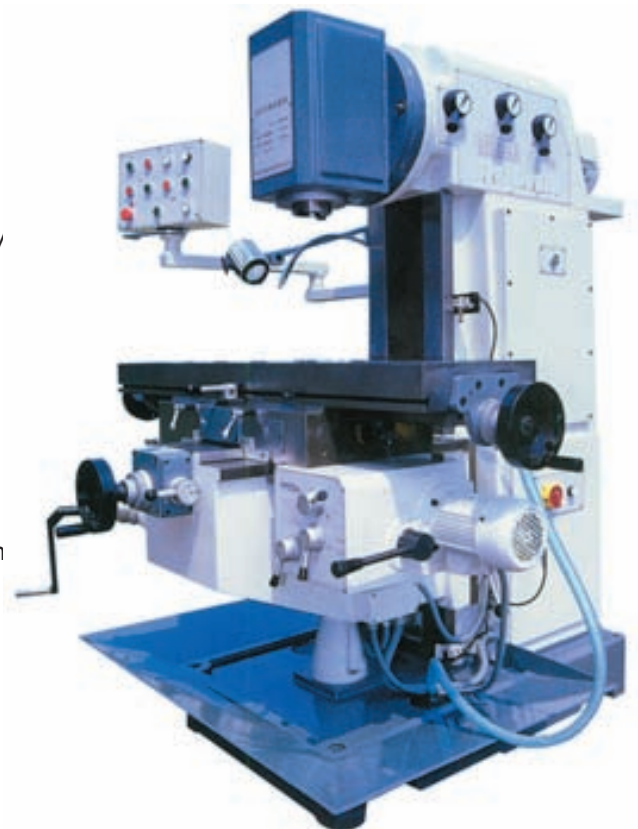
Features:

- * Rigid, rectangular table guideways.
- * Automatic X, Y axis feed.
- * Power driven table lifting control.
- * Table surface and guideways hardened at ultrasonic frequency
- * 35 degree mill head swivel at both sides.

Specifications:

- * Table Size: 1320x320mm
- * T slot size: 14mm
- * X Travel: 800mm (750mm)
- * Y Travel: 300mm
- * Spindle Taper: ISO50
- * Distance from Spindle Nose to Table Surface: 45 to 445mm
- * Distance between spindle axis and column guideways: 320m
- * Spindle Speed Range: 58 to 1710rpm
- * Motor Power: 4kw
- * Machine Weight: 2300kg
- * Overall Size: 1770x1820x1880mm

Order No. 905-0111



Knee Type Universal Milling Machine

Specifications:

- * Table Size: 1320x320mm
- * T slot size: 18mm
- * X axis travel (manual): 700mm
- * Y axis travel (manual): 255mm
- * Z axis travel (manual): 320mm
- * X axis travel (motorized): 680mm
- * Y axis travel (motorized): 240mm
- * Z axis travel (motorized): 300mm.
- * Distance from Spindle Axis to Table Surface:
30 to 350mm
- * Distance from Table Center to Column Guideways:
215 to 470mm
- * No. of Spindle Speed: 18
- * Spindle Speed Range: 30 to 1500rpm
- * X axis Table Feed Speed: 23.5 to 1180 mm/min
- * Y axis Table Feed Speed: 23.5 to 1180 mm/min
- * Z axis Table Feed Speed: 8 to 394 mm/min
- * Rapid Table Feed X: 2300mm/min
- * Rapid Table Feed Y: 2300mm/min
- * Rapid Table Feed Z: 770 mm/min
- * Motor Power: 7.5kw
- * Machine Weight: 2650kg/2950kg
- * Overall Size: 2294x1770x1665mm
- * Optional Vertical Milling head



Order No. 905-0110

Knee Type Universal Milling Machine (Ball Lead Screw)

Specifications:

- * Table Size: 1320x320mm
- * T slot size: 18mm
- * X axis travel (manual): 700mm
- * Y axis travel (manual): 255mm
- * Z axis travel (manual): 320mm
- * X axis travel (motorized): 680mm
- * Y axis travel (motorized): 240mm
- * Z axis travel (motorized): 300mm
- * Distance from Spindle Axis to Table Surface:
30 to 350mm
- * Distance from Table Center to Column Guideways:
215 to 470mm
- * No. of Spindle Speed: 18
- * Spindle Speed Range: 30 to 1500rpm
- * X axis Table Feed Speed: 23.5 to 1180 mm/min
- * Y axis Table Feed Speed: 23.5 to 1180 mm/min
- * Z axis Table Feed Speed: 8 to 394 mm/min
- * Rapid Table Feed X: 2300mm/min
- * Rapid Table Feed Y: 2300mm/min
- * Rapid Table Feed Z: 770 mm/min
- * Motor Power: 7.5kw
- * Machine Weight: 2650kg/2950kg
- * Overall Size: 2294x1770x1665mm
- * Optional Vertical Milling Head



Order No. 905-0135

Vertical Knee Type Milling Machine



Technical Data:

Table Size: 1320x320mm
X Travel (Manual/Power Driven): 700mm/680mm
Y Travel (Manual/Power Driven): 255mm/240mm
Z Travel (Manual/Power Driven): 350mm/330mm
Spindle Travel: 70mm
Distance from Spindle Nose to Table Surface: 60-410mm
Distance between spindle axis and column guideways: 350mm
No. of Spindle Speed: 18
Spindle Speed Range: 30 to 1500rpm
X axis Table Feed Speed 23.5 to 1180 mm/min (18 speeds)
Y axis Table Feed Speed 23.5 to 1180 mm/min (18 speeds)
Z axis Table Feed Speed 8 to 394 mm/min
Rapid Table Feed (X/Y/Z) 2300/2300/770 mm/min
Motor Power 7.5kw
Machine Weight 2800kg/3100kg
Overall Size 2294x1770x1904mm

Order No. 905-0109

Vertical Knee Type Milling Machine (Ball Screw)



Technical Data:

Table Size: 1320x320mm
X Travel (Manual/Power Driven): 700mm/680mm
Y Travel (Manual/Power Driven): 255mm/240mm
Z Travel (Manual/Power Driven): 350mm/330mm
Spindle Travel: 70mm
Distance from Spindle Nose to Table Surface: 60-410mm
Distance between spindle axis and column guideways: 350mm
No. of Spindle Speed: 18
Spindle Speed Range: 30 to 1500rpm
X axis Table Feed Speed 23.5 to 1180 mm/min (18 speeds)
Y axis Table Feed Speed 23.5 to 1180 mm/min (18 speeds)
Z axis Table Feed Speed 8 to 394 mm/min
Rapid Table Feed (X/Y/Z) 2300/2300/770 mm/min
Motor Power 7.5kw
Machine Weight 2800kg/3100kg
Overall Size 2294x1770x1904mm

Order No. 905-0136

Universal Knee Type Milling Machine



Specifications:

- * Table Size: 1600x400mm
- * Number of T slots: 3
- * Width of T slots: 18mm
- * Maximum load: 800kg
- * X axis travel (manual/power): 900mm/880mm
- * Y axis travel (manual/power): 315mm/300mm
- * Z axis travel (manual/power): 380mm/360mm.
- * X axis Table Feed Speed: 19 to 950 mm/min
- * Y axis Table Feed Speed: 19 to 950 mm/min
- * Z axis Table Feed Speed: 6.3 to 317 mm/min
- * Rapid Table Feed X: 2300mm/min
- * Rapid Table Feed Y: 2300mm/min
- * Rapid Table Feed Z: 770 mm/min
- * No. of Spindle Speed: 18
- * Spindle Speed Range: 30 to 1500rpm
- * Distance from Spindle Axis to Table Surface: 30 to 350mm
- * Motor Power: 11kw
- * Machine Weight: 3850kg
- * Overall Size: 2556x2159x1770mm

Order No. 905-0131

Vertical Milling Machine



Specifications:

- * Table Size: 1600x400mm
- * Number of T slots: 3
- * Width of T slots: 18mm
- * Maximum load: 800kg
- * X axis travel (manual/power): 900mm/880mm
- * Y axis travel (manual/power): 315mm/300mm
- * Z axis travel (manual/power): 385mm/365mm.
- * X axis Table Feed Speed: 19 to 950 mm/min
- * Y axis Table Feed Speed: 19 to 950 mm/min
- * Z axis Table Feed Speed: 6.3 to 317 mm/min
- * Rapid Table Feed X: 2300mm/min
- * Rapid Table Feed Y: 2300mm/min
- * Rapid Table Feed Z: 770 mm/min
- * No. of Spindle Speed: 18
- * Spindle Speed Range: 30 to 1500rpm
- * Spindle travel: 85mm
- * Max. spindle swivel angle range: +/-45 degrees
- * Distance from Spindle nose to Table Surface: 30 to 500mm
- * Motor Power: 11kw
- * Machine Weight: 4250kg
- * Overall Size: 2556x2159x2298mm

Order No. 905-0137

Universal Milling Machine

Features:

- * Optional vertical milling head attachment.
- * Rigid, rectangular table guideways.
- * Automatic X, Y axis feed.
- * Power driven table lifting control.
- * Table surface and guideways hardened at ultrasonic frequency.

Specifications:

- * Table Size: 1320x320mm
- * T slot size: 14mm
- * X Travel: 800mm (750mm)
- * Y Travel: 300mm
- * Spindle Taper: ISO50 horizontal/ISO 40 vertical
- * Distance from Spindle Nose to Table Surface: 0 to 400mm
- * Distance between spindle axis and boom: 175mm
- * Spindle Speed Range: 58 to 1800rpm
- * Motor Power: 4kw
- * Machine Weight: 2200kg
- * Overall Size: 1900x1720x1750mm

Order No. 905-0112



Knee Type Universal Milling Machine

Features:

- * Easy vertical to horizontal conversion.
- * Variable table feed.
- * 30 degree milling head swivel at both sides.
- * Table surface and guideways hardened at ultrasonic frequency.

Specifications:

- * Table Size: 1250x260mm
- * X Travel: 780mm
- * Y Travel: 220mm
- * Spindle Taper: ISO50
- * Distance from horizontal spindle to table surface: 0 to 350mm
- * Distance from Vertical Spindle Nose to Table Surface: 20 to 390mm
- * Distance from vertical spindle axis to column guideway: 160 to 480mm
- * Milling Head Swivel Angle: $\pm 30^\circ$
- * Quill Stroke: 70mm
- * No. of Horizontal Speed: 12
- * No. of Vertical Speed: 12
- * Horizontal Spindle Speed: 50 to 2020 rpm
- * Vertical Spindle Speed: 56 to 2500rpm
- * Variable Table Feed Speed X: 24 to 1200mm/min
- * Variable Table Feed Speed Y: 24 to 1200mm/min
- * Variable Table Feed Speed Z: 12 to 600 mm/min
- * Table Rapid Feed Speed X: 1.2m/min
- * Table Rapid Feed Speed Y: 1.2m/min
- * Table Rapid Feed Speed Z: 0.6m/min
- * Motor Power: 1.1kw/4kw
- * Machine Weight: 1440kg
- * Overall Size: 1680x1800x2170mm

Order No. 905-0113



Turrent Milling Machine

- * 55° dovetail Y and Z axis guideways.
- * Strengthening ribs on both sides of the column.

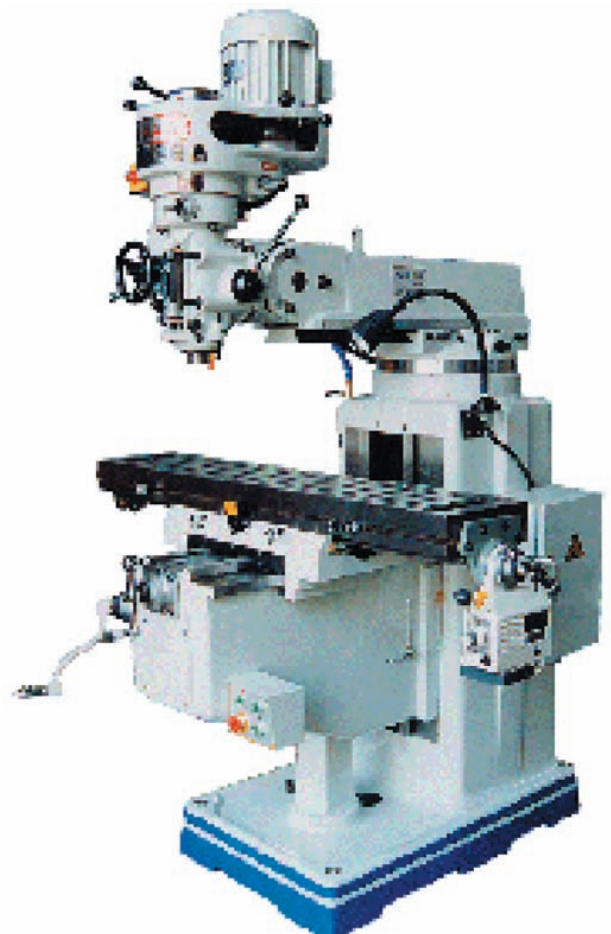
Order No.	905-0001	905-0012
Table Size	230x1067mm	230x1246mm
Longitudinal Travel	650mm	840mm
Table Cross Travel	305mm	
Table Vertical Travel	400mm	
T slot number and size	3X16mm	
Ram Travel	312mm	
Distance between Spindle Nose to Table	0-415mm	
Distance between Spindle center and Column	170-482mm	
Spindle Taper Size	R8 or ISO30, ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-4200rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	2.25Kw/3HP	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1400x1476x2030mm	
Shipping Weight	1100kg	1160kg



Turrent Milling Machine

- * 55° dovetail Z axis guideway, rectangular Y axis.
- * Strengthening ribs on both sides of the column.

Order No.	905-0002	905-0013
Table Size	230x1067mm	230x1246mm
Longitudinal Travel	650mm	840mm
Table Cross Travel	305mm	
Table Vertical Travel	400mm	
T slot number and size	3X16mm	
Ram Travel	312mm	
Distance between Spindle Nose to Table	0-415mm	
Distance between Spindle center and Column	170-482mm	
Spindle Taper Size	R8 or ISO30, ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-4200rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	2.25Kw/3HP	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1400x1476x2030mm	
Shipping Weight	1100kg	1160kg



Turrent Milling Machine

- * Rectangular Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.

Order No.	905-0003	905-0014
Table Size	254x1270mm	254x1370mm
Longitudinal Travel	850mm	or 950mm
Table Cross Travel	420mm	
Table Vertical Travel	420mm	
T slot number and size	3X16mm	
Ram Travel	470mm	
Distance between Spindle Nose to Table	0-405mm	
Distance between Spindle center and Column	170-482mm	
Spindle Taper Size	R8 or ISO30, ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-4200rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	2.25Kw/3HP	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1516x1556x2080mm	
Shipping Weight	1550kg	1610kg



Turrent Milling Machine

- * 55° dovetail Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.

Order No.	905-0004	905-0015
Table Size	254x1270mm	254x1370mm
Longitudinal Travel	850mm	950mm
Table Cross Travel	420mm	
Table Vertical Travel	420mm	
T slot number and size	3X16mm	
Ram Travel	470mm	
Distance between Spindle Nose to Table	0-405mm	
Distance between Spindle center and Column	170-482mm	
Spindle Taper Size	R8 or ISO30, ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-4200rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	2.25Kw/3HP	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1516x1556x2080mm	
Shipping Weight	1380kg	1430kg



Turrent Milling Machine with X axis power feed

- * 55° dovetail Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.

Order No.	905-0005	905-0016
Table Size	254x1270mm	254x1370mm
Longitudinal Travel	850mm	950mm
Table Cross Travel	420mm	
Table Vertical Travel	420mm	
T slot number and size	3X16mm	
Ram Travel	470mm	
Distance between Spindle Nose to Table	0-405mm	
Distance between Spindle center and Column	170-482mm	
Spindle Taper Size	R8 or ISO30, ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-4200rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	2.25Kw/3HP	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1516x1556x2080mm	
Shipping Weight	1380kg	1430kg



Universal Knee type Milling Machine



Order No.	905-0150	905-0151
Table surface	300x1150mm	300x1500 mm
Number of T-slots and slot width	3x18 mm	
Distance between T-slots	70 mm	
Max.longitudinal travel	680 mm	780mm
Max.cross travel	235 mm	
Max.vertical travel	400 mm	
Travel of ram	470 mm	
Swivel angle of the milling head	±90°	
Max.rotations angle of table	±45°	
Level spindle taper	ISO40	
Level spindle Grade of speed	12 steps	
Level Spindle Range of speed	35-1600 r/min	
Number of feeds	14 steps	
Longitudinal,cross,Vertical speed range	12-720 mm/min	
Longitudinal,cross,Vertical rapid travel speed	2100 mm/min	
Main drive motor Level spindle	4 kw	
Feed motor	0.75 kw	
Coolant pump	40 w	
Net weight of machine	2150kg	2250kg
Gross weight of machine	2900 kg	2900kg
Overall Dimensions (LxWxH) (MM)	154x170x163	154x194x163

Turrent Milling Machine

- * Stationary milling head structure.
- * Rectangular Y and Z axis guideway.
- * The guide ways on saddle are lined with TF wearable materials

Order No.	905-0006	905-0017
Table Size	254x1270mm	254x1370mm
Longitudinal Travel	850mm	950mm
Table Cross Travel	420mm	
Table Vertical Travel	420mm	
T slot number and size	3X16mm	
Ram Travel	470mm	
Distance between Spindle Nose to Table	0-405mm	
Distance between Spindle center and Column	140-609mm	
Spindle Taper Size	ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-3750rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	3.75Kw/5HP	
Head Swivel	90°	
Head Tilting	FIXED	
Shipping Size	1516x1556x2080mm	
Shipping Weight	1590kg	1650kg



Turrent Milling Machine

- * Rectangular Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.

Order No.	905-0007	905-0018
Table Size	254x1270mm	254x1370mm
Longitudinal Travel	850mm	950mm
Table Cross Travel	420mm	
Table Vertical Travel	420mm	
T slot number and size	3X16mm	
Ram Travel	470mm	
Distance between Spindle Nose to Table	0-405mm	
Distance between Spindle center and Column	140-609mm	
Spindle Taper Size	ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-4200rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	2.25Kw/3HP	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1516x1556x2080mm	
Shipping Weight	1590kg	1650kg



Turrent Milling Machine

- * Rectangular Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.
- * Lifting Motor

Order No.	905-0008	905-0019
Table Size	305x1370mm	305x1500mm
Longitudinal Travel	870mm	1000mm
Table Cross Travel	380mm	
Table Vertical Travel	430mm	
T slot number and size	3X16mm	
Ram Travel	500mm	
Distance between Spindle Nose to Table	0-350mm	
Distance between Spindle center and Column	108-760mm	
Spindle Taper Size	ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-3750rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	3.75kw/5hp	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1566x1650x2080mm	
Shipping Weight	1700kg	1760kg



Turrent Milling Machine

- * Rectangular Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.
- * Lifting Motor

Order No.	905-0009	905-0021
Table Size	305x1370mm	305x1500mm
Longitudinal Travel	870mm	1000mm
Table Cross Travel	380mm	
Table Vertical Travel	430mm	
T slot number and size	3X16mm	
Ram Travel	500mm	
Distance between Spindle Nose to Table	0-350mm	
Distance between Spindle center and Column	108-760mm	
Spindle Taper Size	ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-3750rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	3.75kw/5hp	
Head Swivel	90°	
Head Tilting	Fixed	
Shipping Size	1566x1650x2080mm	
Shipping Weight	1750kg	1810kg



Turrent Milling Machine

- * Super strong saddle
- * Rectangular Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.
- * Lifting Motor

Order No.	905-0010	905-0020
Table Size	330x1370mm	330x1500mm
Longitudinal Travel	840mm	1000mm
Table Cross Travel	368mm	
Table Vertical Travel	450mm	
T slot number and size	3X16mm	
Ram Travel	500mm	
Distance between Spindle Nose to Table	0-450mm	
Distance between Spindle center and Column	108-760mm	
Spindle Taper Size	ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-3750rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	3.75kw/5hp	
Head Swivel	90°	
Head Tilting	45°	
Shipping Size	1566x1650x2080mm	
Shipping Weight	2300kg	2360kg



Turrent Milling Machine

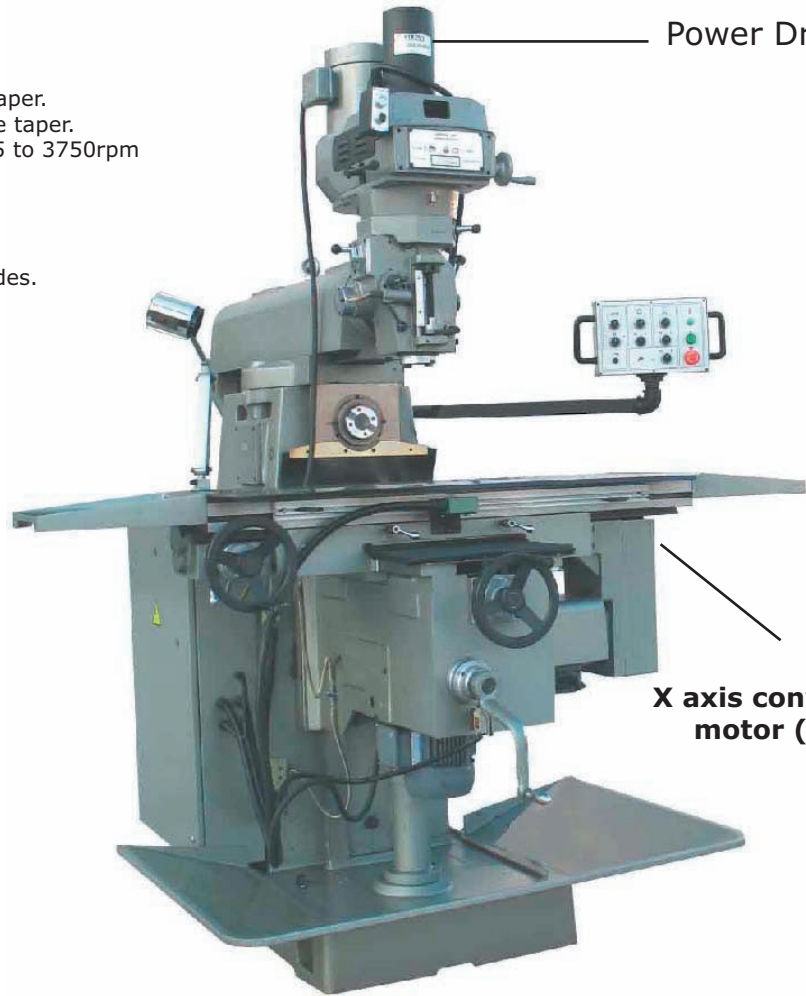
- * Super strong saddle
- * Rectangular Y and Z axis guideways.
- * The guide ways on saddle are lined with TF wearable materials.
- * Lifting Motor

Order No.	905-0011	905-0022
Table Size	330x1370mm	330x1500mm
Longitudinal Travel	840mm	1000mm
Table Cross Travel	368mm	
Table Vertical Travel	450mm	
T slot number and size	3X16mm	
Ram Travel	500mm	
Distance between Spindle Nose to Table	0-450mm	
Distance between Spindle center and Column	108-760mm	
Spindle Taper Size	ISO40	
Spindle Travel	127mm	
16 Spindle Speed	65-4500rpm 50HZ or 80-5440rpm 60HZ	
	65-3750rpm variable speed (optional)	
Automatic Quill Feed	0.04mm,0.08mm, 0.15mm	
Motor Power	3.75kw/5hp	
Head Swivel	90°	
Head Tilting	Fixed	
Shipping Size	1566x1650x2080mm	
Shipping Weight	2300kg	2360kg



Vertical and Horizontal Turrent Milling Machine

- * Large strong saddle.
- * Standard ISO40 vertical spindle taper.
- * Standard ISO40 horizontal spindle taper.
- * Optional variable speed motor: 65 to 3750rpm
- * 900mm/min Knee movement.
- * 5HP Vertical motor
- * 5HP Horizontal motor
- * 1.5HP lifting motor.
- * 90° vertical head rotation both sides.
- * Hang up control panel



Power Drawbar

X axis conversion feed motor (Optional)

Order No.	905-0023	905-0024
Table size	300x1300mm	300x1500mm
Longitudinal travel	845mm	1000mm
Cross travel	385mm	385mm
Knee vertical travel	435mm	
Vertical Quill travel	127mm	
Rapid knee speed	900mm/min	
Vertical Spindle speed	16 steps speed (standard): 65 TO 4500rpm 50HZ 80 to 5440rpm 60HZ. Optional varialbe speed 65 to 3750rpm	
Vertical quill feed speed	0.04/0.08/0.15mm/revolution	
Mill head swivel range	90° both left and right	
Distance between spindle nose to table surface	115-545mm	
Horizontal spindle speed	50HZ: 45,80,165,260,500,980RPM 60HZ: 55,100, 200,315,600,1180RPM	
Distance from horizontal spindle center to table surface	-20-410mm	
Distance from spindle center to ram	183mm	
Ram travel: 480mm	480mm	
Ram rotating	360°	
Machine Weight: 1900kg	1900kg	1950
Shipping Size	180x150x220cm	180x180x220cm

Standard equipment:

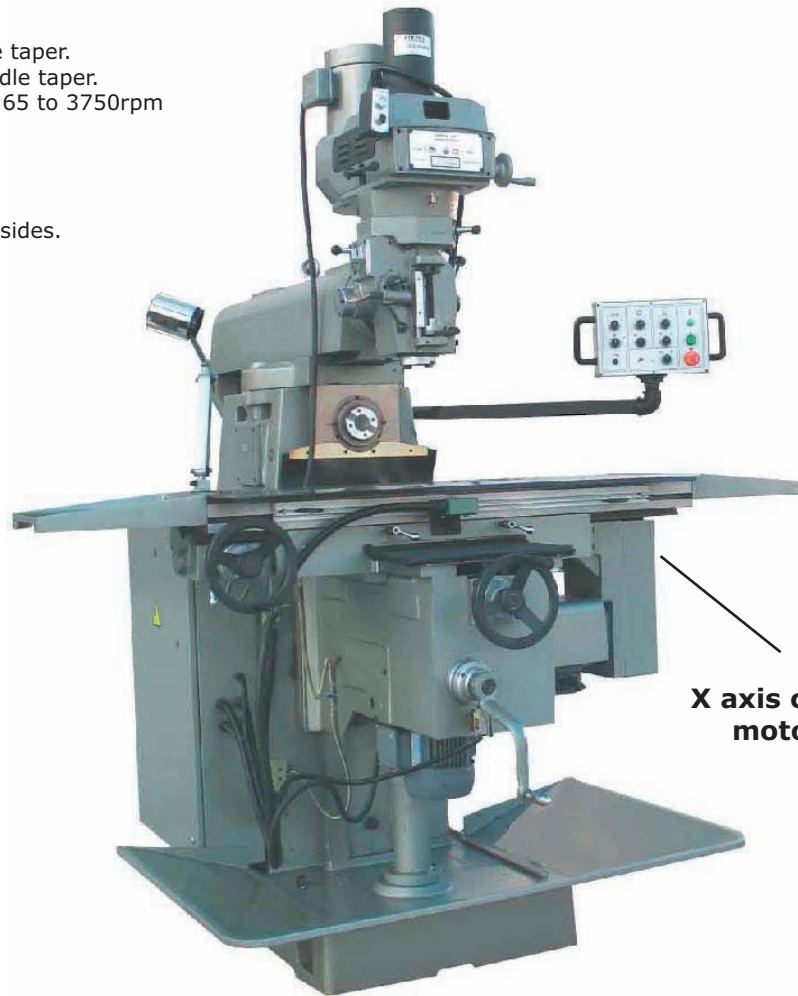
- * Electro cabinet and hung up control panel
- * Knee rapid elevating motor
- * Coolant system.
- * Electro lubricate pump
- * Draw bar
- * Oil collecting plate
- * Working lamp
- * Plastic splashing guard
- * Working lamp.

Optional equipment:

- * X/Y axis gear box power feed
- * X/Y axis conversion feed motor (0-3500mm/minute)
- * Air power draw bar
- * Digital readout
- * Machine vise
- * Universal clamping kits (52 pc)

Vertical and Horizontal Turrent Milling Machine Table feed servo motor

- * Large strong saddle.
- * Standard ISO40 vertical spindle taper.
- * Standard ISO40 horizontal spindle taper.
- * Optional variable speed motor: 65 to 3750rpm
- * 900mm/min Knee movement.
- * 5HP Vertical motor
- * 5HP Horizontal motor
- * 1.5HP lifting motor.
- * 90° vertical head rotation both sides.
- * Hang up control panel
- * Table feed servo motor



X axis conversion feed motor (Optional)

Technical Data:

Table size: 300x1300mm
Longitudinal travel: 845mm
Cross travel: 385mm
Knee vertical travel: 435mm
Longitudinal Table Feed Speed: 0-3500mm/min variable
Cross Table Feed Speed: 0-3500mm/min variable
Vertical Quill travel: 127mm
Rapid knee speed: 900mm/min
Motor power: 5HP
Vertical spindle taper: ISO40
Vertical Spindle speed: 16 steps speed (standard): 65 TO 4500rpm 50HZ
80 to 5440rpm 60HZ. Optional variable speed 65 to 3750rpm
Vertical quill feed speed: 0.04/0.08/0.15mm/revolution
Mill head swivel range: 90° both left and right
Distance between spindle nose to table surface: 115-545mm
Horizontal spindle motor power: 5HP
Horizontal spindle speed: 50HZ: 45,80,165,260,500,980RPM
60HZ: 55,100,200,315,600,1180RPM
Horizontal spindle taper: ISO40
Distance from horizontal spindle center to table surface: -20-410mm
Distance from spindle center to ram: 183mm
Ram travel: 480mm
Ram rotating: 360°
Machine Weight: 1900kg
Shipping Size: 180x150x220cm

Standard equipment:

- * Electro cabinet and hung up control panel
- * Knee rapid elevating motor
- * Coolant system.
- * Electro lubricate pump
- * Draw bar
- * Oil collecting plate
- * Working lamp
- * Plastic splashing guard
- * Working lamp.

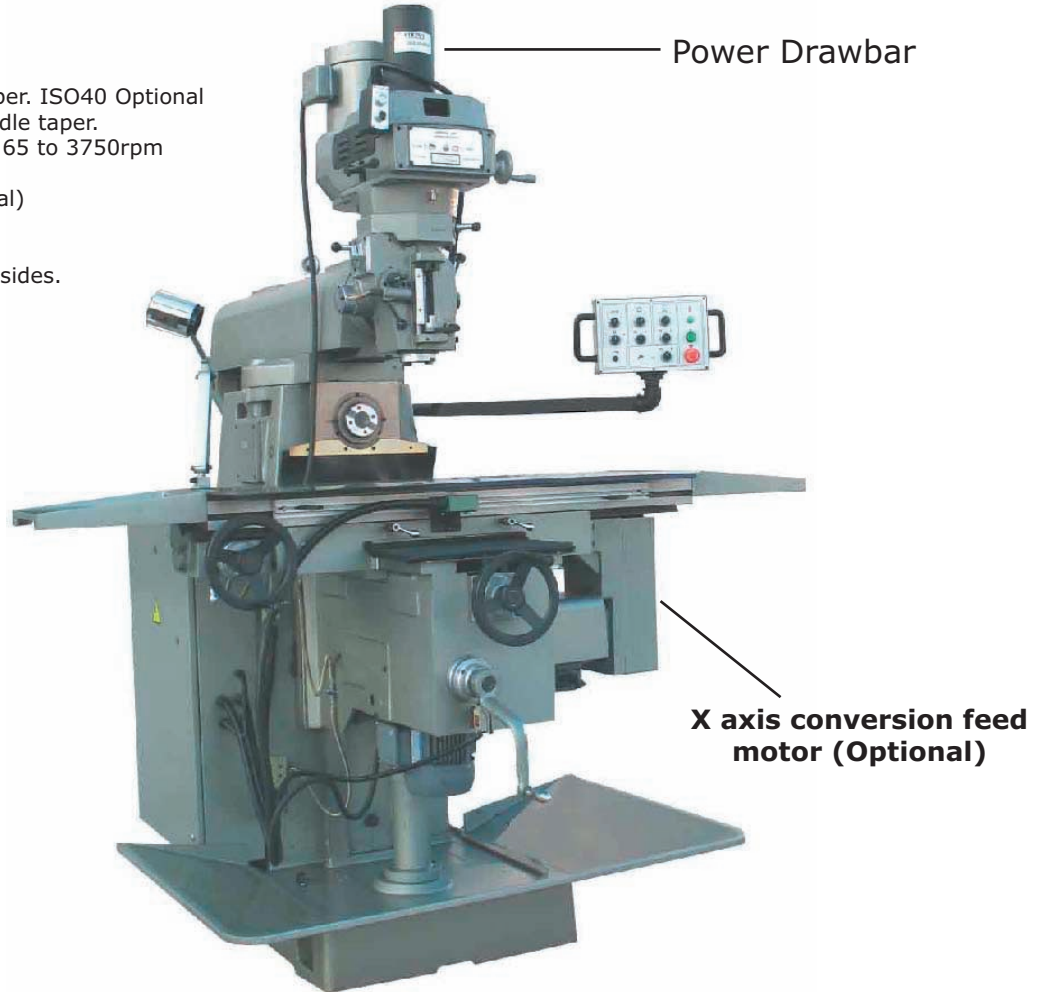
Optional equipment:

- * X/Y axis gear box power feed
- * X/Y axis conversion feed motor (0-3500mm/minute)
- * Air power draw bar
- * Digital readout
- * Machine vise
- * Universal clamping kits (52 pc)

Order No. 905-0025

Vertical and Horizontal Turrent Milling Machine 45° back and forth swivel

- * Large strong saddle.
- * Standard R8 vertical spindle taper. ISO40 Optional
- * Standard ISO40 horizontal spindle taper.
- * Optional variable speed motor: 65 to 3750rpm
- * 900mm/min Knee movement.
- * 3HP Vertical motor (5HP optional)
- * 5HP Horizontal motor
- * 1.5HP lifting motor.
- * 90° vertical head rotation both sides.
- * Hang up control panel
- * 45° back and forth swivel.



Power Drawbar

X axis conversion feed motor (Optional)

Order No.	905-0026	905-0027
Table size	300x1300mm	300x1500mm
Longitudinal travel	845mm	1000mm
Cross travel	385mm	385mm
Knee vertical travel	435mm	
Vertical Quill travel	127mm	
Rapid knee speed	900mm/min	
Vertical Spindle speed	16 steps speed (standard): 65 TO 4500rpm 50HZ 80 to 5440rpm 60HZ. Optional varialbe speed 65 to 3750rpm	
Vertical quill feed speed	0.04/0.08/0.15mm/revolution	
Mill head swivel range	90° both left and right, 45° back and forth	
Distance between spindle nose to table surface	115-545mm	
Horizontal spindle speed	50HZ: 45,80,165,260,500,980RPM 60HZ: 55,100, 200,315,600,1180RPM	
Distance from horizontal spindle center to table surface	-20-410mm	
Distance from spindle center to ram	183mm	
Ram travel: 480mm	480mm	
Ram rotating	360°	
Machine Weight: 1900kg	1680kg	1730
Shipping Size	180x160x220cm	180x180x220cm

Standard equipment:

- * Electro cabinet and hung up control panel
- * Knee rapid elevating motor
- * Coolant system.
- * Electro lubricate pump
- * Draw bar
- * Oil collecting plate
- * Working lamp
- * Plastic splashing guard
- * Working lamp.

Optional equipment:

- * X/Y axis gear box power feed
- * X/Y axis conversion feed motor (0-3500mm/minute)
- * Air power draw bar
- * Digital readout
- * Machine vise
- * Universal clamping kits (52 pc)

Universal Milling Machine

Features:

- * Easy vertical to horizontal conversion.
- * Variable table feed.
- * 45 degree milling head swivel at both sides.
- * Table surface and guideways hardened at ultrasonic frequency.

Specifications:

- * Table Size: 1250x260mm
- * T slot size: 14mm
- * X Travel: 780mm
- * Y Travel: 220mm
- * Spindle Taper: ISO50
- * Distance from horizontal spindle to table surface: 0 to 350mm
- * Distance from Vertical Spindle Nose to Table Surface: 0 to 210mm
- * Distance from vertical spindle axis to column guideway: 310mm
- * Milling Head Swivel Angle: $\pm 45^\circ$
- * Quill Stroke: 60mm
- * No. of Horizontal Speed: 12
- * No. of Vertical Speed: 12
- * Horizontal Spindle Speed: 50 to 2020 rpm
- * Vertical Spindle Speed: 50 to 2020rpm
- * Variable Table Feed Speed X: 24 to 1200mm/min
- * Variable Table Feed Speed Y: 24 to 1200mm/min
- * Variable Table Feed Speed Z: 12 to 600 mm/min
- * Table Rapid Feed Speed X: 1.2m/min
- * Table Rapid Feed Speed Y: 12m/min
- * Table Rapid Feed Speed Z: 0.6 m/min
- * Motor Power: 4kw
- * Machine Weight: 1390kg
- * Overall Size: 1080x1800x1640mm



Order No. 905-0114

Universal Swivel Head Milling Drilling Machine

Features:

- * Milling head swivel for horizontal milling.
- * Automatic X, Y axis table feed and motor-driven Z axis table lifting.
- * Table surface and guideways hardened at ultrasonic frequency.

Technical Data:

- Table Size: 1120x260mm
- T slot size: 14mm
- X Travel: 600mm
- Y Travel: 270mm
- Max. Facing Milling Capacity: 125mm
- Max. End Milling Capacity 25mm
- Distance from spindle nose to table surface: 100 to 480mm
- Milling Head Swivel Angle: 360 degree
- Spindle No. ISO40
- Spindle Speed Range: 45 to 1660rpm
- Motor Power: 2.2kw
- Machine Weight: 1480kg/1680kg
- Overall Size: 1655x1500x1730mm

Standard Kits

- Milling Chuck: 1set
- Allen wrench 5mm,6mm,8mm,10mm,12mm: 1pcs each
- Milling Arbor: ISO40/32: 1pcs
- Nut and washer M16,16: 4pcs each
- Cutter Arbor: 1 set
- Leader: 1pcs
- Support: 1pcc
- Open end wrench: 8/10mm, 16/18mm, 21/24mm: 1pcs each
- Drawbar: 1pcs
- Milling Machine Vise 160mm: 1pcs
- Foundation bolts M16: 4pcs
- Screws M12x30: 4pcs
- Operation manual
- Accuracy test list



Order No. 905-0115

Universal Swivel Head Milling Drilling Machine



* Built-in X, Y axis power feed.

Specifications:

Table Size: 1120x260mm
 T slot size: 14mm
 X Travel: 600mm
 Y Travel: 270mm
 Max. Facing Milling Capacity: 125mm
 Max. End Milling Capacity: 25mm
 Distance from spindle nose to table surface: 100 to 500mm
 Milling Head Swivel Angle: 360 degree
 Spindle NO. ISO40
 Spindle Speed Range: 45 to 1660rpm
 Motor Power: 2.2kw
 Machine Weight: 1400kg/1600kg
 Overall Size: 1655x1500x1730mm

Standard Kits

Milling Chuck: 1set
 Allen wrench 5mm,6mm,8mm,10mm,12mm: 1pcs each
 Milling Arbor: ISO40/32: 1pcs
 Nut and washer M16,16: 4pcs each
 Cutter Arbor: 1 set
 Leader: 1pcs
 Support: 1pc
 Open end wrench: 8/10mm, 16/18mm, 21/24mm: 1pcs each
 Drawbar: 1pcs
 Milling Machine Vise 160mm: 1pcs
 Foundation bolts M16: 4pcs
 Screws M12x30: 4pcs
 Operation manual
 Accuracy test list

Order No. 905-0116

Universal Swivel Head Milling Drilling Machine



* Automatic X axis power feed.

Specifications:

Table Size: 1120x260mm
 T slot size: 14mm
 X Travel: 600mm
 Y Travel: 300mm
 Max. Facing Milling Capacity: 125mm
 Max. End Milling Capacity: 25mm
 Distance from spindle nose to table surface: 100 to 500mm
 Milling Head Swivel Angle: 360 degree
 Spindle No. ISO40
 Spindle Speed Range: 45 to 1660rpm
 Motor Power: 2.2kw
 Machine Weight: 1360kg
 Overall Size: 1655x1325x1730mm

Standard Kits

Built-in standard mechanical X axis powerfeed.
 Milling Chuck: 1set
 Allen wrench 5mm,6mm,8mm,10mm,12mm: 1pcs each
 Milling Arbor: ISO40/32: 1pcs
 Nut and washer M16,16: 4pcs each
 Cutter Arbor: 1 set
 Leader: 1pcs
 Support: 1pc
 Open end wrench: 8/10mm, 16/18mm, 21/24mm: 1pcs each
 Drawbar: 1pcs
 Milling Machine Vise 160mm: 1pcs
 Foundation bolts M16: 4pcs
 Screws M12x30: 4pcs
 Operation manual
 Accuracy test list

Order No. 905-0117

Milling and Drilling Machine

Features:

- * High rigidity rectangular table guideways.
- * Automatic X, Y axis power feed.
- * Motor-driven drill press head height adjustment.
- * $\pm 45^\circ$ drill press head swivel.
- * Table surface and guilds hardened at ultrasonic frequency

Specifications:

- * Max. Drilling Capacity: 50mm
- * Max. Automatic Feed Drilling Capacity: 14mm (Cast Iron)
- * Table Size: 1320x320mm
- * T slot size: 14mm
- * X Travel: 800mm
- * Y Travel: 300mm
- * Spindle No. ISO40
- * Spindle Travel: 120mm
- * Distance from Spindle Nose to Table Surface: 180mm to 580mm
- * Distance between Spindle Axis and Column Surface: 200-780mm
- * Vertical Spindle Speed: 90 to 2000 rpm
- * Horizontal Spindle Speed: 38 to 1310rpm
- * Motor Power: 2.2KW
- * Machine Weight: 2000kg
- * Overall Size: 1710x1720x2330mm

Order No. 905-0118



Milling and Drilling Machine

Features:

- * High rigidity rectangular table guideways.
- * Automatic spindle feeding.
- * Motorized drill press head movement.
- * $\pm 45^\circ$ drill press head swivel.
- * Table surface and guilds hardened at ultrasonic frequency
- * X and Y axis mechanical powerfeed.

Technical Data:

- Drilling Capacity 50mm
- Max. Face Milling Capacity 125mm
- Max. End Milling Capacity 32mm
- Table Size 1220x360mm
- T slot size: 14mm
- X Travel: 600mm
- Y Travel: 360mm
- Spindle Travel: 180mm
- Distance from Spindle Nose to Table Surface: 50mm to 580mm
- Spindle Taper ISO40
- No. of Spindle Speed 16
- Spindle Speed: 94 to 2256rpm
- Automatic Spindle Feeds: 0.1mm,0.15mm,0.3mm
- Motor Power 1.5/2.4KW
- Machine Weight 2000kg/2150kg
- Overall Size 1730x1730x2300mm

Order No. 905-0108



Universal Radial Milling Machine

- * Taiwan high speed milling head.
- * Built-in gear driven X, Y, Z axis power feed system.
- * Motorized up and down movement of table.

Technical Data:

Table Size: 1120x260mm
T slot size: 14mm
X Travel: 600mm
Y Travel: 270mm
Max. Drilling Capacity (Manual) 28mm
Max. Drilling Capacity (Powerfeed): 10mm (Cast Iron)
Max. End Mill Capacity: 20mm
Distance from spindle nose to table surface: 90 to 430mm
Distance from spindle axis to column surface: 50 to 550mm
Spindle speed: 80 to 5440 rpm (Vertical), 38 to 1310rpm (Horizontal)
Spindle No. ISO30
Spindle Travel: 127mm
Motor Power: 3kw
Weight: 1580kg/1680kg
Overall Size: 1710x1480x2100mm

Order No. 905-0119



Universal Milling Drilling Machine

Features:

- * Automatic spindle feed.
- * Table surface and guides hardened at ultrasonic frequency
- * X axis mechanical powerfeed

Specifications:

- * Max. Drilling Capacity: 40mm
- * Max. Facing Milling Capacity: 125mm
- * Max. End Milling Capacity: 25mm
- * Max. Tapping Capacity: M16
- * Table Size: 1120x260mm
- * T slot size: 14mm
- * X Travel: 600mm
- * Y Travel: 300mm
- * Spindle No. ISO40
- * Spindle Travel: 120mm
- * Distance from Spindle Nose to Table Surface: 80mm to 460mm
- * Vertical Spindle Speed: 67 to 2010 rpm
- * Horizontal Spindle Speed: 38 to 1310rpm
- * Automatic Spindle Feed Speed X: 0.1mm per min
- * Automatic Spindle Feed Speed Y: 0.15mm per min
- * Automatic Spindle Feed Speed Z: 0.3mm
- * Motor Power: 1.5/2.2KW, 2.2KW
- * Machine Weight: 1350kg
- * Overall Size: 1580x1450x2150mm

Order No. 905-0120



Milling and Drilling Machine



Features:

- * Automatic spindle feed.
- * Table surface and guilds hardened at ultrasonic frequency
- * X axis mechanical powerfeed

Specifications:

- * Max. Drilling Capacity: 50mm
- * Max. Automatic Feed Drilling Capacity: 14mm (Cast Iron)
- * Max. End Milling Capacity: 25mm
- * Table Size: 1120x260mm
- * T slot size: 14mm
- * X Travel: 600mm
- * Y Travel: 300mm
- * Spindle No. ISO40
- * Spindle Travel: 120mm
- * Distance from Spindle Nose to Table Surface: 100mm to 430mm
- * Vertical Spindle Speed: 90 to 2000 rpm
- * Horizontal Spindle Speed: 38 to 1310rpm
- * Motor Power: 2.2KW
- * Machine Weight: 1350kg
- * Overall Size: 1520x1280x2150mm

Order No. 905-0121

Milling and Drilling Machine with Optional DRO

Features:

- * Table surface and guilds hardened at ultrasonic frequency
- * X axis mechanical powerfeed
- * Optional 2 axis or 3 axis DRO
- * Optional Y axis electrical powerfeed

Specifications:

- * Max. Drilling Capacity: 50mm
- * Max. Face Milling Capacity: 100mm
- * Max. End Milling Capacity: 25mm
- * Max. Tapping Capacity: M16
- * Table Size: 1120x280mm
- * T slot size: 14mm
- * X Travel: 600mm
- * Y Travel: 230mm
- * Spindle No. ISO30
- * Spindle Travel: 120mm
- * Distance from Spindle Nose to Table Surface: 90mm to 400mm
- * Vertical Spindle Speed: 110 to 1760 rpm
- * Horizontal Spindle Speed: 38 to 1310rpm
- * Motor Power: 0.85/1.5 V, 2.2KW H
- * Machine Weight: 1350kg
- * Overall Size: 1520x1280x2150mm

Order No. 905-0122



Milling and Drilling Machine With Optional DRO

Features:

- * Table surface and guilds hardened at ultrasonic frequency
- * Optional X axis mechanical powerfeed
- * Optional Y axis electrical powerfeed
- * Optional 2 axis or 3 axis DRO

Specifications:

- * Max. Drilling Capacity: 50mm
- * Max. Face Milling Capacity: 100mm
- * Max. End Milling Capacity: 25mm
- * Max. Tapping Capacity: M16
- * Table Size: 800x240mm
- * X Travel: 400mm
- * Y Travel: 230mm
- * T slot size: 14mm
- * Spindle Travel: 120mm
- * Spindle No. ISO30
- * Distance from Spindle Nose to Table Surface: 60mm to 440mm
- * Vertical Spindle Speed: 110 to 1760 rpm
- * Horizontal Spindle Speed: 58 to 1355rpm
- * Motor Power: 0.85KW Vertical, 1.5KW Horizontal
- * Machine Weight: 970kg
- * Overall Size: 1290x1220x2100mm

Order No. 905-0123



* Optional power feed.

Milling and Drilling Machine

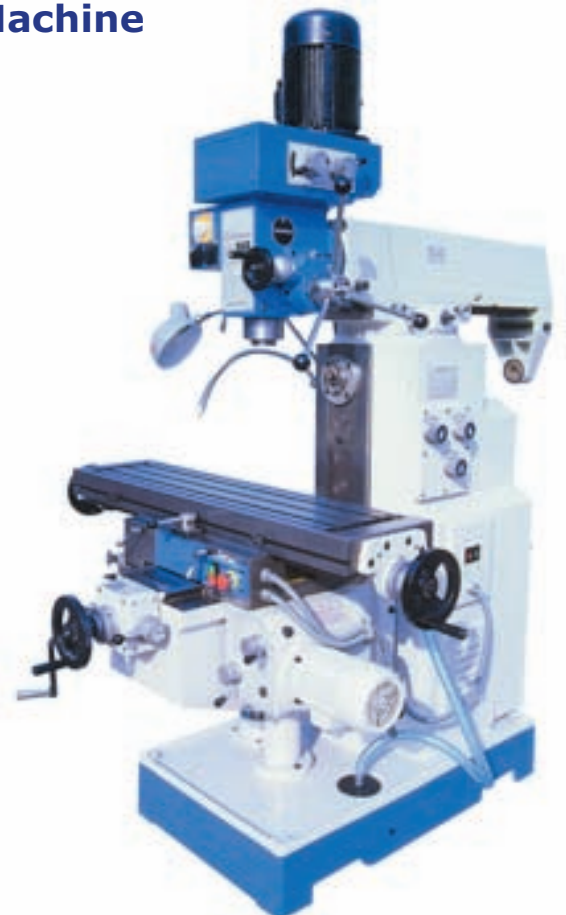
Features:

- * Built-in gear driven X, Y axis powerfeed
- * Table surface and guideways hardened at ultrasonic frequency and

Specifications:

- * Max. Drilling Capacity: 50mm
- * Max. Face Milling Capacity: 100mm
- * Max. End Milling Capacity: 25mm
- * Max. Tapping Capacity: M16
- * Table Size: 1120x260mm
- * T slot size: 14mm
- * X Travel: 600mm
- * Y Travel: 270mm
- * Spindle Travel: 120mm
- * Spindle No. ISO40
- * Distance from Spindle Nose to Table Surface: 100mm to 460mm
- * Vertical Spindle Speed: 115 to 1750 rpm
- * Horizontal Spindle Speed: 38 to 1310rpm
- * Motor Power: 0.85/1.5 V, 2.2KW H
- * Machine Weight: 1600kg
- * Overall Size: 1655x1450x2150mm

Order No. 905-0124



Milling and Drilling Machine

Features:

- * Mechanical X axis powerfeed
- * Table surface and guideways hardened at ultrasonic frequency and ground

Specifications:

- * Max. Drilling Capacity: 50mm
- * Max. Face Milling Capacity: 100mm
- * Max. End Milling Capacity: 25mm
- * Max. Tapping Capacity: M16
- * Table Size: 1120x280mm
- * T slot size: 14mm
- * X Travel: 600mm
- * Y Travel: 230mm
- * Spindle Travel: 120mm
- * Spindle NO. ISO30
- * Distance from Spindle Nose to Table Surface: 90mm to 400mm
- * Vertical Spindle Speed: 110 to 1760 rpm
- * Horizontal Spindle Speed: 38 to 1310rpm
- * Motor Power: 0.85/1.5 V, 2.2KW H
- * Machine Weight: 1500kg
- * Overall Size: 1580x1330x2250mm

Order No. 905-0125



Milling and Drilling Machine

Specifications:

- * Max. Drilling Capacity: 50mm
- * Max. Face Milling Capacity: 100mm
- * Max. End Milling Capacity: 25mm
- * Max. Tapping Capacity: M16
- * Table Size: 800x240mm
- * T slot size: 14mm
- * X Travel: 400mm
- * Y Travel: 230mm
- * Spindle Travel: 120mm
- * Spindle No. ISO30
- * Distance from Spindle Nose to Table Surface: 70mm to 420mm
- * Spindle Speed: 110 to 1760 rpm
- * Motor Power: 0.85/1.5kw
- * Machine Weight: 610kg
- * Overall Size: 1290x1140x2100mm

Order No. 905-0126



*** Optional power feed**

Bed-type Milling Machine

Features:

- * Variable spindle speed.
- * Milling head swivel $\pm 30^\circ$.
- * High rigidity cast iron construction.
- * Hardened and ground table surface.
- * Heavily ribbed base, saddle and column.
- * Rectangular X, Y guideways.

Technical Data:

- * Table Size: 1400x400mm
- * T slot size: 18mm
- * X Travel: 800mm
- * Y Travel: 400mm
- * Quill Travel: 100mm
- * Distance from Spindle Nose to Table: 150mm to 650mm
- * Distance between spindle axis to vertical guideway: 520mm
- * Spindle Taper: ISO50
- * Spindle Speed: 40 to 180rpm
- * Max. Rapid Feed Speed: 36000mm/min
- * Motor Power: 7.5KW
- * Machine Weight: 3860kg
- * Overall Size: 2290x1770x2120mm

Order No. 905-0107



Milling and Drilling Machine

Specifications:

- Max. Drilling Capacity: 50mm
- Max. Face Milling Capacity: 100mm
- Max. End Milling Capacity: 25mm
- Max. Tapping Capacity: M16
- Table Size: 800x240mm
- T slot size: 14mm
- X Travel: 400mm
- Y Travel: 215mm
- Spindle Travel: 120mm
- Spindle No. ISO30
- Distance from Spindle Nose to Table Surface: 50mm to 410mm
- Spindle Speed: 110 to 1760 rpm
- Motor Power: 0.85/1.5kw
- Machine Weight: 500kg
- Overall Size: 1270x950x1800mm



Order No. 905-0127

DRILLING MACHINE

Specifications

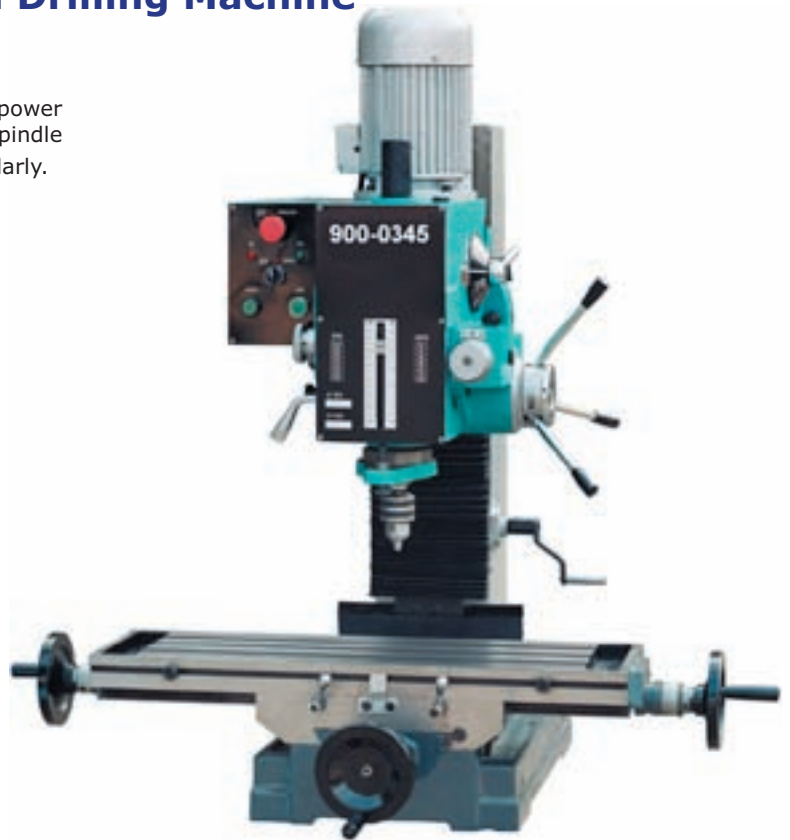
- Max.drilling capacity: 16mm
- Max.spindle traverse: 80mm
- Taper of spindle hole: MT2
- Spindle speed: 100-1800r/min
- Distance from spindle axis to column surface: 220mm
- Max..distance from spindle nose to worktable: 310mm
- Max..distance from spindle nose to base surface: 580mm
- Dimension of worktable surface: 280 x 320mm
- Dimension of column: 75mm
- Overall height: 1000mm
- Motor Output power: 1000W
- Worktable 't' slot size: 12mm
- Net weight: 136kg
- Gross weight: 170kg
- Overall dimension: 556 x 362 x 1000mm
- Packing size: 680 x 500 x 1075mm



Order No.800-1332

Milling and Drilling Machine

The milling and drilling machines come with flat columns, power feeding spindle, gear drive power, rotating milling head. Spindle rotating speeds and feeding speeds can be changed circularly.



Order No.	900-0345	900-0340	900-0332
Max. Drilling Capacity	45mm	40mm	32mm
Max. Boring Capacity	70mm	60mm	50mm
Max. Face milling capacity	80mm	80mm	63mm
Max. Endmilling capacity	32mm	32mm	20mm
Max. Spindle to Table Distance	450mm	450mm	450mm
Spindle Center to Support Column	260mm	260mm	260mm
Spindle travel	130mm	130mm	130mm
Spindle taper	M.T.4 or R8	M.T.4 or R8	M.T.3 or R8
Number of spindle speed	6	6	6
Spindle speed range 50HZ	80-1250r.p.m.	80-1250r.p.m.	80-1250r.p.m.
Spindle speed range 60HZ	95-1500r.p.m.	95-1500r.p.m.	95-1500r.p.m.
Number of feed speed	6	6	6
Spindle powerfeeding speed range	0.06-0.30mm/r	0.06-0.30mm/r	0.06-0.30mm/r
Head Rotation	±90°	±90°	±90°
Table Size	800x240 or 700x240mm		
Y-Axis Travel	175mm	175mm	175mm
X-Axis Travel	500mm or 400mm		
Motor	1.1Kw(1.5Hp)	1.1Kw(1.5Hp)	0.75Kw(1Hp)
Voltage/Frequency	As per Customer's Specification		
Overall height(Without stand)	1020mm	1020mm	1020mm
Net weight	325kg	323kg	320kg
Gross weight	375kg	375kg	370kg
Packing Size (700x240mm table)	880x770x1140mm		
Packing Size (800x240mm table)	1030x832x1140mm		
20FT container load (800 x 240mm Table)	28pcs	28pcs	28pcs
20FT container load (700 x 240mm Table)	36pcs	36pcs	36pcs

Milling and Drilling Machine

The milling and drilling machines come with flat columns, power feeding spindle, gear drive power, rotating milling head. Spindle rotating speeds and feeding speeds can be changed circularly.

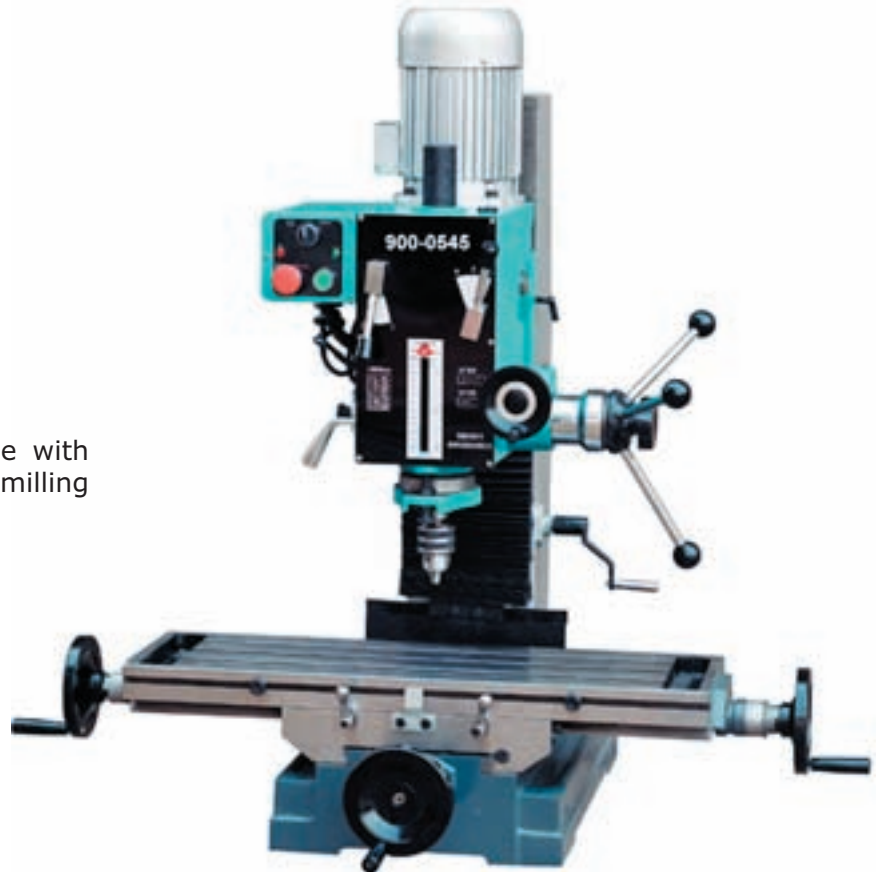
- Cyclic spindle speed change
- Z-axis power feed and circular spindle feeding speed change
- Headstock power feed travel
- Headstock 180°rotation.
- X-axis power feed



Order No.	900-0445	900-0440	900-0432
Max. Drilling Capacity	45mm	40mm	32mm
Max. Boring Capacity	70mm	60mm	50mm
Max. Face milling capacity	80mm	80mm	63mm
Max. Endmilling capacity	32mm	32mm	20mm
Max. Spindle to Table Distance	450mm	450mm	450mm
Spindle Center to Support Column	260mm	260mm	260mm
Spindle travel	130mm	130mm	130mm
Spindle taper	M.T.4 or R8	M.T.4 or R8	M.T.3 or R8
Number of spindle speed	6	6	6
Spindle speed range 50HZ	80-1250r.p.m.	80-1250r.p.m.	80-1250r.p.m.
Spindle speed range 60HZ	95-1500r.p.m.	95-1500r.p.m.	95-1500r.p.m.
Number of spindle feed speed	6	6	6
Spindle powerfeeding speed range	0.06-0.30mm/r	0.06-0.30mm/r	0.06-0.30mm/r
Head Rotation	±90°	±90°	±90°
Automatic headstock travel speed	240mm/min.	240mm/min.	240mm/min.
X-Axis powerfeed	variable speed	variable speed	variable speed
Table Size	800x240 or 700x240mm		
Y-Axis Travel	175mm	175mm	175mm
X-Axis Travel	500mm;400mm	500mm;400mm	500mm;400mm
Power	1.5KW or 2HP	1.5KW or 2HP	1.5KW or 2HP
Voltage/Frequency	As Per Customer's Specification		
Overall height(Without stand)	1020mm	1020mm	1020mm
Net weight	325kg	323kg	320kg
Gross weight	375kg	375kg	370kg
Packing Size (700x240mm table)	880x770x1140mm		
Packing Size (800x240mm table)	1030x832x1140mm		
20FT container load (800 x 240mm Table)	28pcs	28pcs	28pcs
20FT container load (700 x 240mm Table)	36pcs	36pcs	36pcs

Milling and Drilling Machine

The milling and drilling machines come with flat columns, gear drive power, rotating milling head.



Order No.	900-0545	900-0540	900-0532
Max. Drilling Capacity	45mm	40mm	32mm
Max. Face milling capacity	80mm	80mm	63mm
Max. Endmilling capacity	32mm	32mm	20mm
Max. Spindle to Table Distance	450mm	450mm	450mm
Spindle Center to Support Column	260mm	260mm	260mm
Spindle travel	130mm	130mm	130mm
Spindle taper	M.T.4 or R8	M.T.4 or R8	M.T.3 or R8
Number of spindle speed	6	6	6
Spindle speed range 50HZ	80-1250r.p.m.	80-1250r.p.m.	80-1250r.p.m.
Spindle speed range 60HZ	95-1500r.p.m.	95-1500r.p.m.	95-1500r.p.m.
Head Rotation	±90°	±90°	±90°
Table Size	800x240 or 700x240mm		
Y-Axis Travel	175mm	175mm	175mm
X-Axis Travel	500mm or 400mm		
Power	1.5KW or 2HP	1KW or 1.5HP	1KW or 0.75HP
Voltage/Frequency	As Per Customer's Specification		
Overall height(Without stand)	1020mm	1020mm	1020mm
Net weight	325kg	323kg	320kg
Gross weight	375kg	375kg	370kg
Packing Size (700x240mm table)	880x770x1140mm		
Packing Size (800x240mm table)	1030x832x1140mm		
20FT container load (800 x 240mm Table)	28pcs	28pcs	28pcs
20FT container load (700 x 240mm Table)	36pcs	36pcs	36pcs

Milling and Drilling Machine

The milling and drilling machines come with flat columns, gear drive power, rotating milling head. Spindle rotating speeds and feeding speeds can be changed circularly.

- AC or DC variable speed control.
- More cutting power and torque at lower speed
- Headstock power feed travel
- Headstock 180°rotation.
- X-axis power feed



Order No.	900-0645	900-0640	900-0632
Max. Drilling Capacity	45mm	40mm	32mm
Max. Face milling capacity	80mm	80mm	63mm
Max. Endmilling capacity	32mm	32mm	20mm
Max. Spindle to Table Distance	450mm	450mm	450mm
Spindle Center to Support Column	285mm	285mm	285mm
Spindle travel	130mm	130mm	130mm
Spindle taper	M.T.4 or R8	M.T.4 or R8	M.T.3 or R8
Spindle speed (AC motor 2 speeds)	100~1500rpm/500~3000rpm		
Spindle speed (DC motor 2 speed)	0~750rpm/800~2200rpm		
Head Rotation	±90°	±90°	±90°
Automatic headstock travel speed	240mm/min.	240mm/min.	240mm/min.
X-Axis powerfeed	variable speed	variable speed	variable speed
Table Size	800x240 or 700x240mm		
Y-Axis Travel	175mm	175mm	175mm
X-Axis Travel	500mm;400mm	500mm;400mm	500mm;400mm
Motor (AC or DC)	1.5KW or 2HP	1.5KW or 2HP	1.5KW or 2HP
Voltage (Single phase or three phase)	110V or 220V	110V or 220V	110V or 220V
Overall height(Without stand)	1020mm	1020mm	1020mm
Net weight	325kg	323kg	320kg
Gross weight	375kg	375kg	370kg
Packing Size (700x240mm table)	880x770x1140mm		
Packing Size (800x240mm table)	1030x832x1140mm		
20FT container load (800 x 240mm Table)	28pcs	28pcs	28pcs
20FT container load (700 x 240mm Table)	36pcs	36pcs	36pcs

Milling and Drilling Machine

The milling and drilling machines come with flat columns, gear drive power, rotating milling head.

- AC or DC variable speed control.
- More cutting power and torque at lower speed
- Headstock 180° rotation.



Order No.	900-0745	900-0740	900-0732
Max. Drilling Capacity	45mm	40mm	32mm
Max. Face milling capacity	80mm	80mm	63mm
Max. Endmilling capacity	32mm	32mm	20mm
Max. Spindle to Table Distance	450mm	450mm	450mm
Spindle Center to Support Column	285mm	285mm	285mm
Spindle travel	130mm	130mm	130mm
Spindle taper	M.T.4 or R8	M.T.4 or R8	M.T.3 or R8
Spindle speed (AC motor 2 speed)	100~1500rpm/500~3000rpm		
Spindle speed (DC motor 2 speed)	0~750rpm/800~2200rpm		
Head Rotation	±90°	±90°	±90°
Table Size	800x240mm or 700x240mm		
Y-Axis Travel	175mm	175mm	175mm
X-Axis Travel	500mm;400mm	500mm;400mm	500mm;400mm
Motor (AC)	1.5KW or 2HP	1.5KW or 2HP	1.1KW or 1.5HP
Motor (DC)	1.8KW or 2.4HP	1.5KW or 2HP	1.1KW or 1.HP
Voltage (Single phase)	110V or 220V	110V or 220V	110V or 220V
Overall height(Without stand)	1020mm	1020mm	1020mm
Net weight	310kg	310kg	300kg
Gross weight	360kg	360kg	350kg
Packing Size (700x240mm table)	880x770x1140mm		
Packing Size (800x240mm table)	1030x832x1140mm		
20FT container load (800 x 240mm Table)	28pcs	28pcs	28pcs
20FT container load (700 x 240mm Table)	36pcs	36pcs	36pcs

Milling and Drilling Machine

The milling and drilling machines come with round columns, gear drive power, rotating milling head.

- * Millhead horizontal 360° rotation
- * Millhead vertical 180° rotation.
- * Optional X-axis power feed



Order No.	900-0145	900-0140	900-0132	900-0120
Max. Drilling Capacity	45mm	40mm	32mm	14mm
Max. Face milling capacity	80mm	80mm	63mm	63mm
Max. Endmilling capacity	32mm	32mm	20mm	20mm
Max. Spindle to Table Distance	440mm/680mm	440mm/680mm	440mm/680mm	350mm
Spindle Center to Support Column	272.5mm	272.5mm	272.5mm	175mm
Spindle travel	130mm	130mm	130mm	130mm
Spindle taper	M.T.4 or R8	M.T.4 or R8	M.T.3 or R8	M.T.3
Spindle speed range (50HZ)	80~1250rpm	80~1250rpm	80~1250rpm	80~1250rpm
Spindle speed range (60HZ)	95~1500rpm	95~1500rpm	95~1500rpm	95~1500rpm
Headstock swing diameter	680mm	680mm	680mm	680mm
Head Rotation (Horizontal)	360°	360°	360°	360°
Head Rotation (Vertical)	±90°	±90°	±90°	±90°
Table Size	800x240 or 700x240mm			585x190mm
Y-Axis Travel	175mm	175mm	175mm	150mm
X-Axis Travel	500mm or 400mm			380mm
Motor (AC)	1.5KW or 2HP	1.1KW or 1.5HP	0.75KW or 1HP	0.75KW or 1HP
Voltage and Frequency	As per Customer's Specification			
Overall height(Without stand)	1060mm or 1300mm			1060mm
Net weight	320kg	318kg	315kg	300kg
Gross weight	370kg	368kg	365kg	350kg
Packing Size (700x240mm table, 1060mm)	880x770x1140mm			880x770x1140mm
Packing Size (700x240mm table 1300mm)	880x770x1400mm			
Packing Size (800x240mm table,1060mm)	1030x832x1140mm			1030x832x1140mm
Packing Size (800x240mm table,1300mm)	1030x832x1400mm			
20FT container load (1300mm height)	18pcs	18pcs	18pcs	
20FT container load (1060mm height)	36pcs	36pcs	36pcs	36pcs

Milling and Drilling Machine

The milling and drilling machines come with round columns, gear drive power, rotating milling head.

- AC or DC variable speed control.
- More cutting power and torque at lower speed
- Headstock 180° vertical rotation.

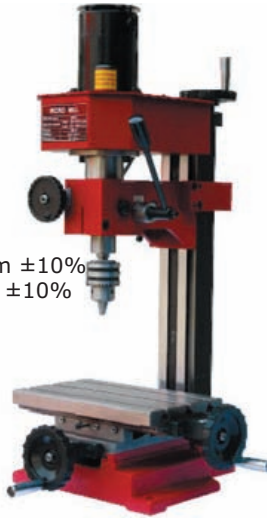


Order No.	900-0845	900-0840	900-0832
Max. Drilling Capacity	45mm	40mm	32mm
Max. Face milling capacity	80mm	80mm	63mm
Max. Endmilling capacity	32mm	32mm	20mm
Max. Spindle to Table Distance	450mm (500mm)	450mm (500mm)	450mm (500mm)
Spindle Center to Support Column	285mm	285mm	285mm
Spindle travel	130mm	130mm	130mm
Spindle taper	M.T.4 or R8	M.T.4 or R8	M.T.3 or R8
Spindle speed (AC motor 2 speeds)	100~1500/500~3000rpm		
Spindle speed (DC motor 2 speeds)	0~750/800~2200rpm		
Head Rotation (Vertical)	±90°	±90°	±90°
Head Rotation (Horizontal)	360°	360°	360°
Table Size	800x240mm or 700x240mm		
Y-Axis Travel	175mm	175mm	175mm
X-Axis Travel	500mm;400mm	500mm;400mm	500mm;400mm
Motor (AC)	1.5KW or 2HP	1.5KW or 2HP	1.1KW or 1.5HP
Motor (DC)	1.8KW or 2.4HP	1.5KW or 2HP	1.2KW or 1.6HP
Voltage (Single phase)	110V or 220V	110V or 220V	110V or 220V
Overall height(Without stand)	1060mm or 1300mm	1060mm or 1300mm	1060mm or 1300mm
Net weight	310kg	305kg	300kg
Gross weight	360kg	355kg	350kg
Packing Size	880x770x1140mm or 880x770x1060mm for 700x240mm table		
Packing Size	1030x832x1300mm or 1030x832x1140mm for 700x240mm table		
Packing Size (800x240mm table,1060mm)	880x770x1400mm or		
Packing Size (800x240mm table,1300mm)	1030x832x1400mm		
20FT container load (1300mm height)	28pcs	28pcs	28pcs
20FT container load (1060mm height)	36pcs	36pcs	36pcs

MICRO MILL

Specifications

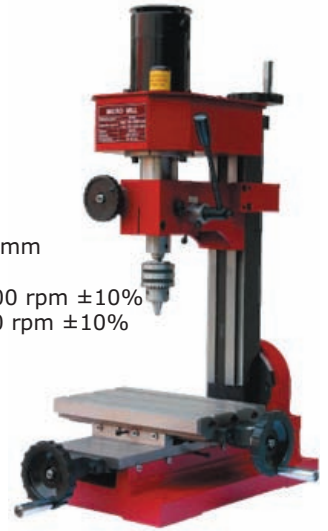
Drilling capacity: 10 mm
 End mill capacity: 10 mm
 Face mill capacity: 16 mm
 Throat: 140 mm
 Max.distance spindle to table: 220 mm
 Spindle taper: MT2
 Spindle speed: High range 100-2000 rpm $\pm 10\%$
 low range 100-1000 rpm $\pm 10\%$
 Table effective size: 240x145 mm
 T-slot size: 8 mm
 Headstock travel: 230mm
 Table cross travel: 90 mm
 Table longitudinal travel: 180 mm
 Motor output power 150 W
 Overall dimension(LxWxH) 425x350x690
 Weight(net/gross) 32/44kg
 Packing size(LxWxH) 420x395x625 mm



MICRO MILL (Tilting Head)

Specifications

Drilling capacity: 10 mm
 End mill capacity: 10 mm
 Face mill capacity: 16 mm
 Throat: 140 mm
 Max.distance spindle to table: 220 mm
 Spindle taper: MT2
 Spindle speed: High range 100-2000 rpm $\pm 10\%$
 low range 100-1000 rpm $\pm 10\%$
 Head tilt: -45° - $+45^{\circ}$
 Table effective size 240x145 mm
 T-slot size: 8 mm
 Headstock travel: 230mm
 Table cross travel: 130 mm
 Table longitudinal travel: 180 mm
 Motor output power: 150 W
 Weight(net/gross): 40/56kg
 Packing size(LxWxH): 530x400x630 mm



Standard Attachment

Dia.10mm Drill chuck
 Wrench set Oil can

Order No.900-0001

Standard Attachment

Dia.10mm Drill chuck
 Wrench set Oil can

Order No.900-0002

MICRO MILL

Features

Digital depth readout
 Feeding depth set up
 Variable speed
 Fine feeding
 High accurate

Specifications

Drilling capacity: 6 mm
 End milling capacity: 6 mm
 Spindle stroke: 40 mm
 Headstock travel(Z): 200 mm
 Spindle taper: B10 OR JT1
 Motor output power: 150 W
 Spindle speed: High range 100-5000 rpm $\pm 10\%$
 low range 100-3600 rpm $\pm 10\%$
 Weight(net/gross): 17/22 kg
 Packing size(LxWxH): 520x400x270mm

Standard Attachment

Dia.6mm Drill chuck
 Screw driver
 Wrench set



Order No.900-0000

HACK SAW

Specifications

Max.cutting diameter: 130mm
 Stroke speed: 170steps/m
 Stroke range: 70mm
 Blade size: 300x25x1.2mm
 Output power: 250W
 Weight (net/gross): 68/80kg
 Packing size(LxWxH): 810x330x330mm



Order No.850-0024

MINI MILLING MACHINE

Specifications

Drilling capacity: 13 mm
 End mill capacity: 16 mm
 Face mill capacity: 30 mm
 Headstock travel(Z): 180 mm
 Cross axis(X): 100 mm
 Longitudinal axis(Y): 220 mm
 Throat: 170mm
 Max.distance spinedle to table: 280mm
 Spindle rotary angle: -45° - $+45^{\circ}$
 Output power 350 W
 Spindle taper: MT3 or R8
 Spindle speed: low range 0-1100 rpm $\pm 10\%$
 High range 0-2500 rpm $\pm 10\%$
 T-slot: 12 mm
 Weight(net/gross): 50/68kg
 Packing size(LxWxH): 540x500x760 mm

Standard Attachment

Dia.13mm Drill chuck
 Wrench set Oil can



Order No.900-0003



With Auto-feed

Order No.900-0004

SMALL MILL

Specifications

Drilling capacity: 25 mm
 End mill capacity: 16 mm
 Face mill capacity: 50 mm
 Spindle stroke: 80 mm
 Throat: 230 mm
 Max.distance spindle to table: 380 mm
 Spindle taper: MT3 or R8
 Spindle speed: High range 100-2000 rpm $\pm 10\%$
 low range 100-1000 rpm $\pm 10\%$
 Table effective size: 550x160 mm
 T-slot size: 12 mm
 Table cross travel: 145mm
 Table longitudinal travel: 400 mm
 Motor output power: 600 W
 Overall dimension(LxWxH): 760x720x930 mm
 Weight(net/gross): 165 kg/198 kg
 Packing size(LxWxH): 840x820x1040 mm

Standard Attachment

Dia.16mm Drill chuck
 Wrench set Oil can

Order No.905-0035



SMALL MILL

Specifications

Drilling capacity: 25 mm
 Max.tapping capacity: 12 mm
 End mill capacity: 16 mm
 Face mill capacity: 50 mm
 Spindle stroke: 70 mm
 Throat: 230 mm
 Max.distance spindle to table: 380 mm
 Spindle taper: MT3 or R8
 Spindle speed: 100-1750 rpm $\pm 10\%$
 Table effective size: 550x160 mm
 T-slot size: 12 mm
 Table cross travel: 145 mm
 Table longitudinal travel: 400 mm
 Motor output power: 1000 W
 Overall dimension: 760x720x930 mm
 Weight(net/gross): 165kg/198kg
 Packing size: 840x820x1040 mm

Standard Attachment

Dia.16mm Drill chuck
 Wrench set Oil can

Order No.905-0036



DRILLING MACHINE

Specifications

Max.drilling capacity: 20mm
 Max.tapping capacity: 12mm
 Max.spindle traverse: 80mm
 Taper of spindle hole: MT2
 Spindle speed: 100-1500rpm
 Distance from spindle axis to column surface: 250mm
 Max.distance from spindle nose to worktable: 380mm
 Max.distance from spindle nose to base surface: 750mm
 Dimension of worktable surface: 320 x 360mm
 Diameter of column: 90mm
 Overall height: 1218mm
 Output motor: 1000W
 Worktable 't' slot size: 12mm
 Overall size: 680 x385 x 1220mm
 Packing size: 805 x 570 x 1395mm
 Weight(net/gross): 220/260kg

Order No.800-1333



DRILLING MACHINE

Specifications

Max.drilling capacity: 30mm
 Max.tapping capacity: 14mm
 Max.spindle traverse: 100mm
 Taper of spindle hole: MT3
 Spindle speed: 100-1800rpm
 Distance from spindle axis to column surface: 280mm
 Max.distance from spindle nose to worktable: 460mm
 Max.distance from spindle nose to base surface: 930mm
 Dimension of worktable surface: 400 x 350mm
 Diameter of column: 110mm
 Overall height: 1750mm
 Output motor: 1500W
 Worktable 't' slot size: 14mm
 Overall size: 750 x 550 x1820mm
 Packing size: 850 x 600 x 2000mm
 Weight(net/gross): 321/361kg

Order No.800-1334



DRILLING MACHINE

Specifications

Max.drilling capacity: 40mm
 Max.tapping capacity: 20mm
 Max.spindle traverse: 120mm
 Taper of spindle hole: MT4
 Spindle speed: H:250-1750rpm
 L:100-900rpm
 Distance from spindle axis to column surface: 310mm
 Max.distance from spindle nose to worktable: 600mm
 Max.distance from spindle nose to base surface: 1160mm
 Dimension of worktable surface: 440 x 390mm
 Diameter of column: 120mm
 Overall height: 1805mm
 Output motor: 1500W
 Worktable 't' slot size: 14mm
 Overall size: 845 x 560 x 1805mm
 Packing size: 900 x 640 x 2010mm
 Weight(net/gross):563/ 613kg



Order No.800-1335

DRILLING MACHINE

Specifications

Max.drilling: 32mm
 Max.travel of spindle: 150mm
 Max.distance from spindle to generating line of column: 300mm
 Max.distance from spindle nose to surface of worktable: 800mm
 Max.distance from spindle nose to surface of base worktable: 1225mm
 Max.travel of spindle box: 270mm
 Max.travel of worktable and bracket: 550mm
 Spindle taper bore: MT4
 Spindle speed steps: 12
 Spindle speed range: 78-2500
 Effective working area of worktable: 365x415 mm
 Power of motor: 1/1.3/1.7kw
 Machine dimension: 780x505x1910mm
 Mode of spindle feed: Manual
 Sets/ 20' Container: 24



Order No.800-1357

DRILLING MACHINE

Order No.	800-1344	800-1345
Max.drilling	25mm	25mm
Max.travel of spindle	135mm	135mm
Max.distance from spindle to generating line of column	260mm	260mm
Max.distance from spindle nose to surface of base worktable	700mm	700mm
Max.travel of spindle box	520mm	520mm
Spindle taper bore	MT3	MT3
Spindle speed steps	12	12
Spindle speed range	125-3030	125-3030
Spindle feed steps	3	3
Spindle feed range	0.1-0.3	0.1-0.3
Effective working area of worktable	335 x 340	335 x 340
Diameter of column	110mm	110mm
Power of motor	0.85	1.1kw
Machine dimension	740 x 420 x 1610	740 x 420 x 1610
Mode of spindle feed	Manual	Mechanical
Sets/ 20' Container	20	20



MICRO DRILL

Specifications

Drilling capacity: 6 mm
 Spindle stroke: 40 mm
 Headstock travel(Z): 200 mm
 Spindle taper: B10 OR JT1
 Spindle speed: High 5000 rpm ±10%
 low 3600 rpm ±10%
 Motor output power: 150W
 Overall dimension(LxWxH): 175x165x415mm
 Weight(net/gross): 14/19kg
 Packing size(LxWxH): 520x400x270mm

Features

Digital depth readout
 feeding depth set up
 2 steps speed
 High accurate

Standard Attachment

Dia.6mm Drill chuck
 Screw driver
 Wrench set

Order No.800-1330



DRILLING MACHINE

Order No.	800-1346	800-1347
Max.drilling	25mm	25mm
Max.travel of spindle	135mm	135mm
Max.distance from spindle to generating line of column	260mm	260mm
Max.distance from spindle nose to surface of worktable	670mm	685mm
Max.distance from spindle nose to surface of base worktable	1150mm	1165mm
Max.travel of spindle box	180mm	180mm
Max.travel of worktable and bracket	605mm	500mm
Swivel angle of worktable	± 45 °	± 45 °
Spindle taper bore	MT3	MT3
Spindle speed steps	12	12
Spindle speed range	125-3030	125-3030
Spindle feed steps	3	3
Spindle feed range	0.1-0.3	0.1-0.3
Dimension of worktable	420 × 350	420 × 350
Effective working area of worktable	335 × 340	335 × 340
Diameter of column	110mm	110mm
Power of motor	0.85/1.1kw	0.85/1.1kw
Machine dimension	700 × 465 × 2060	700×465×2060
Mode of spindle feed	Manual	Mechanical
Sets/ 20' Container	24	24



DRILLING MACHINE

Order No.	800-1348	800-1349	800-1350
Max.drilling	30mm	30mm	30mm
Max.travel of spindle	160mm	160mm	160mm
Max.distance from spindle to generating line of column	320mm	320mm	320mm
Max.distance from spindle nose to surface of worktable	585mm	585mm	585mm
Max.distance from spindle nose to surface of base worktable	1140mm	1140mm	1140mm
Max.travel of worktable and bracket	545mm	545mm	545mm
Swivel angle of worktable	45 degree	45 degree	45 degree
Spindle taper bore	MT4	MT4	MT4
Spindle speed steps	12	12	12
Spindle speed range	125-3030	125-3030	125-3030
Spindle feed steps	3	3	3
Spindle feed range	0.1-0.3	0.1-0.3	0.1-0.3
Dimension of worktable	500 * 420	500 * 420	500 * 420
Effective working area of worktable	400 * 360	400 * 360	400 * 360
Diameter of column	120mm	120mm	120mm
Power of motor	1/1.2kw	1/1.2kw	1/1.2kw
Machine dimension	835 * 510 * 1730	835 * 510 * 1730	835 * 510 * 1730
Mode of spindle feed	Manual	Electromagnetism	Mechanical
Sets/ 20' Container	24	24	24



DRILLING MACHINE

Order No.	800-1351	800-1352	800-1353
Max.drilling	32mm	32mm	32mm
Max.travel of spindle	160mm	160mm	160mm
Max.distance from spindle to generating line of column	320mm	320mm	320mm
Max.distance from spindle nose to surface of base worktable	645mm	645mm	645mm
Max.travel of spindle box	515mm	515mm	515mm
Swivel angle of spindle box	± 45 °	± 45 °	± 45 °
Spindle taper bore	MT4	MT4	MT4
Spindle speed steps	12	12	12
Spindle speed range	125-3030	125-3030	125-3030
Spindle feed steps	3	3	3
Spindle feed range	0.1-0.3	0.1-0.3	0.1-0.3
Effective working area of worktable	400 × 360	400 × 360	400 × 360
Diameter of column	120mm	120mm	120mm
Power of motor	1/1.2kw	1/1.2kw	1/1.2kw
Machine dimension	810 * 460 * 1640	810 * 460 * 1640	810 * 460 * 1640
Mode of spindle feed	Manuall	Electromagnetism	Mechanical
Sets/ 20' Container	20	20	20



DRILLING MACHINE

Order No.	800-1354	800-1355	800-1356
Max.drilling	32mm	32mm	32mm
Max.travel of spindle	160mm	160mm	160mm
Max.distance from spindle to generating line of column	320mm	320mm	320mm
Max.distance from spindle nose to surface of worktable	630mm	630mm	630mm
Max.distance from spindle nose to surface of base worktable	1185mm	1185mm	1185mm
Max.travel of spindle box	285mm	285mm	285mm
Max.travel of worktable and bracket	415mm	415mm	415mm
Swivel angle of spindle box	45 degree	45 degree	45 degree
Swivel angle of worktable	45 degree	45 degree	45 degree
Spindle taper bore	MT4	MT4	MT4
Spindle speed steps	12	12	12
Spindle speed range	125~3030	125~3030	125~3030
Spindle feed steps	3	3	3
Spindle feed range	0.1~0.3	0.1~0.3	0.1~0.3
Dimension of worktable	500 * 420	500 * 420	500 * 420
Effective working area of worktable	400 * 360	400 * 360	400 * 360
Diameter of column	120mm	120mm	120mm
Power of motor	1/1.2kw	1/1.2kw	1/1.2kw
Machine dimension	835 * 500 * 1960	835 * 500 * 1960	835 * 500 * 1960
Mode of spindle feed	Manual	Electromagnetism	Mechanical
Sets/ 20' Container	19	19	19



Specifications

Max.drilling: 25mm
 Max.travel of spindle: 110mm
 Max.distance from spindle to generating line of column: 240mm
 Max.distance from spindle nose to surface of worktable: 830mm
 Max.distance from spindle nose to surface of base worktable: 1150mm
 Max.travel of spindle box: 140mm
 Max.travel of worktable and bracket: 600mm
 Swivel angle of worktable: 45 degree
 Spindle taper bore: MT3
 Spindle speed steps: 12
 Spindle speed range: 125-2880
 Effective working area of worktable: 315x320mm
 Power of motor: 0.85/1.1w
 Machine dimension: 640x485x1750mm
 Mode of spindle feed: Manual
 Sets/ 20'Container: 28

DRILLING MACHINE

Order No.800-1358



DRILLING MACHINE

Order No.	800-1359	800-1360
Max.drilling dia.	35mm	35mm
Max.travel of spindle	190mm	190mm
Max.distance from spindle to generating line of column	340mm	340mm
Max.distance from spindle nose to surface of worktable	665mm	665mm
Max.distance from spindle nose to surface of base worktable	1195mm	1195mm
Max.travel of worktable and bracket	570mm	450mm
Swivel angle of worktable	± 45 °	± 45 °
Spindle taper bore	MT4	MT4
Spindle speed steps	12	12
Spindle speed range	76~2065	76~2065
Spindle feed steps	3	3
Spindle feed range	0.1,0.2,0.3	0.1,0.2,0.3
Dimension of worktable	520*440	520*440
Effective working area of worktable	405*395	405*395
Diameter of column	140mm	140mm
Power of motor	1.5kw	1.5kw
Machine dimension	849*545*2290	849*545*2290
Mode of spindle feed	Mechanical	Electromagnetism
Set/20' Container	20	20



DRILLING MACHINE

Specifications

Max. drilling diameter (steel): 40mm
 Max. tapping diameter (steel): 30mm
 Max.milling cutter diameter: 80mm
 Max.travel of spindle: 200mm
 Distance between column center line to the T solt in the middle of worktable: 560mm
 Max.distance between spindle end to the worktable surface: 740mm
 Max.Travel of ram: 600mm
 Max .travel for the spindle box in up and down position: 400mm
 Turning angle of spindle box to the ram: ±90°
 Spindle taper bore: MT4
 Spindle speed ranges (step-less): 50~2000 r/min
 Spindle feed steps: 6
 Spindle feed range: 0.08~0.50
 Dimension of worktable(LxW): 1200x505 mm
 Diameter of column: 220 mm
 Power of motor: 2.2 kw
 Machine dimension: 1720x1200x2250 mm
 Mode of spindle feed: Electromagnetism
 Machine weight (gross/net): 2740/2610 kg

Order No.800-1365



DRILLING MACHINE

Order No.	800-1361	800-1362
Max.drilling dia.	40mm	40mm
Max.travel of spindle	200mm	200mm
Max.distance from spindle to generating line of column	360mm	360mm
Max.distance from spindle nose to surface of worktable	590mm	590mm
Max.distance from spindle nose to surface of base worktable	1175mm	1175mm
Max.travel of worktable and bracket	530mm	410mm
Swivel angle of worktable	± 45 °	± 45 °
Spindle taper bore	MT4	MT4
Spindle speed steps	12	12
Spindle speed range	52~1400	52~1400
Spindle feed steps	4	4
Spindle feed range	0.1,0.2,0.3,0.4	0.1,0.2,0.3,0.4
Dimension of worktable	580*460	580*460
Effective working area of worktable	445*435	445*435
Diameter of column	160mm	160mm
Power of motor	2.2kw	2.2kw
Machine dimension	940*680*2405	940*680*2405
Mode of spindle feed	Mechanical	Electromagnetism
Set/ 20' Container	16	16

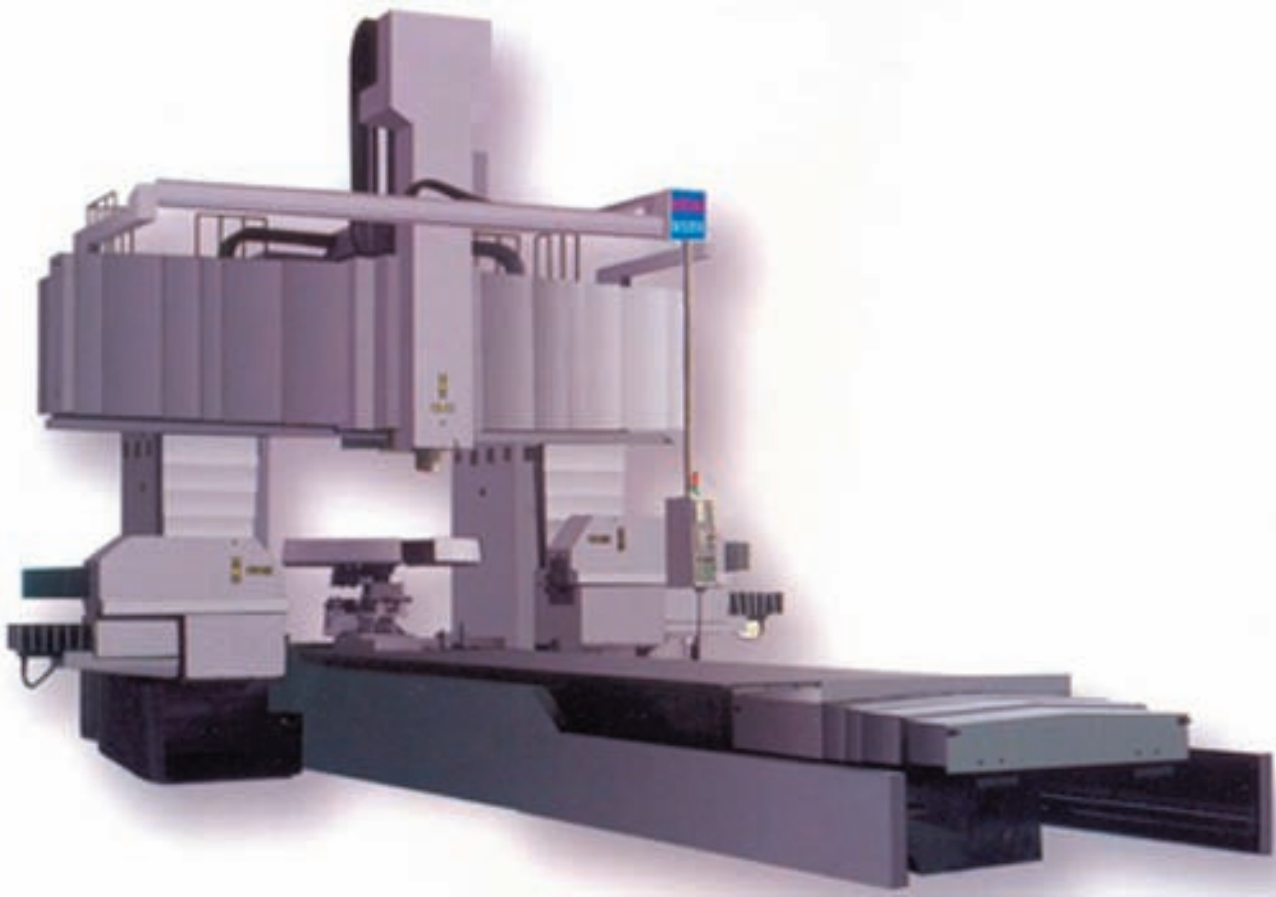


DRILLING MACHINE

Order No.	800-1363	800-1364
Max.drilling dia.	50mm	50mm
Max.travel of spindle	240mm	240mm
Max.distance from spindle to generating line of column	360mm	360mm
Max.distance from spindle nose to surface of worktable	585mm	585mm
Max.distance from spindle nose to surface of base worktable	1170mm	1170mm
Max.travel of worktable and bracket	530mm	410mm
Swivel angle of worktable	45 degree	45 degree
Spindle taper bore	MT4	MT4
Spindle speed steps	12	12
Spindle speed range	52~1400	52~1400
Spindle feed steps	4	4
Spindle feed range	0.1,0.2,0.3,0.4	0.1,0.2,0.3,0.4
Dimension of worktable	580*460	580*460
Effective working area of worktable	445*435	445*435
Diameter of column	180mm	180mm
Power of motor	3kw	3kw
Machine dimension	950*680*2405	950*680*2405
Mode of spindle feed	Mechanical	Electromagnetism
Set/20' Container	16	16



CNC Double Column Plano Miller *Fixed Crossrail Type*



Features:

- * Gantry structure with stationery columns and moveable milling table.
- * One Milling head on elevating cross rail.
- * Cross rail moves vertically (Z axis) and vertical milling heads move cross (Y axis) on rail. Milling table moves horizontally (Y axis)
- * Rectangular guideways on three axes. X guideways are treated with constant current static-pressure for heavy duty cutting. The step type Y axis guidways are combines sliding and rolling movements. Z axis cross rail is of 500x500mm square sturcture.
- * Made of high grade casting for great ridiidity and accuracy.
- * AC servo motor drives ball screw or double gear and rack for X axis. Y and Z axis ball screws are powered by AC servo motors. Encoders are adopted to realize semi-closed loop control.
- * Spindle Drive. The AC servo motor is connected to the spindle via automatic gear-box with two speeds. Spindle can perform low speed with big torque heavy-duty cutting, or high speed cutting with constant power and precision cutting. Hight precision bearing are used on spindles. Automatic tool change, automatic step change, automatic tapping reverse, automatic cleaning are all standard configuration. Y axis ram movement was balanced and controled by a double hydraulic cylindrs.
- * Standard FANUC01-MC CNC system. FANUC181-MB, Simense 802D and Simense 8400 are popular optional CNC system.
- * Lubrication and chip and coolant liqud recycle and all done automatically.

Optional:

1. Vertical boring and milling head accessories includes right angle milling head, unversal milling head, extension right-angle milling head.
 2. Two installation methods: Manual and automatic
 3. Can machine pentahedron maching and automatic polyhedron maching.
 4. Vertical boring-milling head with boring and milling head for AC axis to achieve 5 axis cutting.
 5. Vertical boring and milling head can work both horizontally and vertically. Automatica minmum index at 2.5 degrees can perform pentahedron maching.
 6. ATC arm-type with 24T, 32T, 40T, 60T tools.
 7. X, Y, and Z axis can have digital scales and realize full closed-loop for high tolerance.
- * Wallboard type cover.
 - * The talbe is equipped with 4th CNC rotary table linked with X, Y and Z.

MILLING MACHINES

Order No.	904-3100 to 904-311	904-3112 to 904-3123	904-3124 to 904-3134	904-3135 to 904-3144
Width of Table (mm)	1250	1600	2000	2500
Leng of Table (mm)	2500-14000	2500-14000	3500-14000	4500-14000
Max. Milling Width (mm)	1400	2000	2400	3000
Max. Milling Length(mm)	3000-14500mm	3000-14500mm	4000-14500mm	5000-14500mm
Max. Vertical Travel (mm)	1000	1200	1200	1200
Between Column Length (mm)	1600	2200	2600	3200
Milling Head Travel (mm)	1200 Optional 1600mm	1400 Optional 2000mm	1400 Optional 2000mm	1400 Optional 2000mm
Max. Load (kg/m)	2000 Optional 5000kg	3000 Optional 8000kg	10000	10000
Vertical Spindle Motor (KW)	FANUC 22/26 (Optional FANUC 30/37, 45/55 or Simense 22/30, 28/38 or 40/66.			
Horizontal spindle	15KW			
Vertical Spindle Speed	20-3500RPM (Optional 20-6000rpm)			
Horizontal Spindle Speed	50-1500RPM			
Max. Vertical Spindle Torque	770Nm (Optional 1369, 1689 or 770, 1470, 1677Nm)			
Horizontal Spindle Torque	433Nm			
Counting speed	Vertical 273rpm (Optional 209 or 273, 182,228rpm) Horizontal: 330rpm			
Spindle Taper	BT50 (Optional BT60)			
Vertical Sliding Ram Size	500x500 Vertical, 420x420 Horizontal			
Feeding speed	1-5m/min			
Rapid Travel speed	10m/min			

CNC Horizontal Machining Center

- * Gantry-twin column body.
- * One piece casting bed.
- * Vertical disc tool magazine
- * NSK high precision and high rigidity combination bearing.



Description	905-0040	905-0041	905-0042	905-0043
X travel (mm)	1250	1250	2400	3200
Y travel (mm)	1000	1200	1800	1800
Z travel (mm)	11000	11000	1500	1500
Spindle end to table center (mm)	300-1400	300-1400	680-2180	680-2180
Spindle nose to table center (mm)	70-1070	70-1070	50-1850	50-1850
Table size (mm)	1000X1000	1000X1000	1500x1500	1500x1500
T slot (widthnumberxdistance)	22x5x200mm	22x5x200mm	28x5x275mm	28x5x275mm
Max. loading	3000	3000	8000	8000
Spindle motor	18.5/22KW			
Spindle max speed	6000RPM	6000RPM	6000rpm	6000rpm
Spindle Taper	BT50	BT50	BT50	BT50
3 Axis Rapid feed speed (m/min)	15	15	12	15
3 axis Cutting speed (m/min)	0-12	0-12	0-10	0-10
Position accuracy (mm)	0.025	0.025	0.030	0.03
Position repeatability (mm)	0.012	0.012	0.015	0.015
Table indexing accuracy	±5" (20")	±5" (20")	±20"/(±5")	±20"/(±5")
Table Repeatability	±1.5" (±2")	±1.5" (±2")	±2" (±1.5")	±2" (±1.5")
Tool magazine capacity	40(Optional 60)			
Max. Tool shank diameter	125	125	125	125
Max. tool weight (kg)	20	20	25	25
Max. tool length (mm)	400	400	400	400
Machine weight	20000kg	20000kg	30000kg	32000kg
Power requirement (KVA)	45	45	50	50
Controller	Fanuc Oi-Mc (Optional Simense, Mitsubishi, HD-500 etc.)			

CNC Vertical Machining Center

- * Automatic arm type tool changer.
- * Fanuc, Simense, Mitsubish SYSTEM



Order No.	905-0045	905-0046	905-0047	905-0048	905-0049
X travel (mm)	1500	1500	2000	2000	2000
Y travel (mm)	750	800	900	900	1250
Z travel (mm)	650	650	800	800	900
Spindle nose to table (mm)	200~850	200~850	200~1000	200~1000	200~1100
Table size (mm)	1700*650	1700*750	2200*900	2200*900	3200*1250
T slot(wide*number*space) (mm)	18*5*125	18*5*125	22*5*160	22*5*160	22*7*160
Max load capacity (kg)	1800	2000	2500	3000	5000
Spindle motor (kw)	11/15	11/15	11/15	15/18.5	15/18.5
Spindle speed (rpm)	60~5000	60~6000	60~5000	60~6000	60~5000
Spindle taper (No.)	BT50	BT50	BT50	BT50	BT50
X,Y,Z axis Servo Motor (kw)	4	4	4/7/4	7/6/7	7/7/7x2
Spindle connection with motor	Coupling	Belt (Optional coupling)	Coupling	Belt (Optional coupling)	Coupling
X,Y,Z motor torque (n.m)	22	22/30/22	22/30/22	30/38/30	30/30/30
X,Y,Z rapid speed (m/min)	20/20/20	20/20/20	16/16/16	16/16/16	12/12/12
Cutting speed (mm/min)	1~5000	1~5000	1~5000	1~5000	1~5000
Manual feed (mm/min)	0~2000	0~2000	0~2000	0~2000	0~2000
Positioning accuracy (mm)	0.016	0.016	0.016	0.020	0.025
Repeatability (mm)	0.008	0.008	0.008	0.010	0.012
Tool magazine capacity (t)	24	24	24	24	24
Max tool(diameter*weight*length) (mm*kg*mm)	Φ127*15*300	Φ110*15*300	Φ127*15*300	Φ127*15*300	Φ127*15*300
Tool Change Time (sec)	5	5	5	5	5
Machine weight (kg)	15000	16000	18000	18000	3000
Power requirement (kva)	40	45	45	50	55

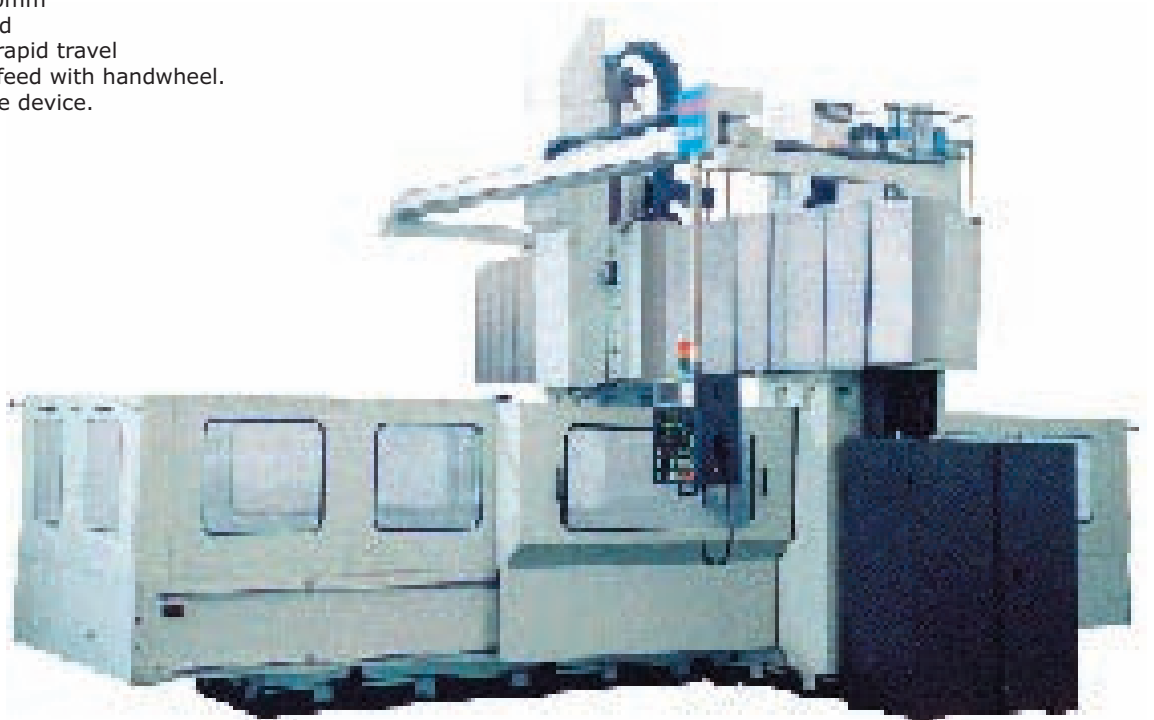
Bridge Type CNC Machining Center

Main specifications:

- * Spindle motor: 22/26(Continue/30min)
- * Spindle hole taper: BT50
- * Spindle speed: 30-3500rpm (Automatic speed change with 2 grades ratio 1:4)(Optional 30-6000rpm or 30-8000rpm)
- * Max. torque of spindle: 600Nm
- * Magazine capacity: 24 tools(Optional: 32, 40 or 60 tools)
- * Tool selection: Two direction short-cut tool selection
- * Tool change: Robot arm type.
- * Max. diameter of tool: 110mm(250mm if neighbouring tool is not there)
- * Max. length of tool: 350mm
- * Max. weight of tool: 20Kg
- * Max. weight of tool
- * Air source: 0.6MPa
- * CNC system: Simense, Fanuc or to customer selection.

Side Milling data:

- * Spindle power 11KW
- * Spindle speed 66,83,116,166,216,291,375,493,662(RPM)
- * Vertical travel: 650mm
- * Horizontal travel: 380mm
- * Vertical variable speed
- * Motorized horizontal rapid travel
- * Mechanical left-right feed with handwheel.
- * Automatic tool change device.



Order No.	905-0050	905-0051	905-0053	905-0054	905-0055	905-0057
Table size(WxL) (mm)	1000x2500	1000x4000	1600x3000	1600x4000	1600x5000	2000x6500
X travel (mm)	1400	1400	2000	2000	2000	2400
Y Travel (mm)	2000	3500	2500	3500	4500	6000
Z Travel (mm)	800	800	800	800	1000	1000
Distance from spindle nose to table (mm)	100-900	100-900	100-900	100-900	200-1200	200-1200
Distance between columns (mm)	1600	1600	2200	2200	2200	2600
Max. height of workpiece (mm)	1100	1100	1000	1000	1000	1200
Rapid speed (mm/min)	10000	10000	10000	10000	10000	d
Max. loading capacity (kg)	5000	7000	8500	10000	12000	18000
Machine Length (mm)	6900	9900	7500	9500	11000	14700
Machine Width (mm)	3700	3700	4600	4600	4600	5000
Machine Height (mm)	5000	5000	5200	5200	5200	5200
Weight (ton)	25	32	38	40	60	80

Bridge Type CNC Machining Center

Main specifications:

- * Spindle motor: 22/26(Continue/30min)
- * Spindle hole taper: BT50
- * Spindle speed: 30-3500rpm (Automatic speed change with 2 grades ratio 1:4)(Optional 30-6000rpm or 30-8000rpm)
- * Max. torque of spindle: 600Nm
- * Magazine capacity: 24 tools(Optional: 32, 40 or 60 tools)
- * Tool selection: Two direction short-cut tool selection
- * Tool change: Robot arm type.
- * Max. diameter of tool: 110mm(250mm if neighbouring tool is not there)
- * Max. length of tool: 350mm
- * Max. weight of tool: 20Kg
- * Max. weight of tool
- * Air source: 0.6MPa
- * CNC system: Simense, Fanuc or to customer selection.

Side Milling data:

- * Spindle power 11KW
- * Spindle speed 66,83,116,166,216,291,375,493,662(RPM)
- * Vertical travel: 650mm
- * Horizontal travel: 380mm
- * Vertical variable speed
- * Motorized horizontal rapid travel
- * Mechanical left-right feed with handwheel.
- * Automatic tool change device.



Order No.	905-0061	905-0062	905-0063	905-0064	905-0065	905-0066	905-0067
Table size(WxL) (mm)	2000x8000	2000x10000	2000x12000	2000x8000	2500x10000	2500x12000	2500x13000
X travel (mm)	2500	2500	2500	3000	3000	3000	3000
Y Travel (mm)	8000	10000	12000	8000	10000	12000	13000
Z Travel (mm)	1000	1000	1000	1000	1000	1000	1000
Distance from spindle nose to table (mm)	200-1200	200-1200	200-1200	200-1200	200-1200	200-1200	200-1200
Distance between columns (mm)	2700	2700	2700	3200	3200	3200	3200
Max. height of workpiece (mm)	1200	1200	1200	1200	1200	1200	1200
Rapid speed	800 mm/min X axis, 1000mm/min Y axis						
Max. loading capacity (kg)	25000	35000	40000	38000	40000	45000	48000
Machine Length (mm)	21000	25000	29000	21000	25000	29000	31500
Machine Width (mm)	6000	6000	6000	6700	6700	6700	6700
Machine Height (mm)	5500	5500	5500	5700	5700	5700	5700
Weight (ton)	95	120	141	144	165	198	210

CNC Vertical Milling Machine



- * FANUC 0i Mate MC system
- * Sliding bedways
- * Carrousel Type Magazine
- * Coolant system
- * CNC Manual
- * User's manual
- * Tool kits

Description	920-0024	920-0032	920-0044
Table size	800x400mm	950x460mm	1200x580mm
X travel	600mm	800mm	1100mm
Y travel	400mm	500mm	550mm
Z travel	500mm	550mm	600mm
Distance between spindle center and column guide way	450mm	550mm	610mm
Distance between spindle end and table	138-648mm	150-700mm	150-750mm
Taper bore of spindle	BT40	BT40	BT40
Spindle speed	60-6000rpm	60-6000rpm	60-6000rpm
XiϕYiϕZ Travel speed	0-15m/min	0-18m/min	0-20m/min
Table T slot number & width	3x18mm	3x18mm	3x18mm
Max. Table load	500Kg	600Kg	800Kg
XiϕY motor torque	7NM	12NM	16NM
Z motor torque	8NM	12NM	16NM
Xi ϕYi ϕZ motor connection	Direct connection		
Tool number	20	20	20
Cutter removal from spindle	Pneumatic		
Main motor power	5.5/7.5kw	5.5/7.5kw	11/15kw
Min. displacement(X/Y/Z)	0.001mm	0.001mm	0.001mm
Min. input(X/Y/Z)	0.001mm	0.001mm	0.001mm
Pepeatability(X/Y/Z)	±0.003mm	±0.003mm	±0.003mm
Overall dimensilns(LxWxG)	2280x1880x2100mm	2400x2110x2800mm	2900x2350x2900mm
Net weight	4500kg	5000kg	7000kg

Slant Bed CNC Lathe

This CNC lathe satisfies all your machining need for auto parts, motorcycle parts, valves and other complexly shaped parts at any quantities, large, medium or even small. It is of high speed, high precision and high efficiency.



Technical Data:

Max. swing over bed: Ø500mm
 Max. turning diameter: Ø420mm
 Max. cross travel (X): 220mm
 Max. longitudinal travel (Z): 650mm
 Rapid feed for axis X: 12m/min
 Rapid feed for axis Z: 20m/min
 Max. speed of spindle: 4000rpm
 Diameter of spindle through bore: Ø65mm
 Spindle nose: A2-6
 Taper bore of spindle: Ø80mm 1:20
 Hydraulic chuck: Ø200mm
 Number of tools: 12
 Outside dia. of cutting tool shank: 25x25mm
 Inner dia. Of cutting tool shank: Ø32mm
 Tailstock sleeve diameter: Ø63mm
 Tailstock sleeve travel: 100mm
 Taper hole of tailstock quill: M.T.No.3
 Min. Input: .001mm
 Bed structure: 45° slant bed integrated with stand
 Capacity for coolant: 120L
 Main motor power(X/Z): 11/15KW
 Tool compensation model: Wear/geometric
 Overall dimension(LxWxH): 3712x1660x1850mm
 Net weight: 4500kg

Features:

- * MITSUBISHI or FANUC control system.
- * Servo motors.
- * LIO SHING 12-station hydraulic turret.
- * Tool change time upto 0.3 second.
- * NSK bearings.
- * Automatic and timed lubrication system.
- * Stainless steel inner protection and totally enclosed outer protection.
- * Optional customerized control system and accessories.

Stand kit:

- * Fanuc Oi Mate MC control system
- * Slant lathe body
- * Linear bedways

Order No. 920-2026

CNC LATHE



Specifications:

Max.swing over bed: 360mm(14")
 Max.cutting dia for axle parts: 150mm (6")
 Max.cutting dia. for disc parts: 250mm(10")
 Max. cross travel(X): 150mm(6")
 Max. longitudinal travel(Z): 320mm,500mm(12",19-5/8")
 Rapid feed for axis X: 12m/min (427in/min)
 Rapid feed for axis Z: 20m/min (787in/min)
 Max. longitudinal travel (z): 6000r/min
 Taper bore of spindle: MT5
 Spindle nose: A2-5
 Hydraulic chuck: 6"
 Number of tools: 8
 Outside dia. Of cutting tool shank: 20x20mm (7/8"x7/8")
 Inner dia. Of cutting tool shank: ϕ 25mm (1")
 Hydraulic tailstock sleeve dia.: ϕ 80mm(3-1/8")
 Tailstock sleeve travel: 90mm(3-1/2")
 Min. displacement: 0.0005/0.001mm
 Min. input 0.001mm:
 Manual pulse generator: 0.001/0.01/0.1mm
 Bed structure: 45°slant bed integrated with stand
 Guide ways X&Z: Precision linear ball rail
 Tool compensation model: Wear/geometric
 Metric/Inch switch function: G20,G21
 MNI/CRT unit: 9" single color display
 Main motor power(X/Z): 5.5/7.5kW (7.5/10HP)
 Drive motors power(X/Z): 1.0/1.0kW
 Capacity for coolant: 100L
 Overall dimensions(LxWxH): 2700x1460x1680mm
 Net weight: 3600kg (7930lbs)

This CNC lathe is capable of high speed, precision and high efficiency cutting turning for complex parts. It is suitable for auto parts, motorcycle parts, valves and otehr similiar part maching at large, medium or samll quantities.

Features:

- * Unique design
- * MITSUBISHI or FANUC control system.
- * German SAUTER tool post.
- * Servo motors.
- * LIO SHING 12-station hydraulic tarrent.
- * Tool change time upto 0.3 second.
- * NSK bearings.
- * Automatic and timed lubrication system.
- * Stainless steel inner protection and totally enclosed outer protection.
- * Optional customerized control system and accessories.

Stand kit:

- * Fanuc Oi Mate MC control system
- * Slant lathe body
- * Linear bedways

Order No. 920-1406

CNC LATHE



Technical Data

Max.swing over bed 360mm (14")
 Max.cutting dia. For axle parts: 150mm (6")
 Max.cutting dia.for disc parts: 250mm (10")
 Max. cross travel(X): 150mm (6")
 Max. longitudinal travel(Z): 320mm,500mm (12",19-5/8")
 Rapid feed for Axis X: 10m/min (349in/min)
 Rapid feed for Axis Z: 16m/min (630in/min)
 Max. speed of spindle: 4000r/min (3500r/min*)
 Taper bore of spindle: M.T.No.5 or M.T.NO.6
 Spindle nose: A2-5 or A2-6
 Hydraulic chuck: 6" or 8" optional
 Number of tools: 8
 Outside dia. Of cutting tool shank: 20×20mm (7/8"×7/8")
 Inner dia. Of cutting tool shank: φ25mm (1")
 Hydraulic tailstock sleeve dia.: φ80mm 3-1/8")
 Tailstock sleeve travel: 90mm (3-1/2")
 Min. input: 0.001mm
 Manual pulse generator: 0.001/0.01/0.1mm
 Bed structure: 45°slant bed integrated with stand
 Guide ways X&Z: Precision linear ball rail
 Tool conensation model: Wear/geometric compensation
 Spindle frequency variable motor: 5.5KW(7.5HP)
 Capacity for coolant: 100L
 Overall dimensions(L×W×H): 2700×1460×1680mm
 Net weigh: 3600kg(7930lbs)

Standard Accessories

- * Totally enclosed fencing system.
- * Lubrication system.
- * Hydraulic system.
- * Solid hydraulic chuck
- * Operation manual
- * FANUC Oi Mate MC control system

Optional Accessories:

- * Hydraulic tailstock
- * Automatic bar feeding system.
- * Hydraulic 5C collet clamping system.

Features:

- * Fanuc Oi Mate MC control system
- * Slant lathe body
- * Linear bedways

Order No. 920-1407

Slant Bed CNC Lathe**Technical Data:**

Max.swing ober bed: Φ 410mm
Max. turned diameter: Φ 360mm
Max. cross travel(X): 180mm
Max. longitudinal travel (Z): 420mm
Max. turned length: 350mm
Rapid feed for Axis X: 9m/min
Rapid feed for Axis Z: 15m/min
Max. spindle speed: 4000rpm with 160mm chuck or
3000rpm with 200mm chuck
Number of tool post: 8
Spindle nose: A2-5
Spindle bore: Φ 63mm
Outside dia. Cutting tool shank: 20mmx20mm
Max. inner dia. Cutting tool shank: Φ 25mm
Min. displacement(X/Z): 0.0005/0.001mm
Min. input: 0.001mm
Manual pulse generator: 0.001/0.01/0.1mm
Bed structure: 60°Slant bed
Guide ways X&Z: Precision linear ball rail
Tool compensation mode: Wear/geometric compensation
Repeatability (X/Z): 0.005mm/0.006mm
Surface roughness: \leq Ra0.8 μ m(Nonferrous)
 \leq Ra1.6 μ m(Steel part)
Metric/inch switch function: G20/G21
Main motor power: 5.5KW
Capacity for coolant: 100L
Overall dimensions(LxWxH): 2435x1270x1660mm
Net weight: 3500kg

Features:

- * Slant lathe body
- * Linear bedways
- * Rapid X/Z axis feed.
- * Tool compensation
- * Easy Incy/Metric conversion

Standard Kit

- * Fanuc Oi Mate MC control system
- * Total sealed fencing system.
- * Lubrication system.
- * 200mm solid hydraulic lathe chuck.
- * Operation Manual

Optional Accessories

- * Hollowed hydraulic lathe chuck
- * automatic back chip conveying system.
- * Hydraulic tailstock

Order No. 920-3207

Big Bore Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic.
- * Supersonic frequency hardened and precision ground guideways.
- * 105mm spindle bore.
- * Programmable high and low variable spindle speeds.
- * No vibration even at 80mm cutting depth.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

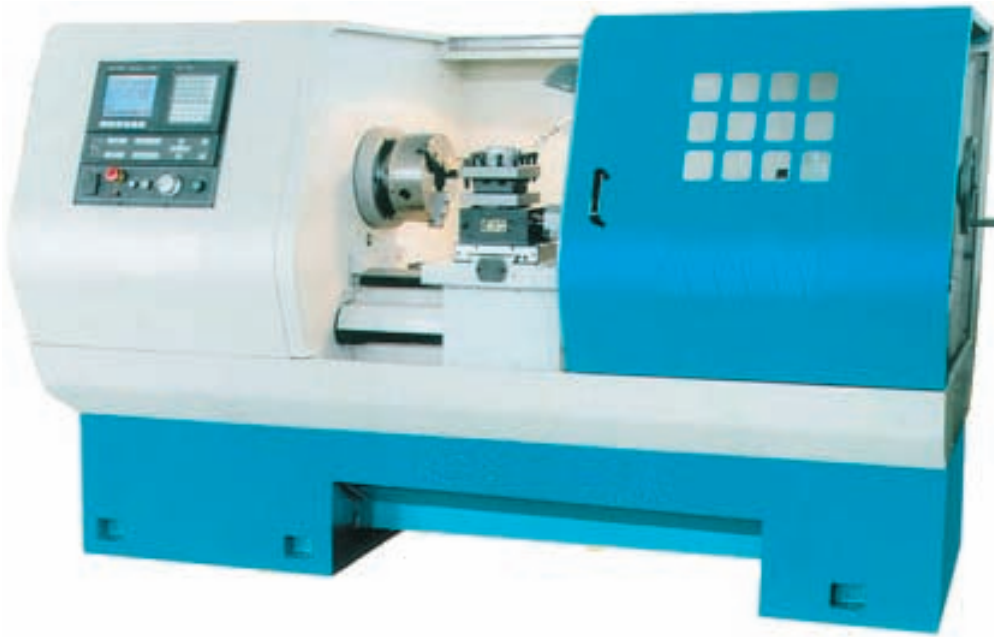
- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-0035	920-0036	920-0037	920-0038	920-0039
Max. Swing over bed	Φ660mm				
Max. Length of workpiece	750mm	1000mm	1500mm	2000mm	3000mm
Max. Swing over slide	Φ430mm				
Max. Cross travel(X)	365mm				
Spindle bore	Φ105mm				
Spindle Nose Dia. and taper size	Φ113 1:20				
Principal Axis Head Type	Cam lock type				
Rev series of principal axis	Stepless				
Range of spindle speeds	200-1100rpm				
Rapid feed for Axis Z	8m/min				
Rapid feed for Axis X	5m/min				
Min input	0.001mm				
Number of tools	4 way or 6 way or gang tools				
Size of tool shank	25×25mm				
Tailstock sleeve dia.	Φ75mm				
Tailstock sleeve travel	150mm				
tailstock sleeve quill	MT No.5				
Power of main motor	7.5Kw				
Motor power of cooling pump	60W				
Overall dimensions(cm)	225×125×158	250×125×158	300×125×158	350×125×158	450×125×158
Net weight(kg)	3500	3800	4050	4300	4700

Big Bore Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic.
- * Supersonic frequency hardened and precision ground guideways.
- * 80mm spindle bore.
- * Programmable high and low variable spindle speeds.
- * No vibration even at 80mm cutting depth.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-0025	920-0026	920-0027	920-0028	920-0029
Max. swing over bed	500mm				
Max. swing over slide	310mm				
Max. length of workpiece	750mm	1000mm	1500mm	2000	3000
Max. cross travel(X)	300mm				
Spindle bore	Φ80mm				
Spindle nose	A2-8				
Taper of spindle bore	MT7				
Range of spindle speeds	200-1800rpm(high), 25-250rpm(low)				
Rapid feed for Axis X	5m/min				
Rapid feed for Axis Z	8m/min				
No. of tools post stations	4-ways, 6-ways or gang tools				
Size of tool shank	25×25mm				
Tailstock sleeve dia.	75mm				
Tailstock sleeve travel	150mm				
Taper of tailstock quill	MT5				
Power of main motor	7.5KW				
Min. input	0.001mm				
Overall dimensions(cm)	225×120×152	250×120×152	300×120×152	350×120×152	450×120×152
Net weight(Kg)	3000	3300	3550	3800	4200

Big Bore Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic.
- * Supersonic frequency hardened and precision ground guideways.
- * 80mm spindle bore.
- * Variable spindle speed.
- * No vibration even at 80mm cutting depth.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-0016	920-0116	920-0216
Max. swing over bed	400mm		
Max. swing over slide	210mm		
Max. length of workpiece	750mm	1000mm	1500mm
Max. cross travel(X)	250mm power tool post or 330mm Gang tool post		
Spindle bore	Φ80mm		
Taper of spindle bore	MT7		
No. of spindle speeds	stepless		
Range of spindle speeds	100-2000rpm		
Longitudinal rapid traverse	8m/min		
Cross rapid traverse	5m/min		
Range of tailstock sleeve	0.150~30.00mm		
Taper of tailstock sleeve	MT4		
Size of tool shank	25×25mm		
No. of tool post stations	4-way or 6-way or gang tools		
Power of main motor	5.5KW		
Coolant pump motor power	75W		
Repeatability(X/Z)	0.0075/0.01mm		
Min. input	0.001mm		
Overall dimensions(mm)	2060×1180×1500	2310×1180×1500	2790×1180×1500
Net weight(Kg)	2380	2580	3050

Gap Bed Big Bore Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic.
- * Supersonic frequency hardened and precision ground guideways.
- * 80mm spindle bore.
- * Variable spindle speed.
- * No vibration even at 80mm cutting depth.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-1016	920-1116	920-1216
Max. swing over bed	400mm		
Max. swing ober slide	210mm		
Max. length of workpiece	750mm	1000mm	1500mm
Max. cross travel(X)	250mm power tool post or 330mm Gang tool post		
Max. Swing in gap	650mm		
Length of Gap	200mm		
Spindle bore	Φ80mm		
Taper of spindle bore	MT7		
No. of spindle speeds	stepless		
Range of spindle speeds	100-2000rpm		
Longitudinal rapid traverse	8m/min		
Cross rapid traverse	5m/min		
Range of tailstock sleeve	0.150~30.00mm		
Taper of tailstock sleeve	MT4		
Size of tool shank	25×25mm		
No. of tool post stations	4-way or 6-way or gang tools		
Power of main motor	5.5KW		
Coolant pump motor power	75W		
Repeatability(X/Z)	0.0075/0.01mm		
Min. input	0.001mm		
Overall dimensions(mm)	2060×1180×1500	2310×1180×1500	2790×1180×1500
Net weight(Kg)	2380	2580	3050

Big Bore Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic.
- * Supersonic frequency hardened and precision ground guideways.
- * 80mm spindle bore.
- * Variable spindle speed.
- * No vibration even at 80mm cutting depth.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-0018	920-0118	920-0218
Max. swing over bed		460mm	
Max. swing over slide		250mm	
Max. length of workpiece	750mm	1000mm	1500mm
Max. cross travel(X)	250mm power tool post or 330mm(Gang tool type)		
Spindle bore	Φ80mm		
Taper of spindle bore	MT7		
No. of spindle speeds	stepless		
Range of spindle speeds	100-2000rpm		
Longitudinal rapid traverse	8m/min		
Cross rapid traverse	5m/min		
Range of tailstock sleeve	0.150~30.00mm		
Taper of tailstock sleeve	MT5		
Size of tool shank	25×25mm		
No. of tool post stations	4-way or 6-way or gang tools		
Power of main motor	5.5KW		
Coolant pump motor power	75W		
Repeatability(X/Z)	0.0075/0.01mm		
Min. input	0.001mm		
Overall dimensions(mm)	2060×1180×1500	2310×1180×1500	2790×1180×1500
Net weight(Kg)	2380	2580	3050

Gap Bed Big Bore Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic.
- * Supersonic frequency hardened and precision ground guideways.
- * 80mm spindle bore.
- * Variable spindle speed.
- * No vibration even at 80mm cutting depth.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-1018	920-1118	920-1218
Max. swing over bed	460mm		
Max. swing over slide	250mm		
Max. length of workpiece	750mm	1000mm	1500mm
Max. cross travel(X)	250mm power tool post or 330mm(Gang tool type)		
Max. swing in Gap	700mm		
Length of Gap	200mm		
Spindle bore	Φ80mm		
Taper of spindle bore	MT7		
No. of spindle speeds	stepless		
Range of spindle speeds	100-2000rpm		
Longitudinal rapid traverse	8m/min		
Cross rapid traverse	5m/min		
Range of tailstock sleeve	0.150~30.00mm		
Taper of tailstock sleeve	MT5		
Size of tool shank	25×25mm		
No. of tool post stations	4-way or 6-way or gang tools		
Power of main motor	5.5KW		
Coolant pump motor power	75W		
Repeatability(X/Z)	0.0075/0.01mm		
Min. input	0.001mm		
Overall dimensions(mm)	2060×1180×1500	2310×1180×1500	2790×1180×1500
Net weight(Kg)	2380	2580	3050

Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic or pneumatic.
- * Variable spindle speed.
- * Rapid X and Z axis feed.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-3010	920-4010
Max. swing over bed	410mm (16")	
Max. swing over slide	Φ150mm(gang tools)	
	Φ240mm	
Max. cross travel (X)	235mm power tool post	
Max. length of workpiece	750mm	1000mm
Rapid feed for Axis X	8m/min	
Rapid feed for Axis Z	10m/min	
Range of spindle speeds(stepless)	200-2800r/min	
Spindle bore	Φ52	
Taper bore of spindle	MT No.6	
3-jaw chuck or collet	Φ200 or 5C	
Tool post	4-way or 6-way or gang tools	
Servo Motor Power (X/Z)	0.75/1.0KW	
Size of tool shank	20×20mm	
Min. input	0.001mm	
Repeatability(X/Z)	0.0075/0.01mm	
Surface roughness	≤Ra0.8μm(Nonferrous) or ≤Ra1.6μm(Steel part)	
Main motor power	3.7KW (5HP)	
Overall dimensions(L×W×H)	2120×1200×1415mm	2370×1200×1415mm
Net weight	2100Kg	2300Kg

Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Standard 4-station tool post. Optional 6-station or gang tools either horizontal or vertical
- * Standard manual lathe chuck and tailstock. Optional hydraulic or pneumatic.
- * Variable spindle speed.
- * Rapid X and Z axis feed.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

Order No.	920-2007	920-2008	920-2009
Max. swing over bed	360mm (14")		
Max. swing over slide	Φ100mm(gang tools)		
	Φ180mm		
Max. cross travel (X)	300mm(gang tools) or 235mm power tool post		
Max. length of workpiece	500mm	750mm	1000mm
Rapid feed for Axis X	5m/min		
Rapid feed for Axis Z	8m/min		
Range of spindle speeds(stepless)	200-2800r/min		
Spindle bore	Φ40		
Taper bore of spindle	MT No.5		
3-jaw chuck or collet	Φ200 or 5c		
Tool post	4-way or 6-way or gang tools		
Servo Motor Power (X/Z)	0.75/1.0KW		
Size of tool shank	20×20mm		
Min. input	0.001mm		
Repeatability(X/Z)	0.0075/0.01mm		
Surface roughness	≤Ra0.8μm(Nonferrous) or ≤Ra1.6μm(Steel part)		
Main motor power	3.7KW (5HP)		
Overall dimensions(L×W×H)	1870×1200×1415mm	2120×1200×1415mm	2370×1200×1415mm
Net weight	1700kg	2000kg	2200kg

Variable Speed CNC Lathe

Features:

- * ISO coding, manual keyboard data input, power failure protection, automatic diagnosis, R232 interface.
- * X and Z axis power feed driven by servo motor and ball screws.
- * Gang tool or 4-station tool post for option.
- * Manual or pneumatic collets or 3-jaw lathe chucks.
- * Variable spindle speed.



Stand kit

- * FANUC Oi Mate TC control system
- * Hitachi inverter
- * FUKUTA inverter motor
- * Manual lathe chuck
- * 4 way power-driven toolpost

Optional accessories

- * Solid hydraulic chuck
- * Hollow hydraulic chuck
- * Hydraulic tailstock
- * 6 way power-drive toolpost

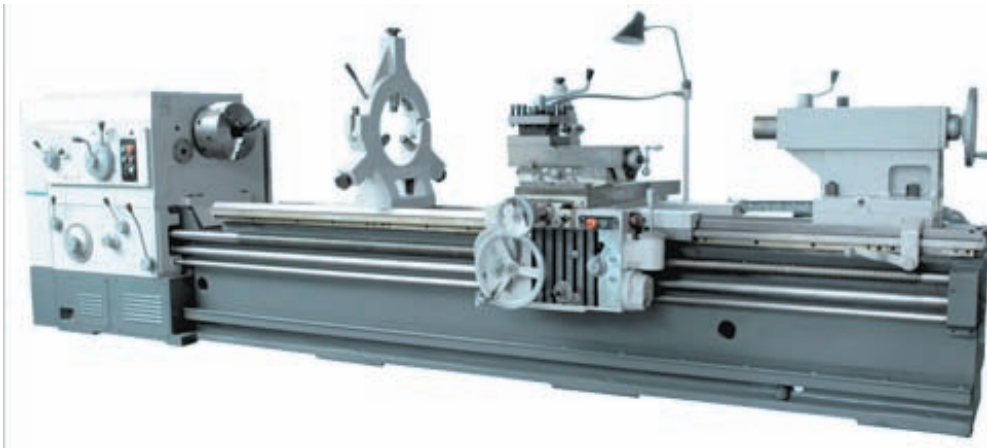
Technical Data:

Max. swing over bed: 300mm(12")
 Max. swing over slide: ϕ 100mm(Gang tools) ϕ 135mm(Power tool post)
 Max. cutting dia.: 250mm(10")
 Max. cross travel (X): 270mm(10-5/8"), (Gang tool type)
 Max. longitudinal travel (Z): 500mm(20")
 Rapid feed for Axis X: 5m/min
 Rapid feed for Axis Z: 8m/min
 Spindle speed range: 200-3500r/min
 Taper bore of spindle: MT No.5
 Spindle nose: D1-4
 3-jaw chuck or collet : 160mm or 5C
 Tool post: Gang tool post or power tool post
 Servomotor power (X/Z): 0.75/1.0KW
 Size of tool shank: 16×16mm
 Min. input: 0.001mm
 Repeatability (X/Z): 0.0075/0.01mm
 Surface roughness: \leq Ra0.8 μ m(Nonferrous) \leq Ra1.6 μ m(Steel part)
 Main motor power: 3KW(4.1hp)
 Overall dimensions(L×W×H): 150×95×138cm
 Net weight: 1100kg

Order No. 920-2012

GAP-BED LATHE

The surface of the bedways is supersonic frequency hardened. The spindle system is rigid and accurate. Carriage comes with rapid feed forward and backware. The clutch in headstock make the lathes start smoothly and brake quickly. Metric or inch lead-screws, right or left hand carriages, inverter motor, voltage and frequencies tailored to customer's requirements.



- * Camlock spindle nose D-11
- * 600mm bedways
- * $\Phi 104$ mm spindle bore
- * Friction clutch
- * Z and X rapid feed
- * 12mm longitudinal ball screw pitch
- * 32mmx32mm tool shank size
- * Stand accessories with coolant system, halgen work lamp.

Standard accessories

- * 3 jaw lathe chuck
- * Face plate
- * Drill sleeves
- * Solide center
- * Wrenches

Order No.	920-2620	920-2621	920-2622	920-2623
Max. swing diameter over bed	910mm			
Max. swing diameter over carriage	580mm			
Max. swing diameter over gap:	1100mm			
Effective length of gap	310mm			
Max. length of workpiece	1500mm	2000mm	3000mm	4000mm
Max. turning length	1040mm	1540mm	2540mm	3540mm
Spindle bore	104mm			
Spindle taper hole	$\Phi 120$ mm, 1:20			
Number of speeds and range	18 speeds from 5.4rpm to 720rpm			
Longitudinal feeds:	64 feeds from 0.1 to 1.52mm/r, 1.6 to 24.3mm/r			
Longitudinal fine feeds	0.06-0.912mm/r			
Cross feeds	64 feeds, at half of longitudinal feeds			
Longitudinal rapid traverse	4000mm/min			
Cross rapid traverse	2000mm/min			
Metric pitch threads	1-240mm/50 kinds			
Whit-worth threads	14-1TPI/26 kinds			
Module threads	0.5-120mm/53 kinds			
D.P. threads	28-1 DP/24 kinds			
Distance from spindle center to tool rest surface	33mm			
Max. travel of cross slide	550mm			
Max. travel of top slide	200mm			
Max. cross displacement of tailstock	15mm			
Taper of tailstock sleeve	MT5			
Max. traverse of tailstock sleeve	250mm			
External diameter of tailstock sleeve	100mm			
Power of main motor	11KW			
Rapid feed motor power	1.1KW			
Coolant pump power	90W			
Overall dimensions (mm)	366x145x163	416x 145x163	516 x 145 x163	616x145x163
Net weight	4950kg	5250kg	5900kg	6560kg

Big Bore Gap-Bed Lathe

- * 105mm Bore
- * Supersonic frequency hardened bed.
- * Cut 89 threads with no need to change gears.
- * Automatic limit stop switch.



- Standard Accessories:
- * 325mm 3-jaw lathe chuck
 - * face plate
 - * Drill Sleeve
 - * MT5 solid center
 - * Wrenches
 - * Operation manual

- Optional Accessories
- * 400mm 4-jaw lathe chuck
 - * 25mm drive plate
 - Steady rest
 - * follow rest

Order No.	920-2604	920-2606	920-2608	920-2612
Swing over bed(mm)	660 (26")			
Swing over carriage(mm)	420 (17")			
Swing over gap(mm)	870 (34")			
Max. turned diameter(mm)	520 (20-2/5")			
Max. length of workpiece(mm)	1000 (40")	1500 (60")	2000 (80")	3000 (118")
Effective length in gap(mm)	240 (9")			
Spindle bore(mm)	105 (4")			
Taper of bore	113mm 1:20			
Number of speeds	12			
Spindle speed scope(r/min)	36-1600			
Thread cutting	MetricRange/No.	1-14mm/22		
	InchRange/No.	28-2T.P.1/25		
	D.P.Range/No.	56-4D.P/24		
	ModuleRange/No.	0.5-7mm/18		
Range of feeds	Longitudinal(mm)	0.063-2.52(0.023"-0.937)		
	Cross(mm)	0.027-1.07(0.011"-0.404")		
Rapid traverse	Longitudinal(m/min)	4.5		
	Cross(m/min)	1.9		
Max. travel of top slide(mm)	145(5-3/4")			
Max. travel of cross slide(mm)	310(12-3/32)			
Max. size of tool(W×H)(mm)	25×25(1"×1")			
Tailstock sleeve	External diameter	75(2-61/64")		
	Taper of bore	M.T.NO.5		
	Max. traverse(mm)	150(5-29/32")		
Power of main motor(KW)	7.5(10HP)			
Overall dimensions(mm)	2500×1100×1450	3000×1100×1450	3500×1100×1450	4500×1100×1450
Net weigh(kg)	2500	2700	3000	3350

GAP-BED LATHE

Features:

- * Supersonic frequency hardened and ground bedways.
- * 80mm diameter spindle bore.
- * Rapid carriage travel.
- * Clutch system in headstock



Standard accessory:
 250mm 3-jaw lathe chuck
 Face plate
 MT7/MT5 Drill sleeve
 MT5 Solid center
 Wrenches
 Operation Manual

Optional accessories
 320mm 4-jaw lathe chuck
 250mm drive plate
 Stead rest
 Follow rest

Order No.		921-5510	921-5515	921-5520	921-5530
Max. swing diameter	over bed(mm)	500			
	over carriage(mm)	310			
	over gap(mm)	720			
Max. length of workpiece(mm)		1000	1500	2000	3000
Spindle bore(mm)		Ø80			
Taper of bore		MT7			
Number of speeds		24			
Spindle speed scope(r/min)		9-1600			
Thread cutting	Metric Threads	1-224mm/46			
	Inch Threads	28-1/TPI./46			
	Diameter Pitch Threads	56-1/4D.P/45			
	Module Threads	0.5-112mm/42			
Range of feeds	Longitudinal(mm)	0.063-6.43			
	Cross(mm)	0.027-2.73			
Rapid traverse	Longitudinal(m/min)	4.5			
	Cross(m/min)	1.9			
Max. traver of top slide(mm)		145			
Max. travel of cross slide(mm)		320			
Max. size of tool(mm)		25×25			
Tailstock sleeve	External diameter	75			
	Taper of bore	MT5			
	Max. traverse(mm)	150			
Power of main motor(KW)		7.5kw (10HP)			
Overall dimensions(cm)		250×90×125.9	300×90×125.9	350×90×125.9	450×90×125.9
Net weigh(kg)		2750	3000	3250	3600

Big Bore Gap-bed Lathe

Supersonic frequency hardened and precision ground bedways.
 Precision ground gears making low noise.
 80mm spindle bore size.
 Highly rigid and accurate spindle system makes no vibration when turning with a cutting depth of 10mm.
 There is no need for change gears.
 Turn about 200 kinds of metric, inch, module and D.P. Threads, pipe threads.
 Automatic HONDA motorcycle stop device.



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-5218	921-5118	921-5018
Swing Over Bed(mm)	460mm/18"		
Swing Over Carriage (mm)	290mm/10-4/5"		
Swing overgap (mm)	700mm/27-1/2"		
Distance between centers (mm)	2000mm/80"	1500mm/60"	1000mm/40"
Effective Gap Length (mm)	200mm/8"		
Spingle Bore	80mm/3-1/8"		
Spinle Taper	MT7		
Number of Speed	12		
Speed Range	42-1800rpm 25-1800rpm		
Metic Thread Cutting	0.5 to 20mm,24 threads		
Inch Thread Cutting	72~1-5/8TPI, 61 threads		
Diameter Pitch Threads	96" to 3-1/4" , 45 threads		
Module Threads Cutting	0.25 to 10M, 20 threads		
Longitudinal Feed	0.04-2.46mm/0.0015"-0.0913"		
Cross Feed (mm)	0.03-1.23(0.0006"-0.0365")		
Tailstock Barrel Dia	75mm/3"		
Tailstock Barrel Taper	MT5		
Max. traverse	130MM/5"		
Max. travel of compound toolpost	100MM/4"		
Max. cross slide travel	230MM/9"		
Max.Tool Size (WxH)	25x25MM/1"X1"		
Motor Power	5.5KW		
Overall dimensions(LxWxH)	3320x1000x1295mm	2810x1000x1295mm	2310x1000x1295mm
Net Weight	3055KG	2835kg	2635kg

Big Bore Gap-bed Lathe

Supersonic frequency hardened and precision ground bedways.
 Precision ground gears making low noise.
 80mm spindle bore size.
 Highly rigid and accurate spindle system makes no vibration when turning with a cutting depth of 10mm.
 There is no need for change gears.
 Turn about 200 kinds of metric, inch, module and D.P. Threads, pipe threads.
 Automatic HONDA motorcycle stop device.



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-5216	921-5116	921-5016
Swing Over Bed(mm)	410mm/16"		
Swing Over Carriage (mm)	250mm/10"		
Swing overgap (mm)	660mm/26"		
Distance between centers (mm)	2000mm/80"	1500mm/60"	1000mm/40"
Effective Gap Length (mm)	200mm/8"		
Spingle Bore	80mm/3-1/8"		
Spinle Taper	MT7		
Number of Speed	12		
Speed Range	42-1800rpm 25-1800rpm		
Metic Thread Cutting	0.5 to 20mm,24 threads		
Inch Thread Cutting	72~1-5/8TPI, 61 threads		
Diameter Pitch Threads	96" to 3-1/4" , 45 threads		
Module Threads Cutting	0.25 to 10M, 20 threads		
Longitudinal Feed	0.04-2.46mm/0.0015"-0.0913"		
Cross Feed (mm)	0.03-1.23(0.0006"-0.0365")		
Tailstock Barrel Dia	75mm/3"		
Tailstock Barrel Taper	MT4		
Max. traverse	130MM/5"		
Max. travel of compound toolpost	100MM/4"		
Max. cross slide travel	230MM/9"		
Max.Tool Size (WxH)	25x25MM/1"X1"		
Motor Power	5.5KW		
Overall dimensions(LxWxH)	3320x1000x1275mm	2810x1000x1275mm	2310x1000x1275mm
Net Weight	2780kg	2630kg	2485kg

Big Bore Gap-bed Lathe

Supersonic frequency hardened and precision ground bedways.
 Precision ground gears making low noise.
 80mm spindle bore size.
 Highly rigid and accurate spindle system makes no vibration when turning with a cutting depth of 10mm.
 There is no need for change gears.
 Turn about 200 kinds of metric, inch, module and D.P. Threads, pipe threads.
 Automatic HONDA motorcycle stop device.



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-5114	921-5014
Swing Over Bed(mm)	360mm/14"	
Swing Over Carriage (mm)	200mm/7-2/3"	
Swing overgap (mm)	660mm/23-5/8"	
Distance between centers (mm)	1500mm/60"	1000mm/40"
Effective Gap Length (mm)	200mm/8"	
Spindle Bore	80mm/3-1/8"	
Spindle Taper	MT7	
Number of Speed	12	
Speed Range	42-1800rpm 25-1800rpm	
Metric Thread Cutting	0.5 to 20mm, 24 threads	
Inch Thread Cutting	72~1-5/8TPI, 61 threads	
Diameter Pitch Threads	96" to 3-1/4" , 45 threads	
Module Threads Cutting	0.25 to 10M, 20 threads	
Longitudinal Feed	0.04-2.46mm/0.0015"-0.0913"	
Cross Feed (mm)	0.03-1.23(0.0006"-0.0365")	
Tailstock Barrel Dia	75mm/3"	
Tailstock Barrel Taper	MT4	
Max. traverse	130MM/5"	
Max. travel of compound toolpost	100MM/4"	
Max. cross slide travel	230MM/9"	
Max.Tool Size (WxH)	25x25MM/1"x1"	
Motor Power	5.5KW	
Overall dimensions(LxWxH)	2810x1000x1255mm	2310x1000x1255mm
Net Weight	2510kg	2355kg

Engine Lathe

- * The guide ways and all gears in the headstock are hardened and precision-ground
- * The spindle system is high in rigidity and accuracy
- * The machines have powerful headstock gear train, high rotating accuracy and smooth running with low noise.
- * An overload safety device is provided on the apron
- * Has a pedal or an electromagnetic braking device



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

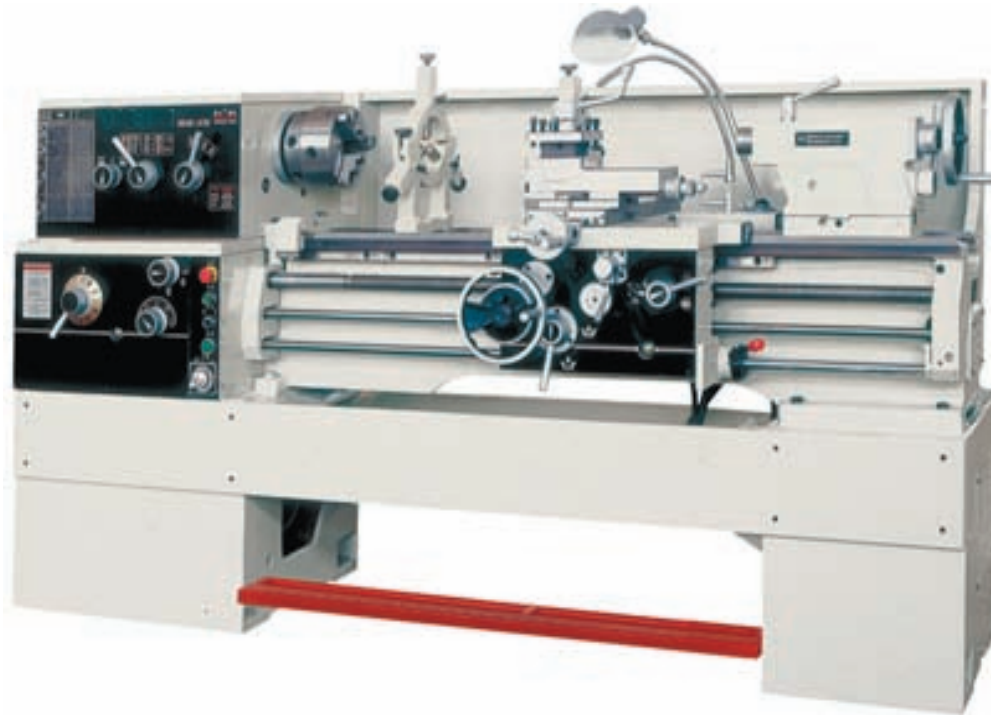
Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-3010	921-3011	921-3110	921-3111
Swing over bed	350mm			
Swing over carriage	185mm			
Swing over gap	/	/	520	
Distance between centers	750mm	1000mm	750mm	1000mm
Effective gap length	200mm		200mm	
Spindle bore taper	40 or 52			
Spindle bore taper	MT5 or MT6			
Number of spindle speeds	12			
Range of spindle speeds	40-1800rpm			
24 Metric threads	0.5~20mm/24			
61 Inch Threads	72~1-5/8t.p.i/61			
45 Diameter Pitches	96~3-1/4D.P/45			
20 Module Threads	0.25~10M.P/20			
Longitudinal Feed	0.04-2.46mm (0.0015"-0.0913")			
Cross Feed	0.03-1.23mm(0.0006"-0.0365")			
Tailstock Barrel Outer diameter	60mm			
Tailstock Bore Taper	MT4			
Tailstock Barrel Travel	120mm			
Max. travel of compound rest	100mm			
Max. cross slide travel	210mm			
Max. size of tool shank(W×H)	20×20mm			
Power of main motor(kw)	3/4			
Overall dimensions(mm)	2140×1000×1200	2360×1000×1200	2140×1000×1200	2360×1000×1200
Net weight(kg)	1600	1680	1680	1760

Engine Lathe

- * The guide ways and all gears in the headstock are hardened and precision-ground
- * The spindle system is high in rigidity and accuracy
- * The machines have powerful headstock gear train, high rotating accuracy and smooth running with low noise.
- * An overload safety device is provided on the apron
- * Has a pedal or an electromagnetic braking device



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

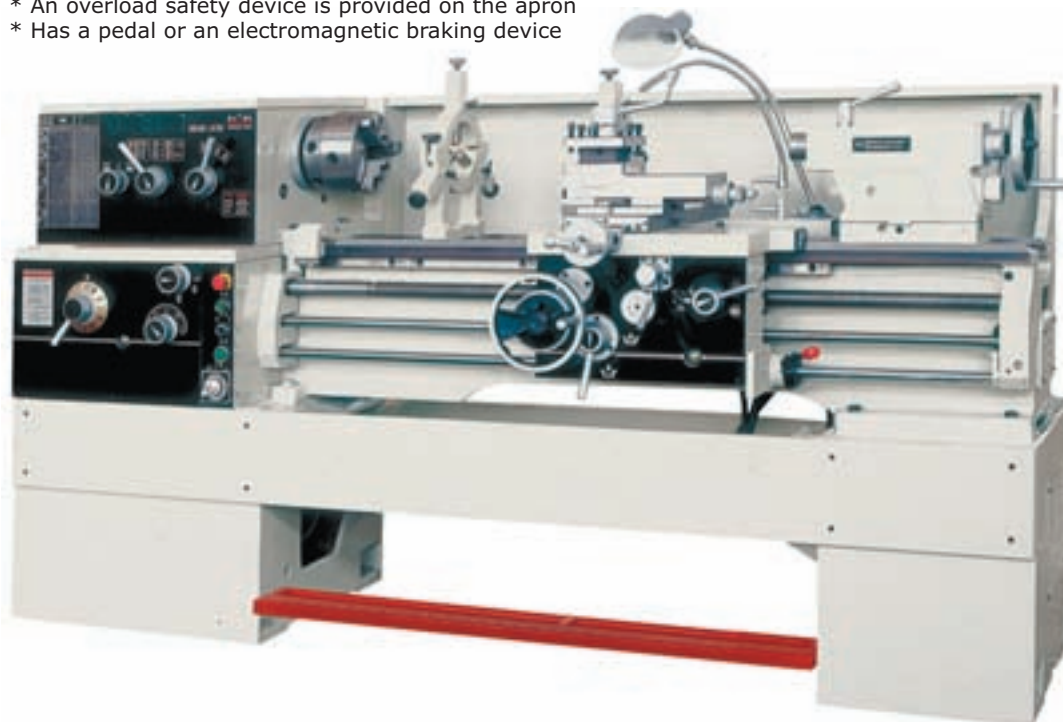
Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-3016	921-3017	921-3012
Swing over bed	400		
Swing over carriage	255		
Distance between centers	750mm	1000mm	1500mm
Spindle bore taper	52		
Spindle bore taper	MT6		
Number of spindle speeds	12		
Number of spindle speeds	40-1800rpm		
24 Metric threads	0.5~20mm/24		
61 Inch Threads	72~1-5/8t.p.i/61		
45 Diameter Pitches	96~3-1/4D.P/45		
20 Module Threads	0.25~10M.P/20		
Longitudinal Feed	0.04-2.46mm (0.0015"-0.0913")		
Cross Feed	0.03-1.23mm(0.0006"-0.0365")		
Tailstock Barrel Outer diameter	60mm		
Tailstock Bore Taper	MT4		
Tailstock Barrel Travel	120		
Max. travel of compound rest	100mm		
Max. cross slide travel	240mm		
Max. size of tool shank(W×H)(mm)	20×20		
Power of main motor(kw)	4/5.5		
Overall dimensions(mm)	2140×1000×1200	2360×1000×1200	2860×1000×1200
Net weight(kg)	1650	1730	1890

Gap Bed Engine Lathe

- * The guide ways and all gears in the headstock are hardened and precision-ground
- * The spindle system is high in rigidity and accuracy
- * The machines have powerful headstock gear train, high rotating accuracy and smooth running with low noise.
- * An overload safety device is provided on the apron
- * Has a pedal or an electromagnetic braking device



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-3116	921-3117	921-3112
Swing over bed		400mm	
Swing over carriage		255mm	
Swing over gap		570mm	
Distance between centers	750mm	1000mm	1500mm
Effective gap length		200mm	
Spindle bore taper		52	
Taper of bore		MT6	
Number of spindle speeds		12	
Range of spindle speeds		40-1800rpm	
24 Metric threads		0.5~20mm/24	
61 Inch Threads		72~1-5/8t.p.i/61	
45 Diameter Pitches		96~3-1/4D.P/45	
20 Module Threads		0.25~10M.P/20	
Longitudinal Feed		0.04-2.46mm (0.0015"-0.0913")	
Cross Feed		0.03-1.23mm(0.0006"-0.0365")	
Tailstock Barrel Outer diameter		60mm	
Tailstock Bore Taper		MT4	
Tailstock Barrel Travel		120mm	
Max. travel of compound rest		100mm	
Max. cross slide travel		240mm	
Max. size of tool shank(W×H)		20×20mm	
Power of main motor(kw)		4/5.5	
Overall dimensions(mm)	2140×1000×1200	2360×1000×1200	2860×1000×1200
Net weight(kg)	1730	1810	1970

Engine Lathe

- * The guide ways and all gears in the headstock are hardened and precision-ground
- * The spindle system is high in rigidity and accuracy
- * The machines have powerful headstock gear train, high rotating accuracy and smooth running with low noise.
- * An overload safety device is provided on the apron
- * Has a pedal or an electromagnetic braking device



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

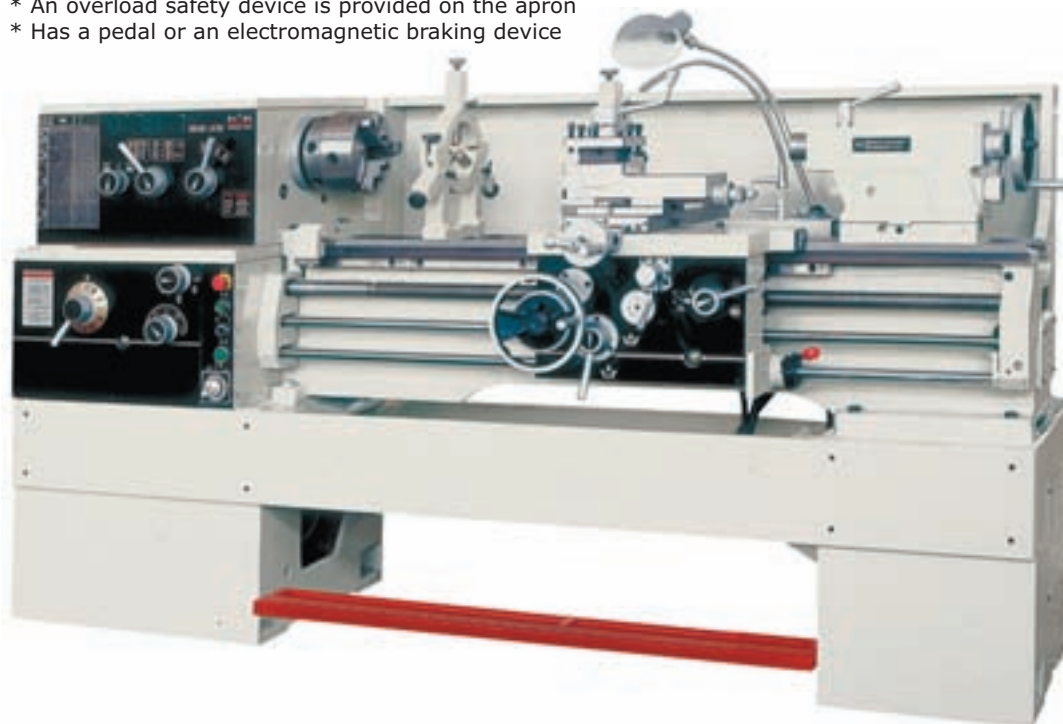
Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-3015	921-3013	921-3014
Swing over bed	360		
Swing over carriage	195		
Distance between centers	750mm	1000mm	1500mm
Spindle bore taper	40 or 52		
Spindle bore taper	MT5 or MT6		
Number of spindle speeds	12		
Number of spindle speeds	40-1800rpm		
24 Metric threads	0.5~20mm/24		
61 Inch Threads	72~1-5/8t.p.i/61		
45 Diameter Pitches	96~3-1/4D.P/45		
20 Module Threads	0.25~10M.P/20		
Longitudinal Feed	0.04-2.46mm (0.0015"-0.0913")		
Cross Feed	0.03-1.23mm(0.0006"-0.0365")		
Tailstock Barrel Outer diameter	60mm		
Tailstock Bore Taper	MT4		
Tailstock Barrel Travel	120mm		
Max. travel of compound rest	100mm		
Max. cross slide travel	210mm		
Max. size of tool shank(W×H)(mm)	20×20		
Power of main motor(kw)	3/4		
Overall dimensions(mm)	2140×1000×1200	2360×1000×1200	2860×1000×1200
Net weight(kg)	1600	1680	1840

Gap Bed Engine Lathe

- * The guide ways and all gears in the headstock are hardened and precision-ground
- * The spindle system is high in rigidity and accuracy
- * The machines have powerful headstock gear train, high rotating accuracy and smooth running with low noise.
- * An overload safety device is provided on the apron
- * Has a pedal or an electromagnetic braking device



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-3115	921-3113	921-3114
Swing over bed		360mm	
Swing over carriage		195mm	
Swing over gap		530mm	
Distance between centers	750mm	1000mm	1500mm
Effective gap length		200mm	
Spindle bore taper		40 or 52	
Taper of bore		MT5 or MT6	
Number of spindle speeds		12	
Range of spindle speeds		40-1800rpm	
24 Metric threads		0.5~20mm/24	
61 Inch Threads		72~1-5/8t.p.i/61	
45 Diameter Pitches		96~3-1/4D.P/45	
20 Module Threads		0.25~10M.P/20	
Longitudinal Feed		0.04-2.46mm (0.0015"-0.0913")	
Cross Feed		0.03-1.23mm(0.0006"-0.0365")	
Tailstock Barrel Outer diameter		60mm	
Tailstock Bore Taper		MT4	
Tailstock Barrel Travel		120mm	
Max. travel of compound rest		100mm	
Max. cross slide travel		240mm	
Max. size of tool shank(W×H)		20×20mm	
Power of main motor(kw)		4/5.5	
Overall dimensions(mm)	2140×1000×1200	2360×1000×1200	2860×1000×1200
Net weight(kg)	1680	1760	1920

Engine Lathe

- * The guide ways and all gears in the headstock are hardened and precision-ground
- * The spindle system is high in rigidity and accuracy
- * The machines have powerful headstock gear train, high rotating accuracy and smooth running with low noise.
- * An overload safety device is provided on the apron
- * Has a pedal or an electromagnetic braking device



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

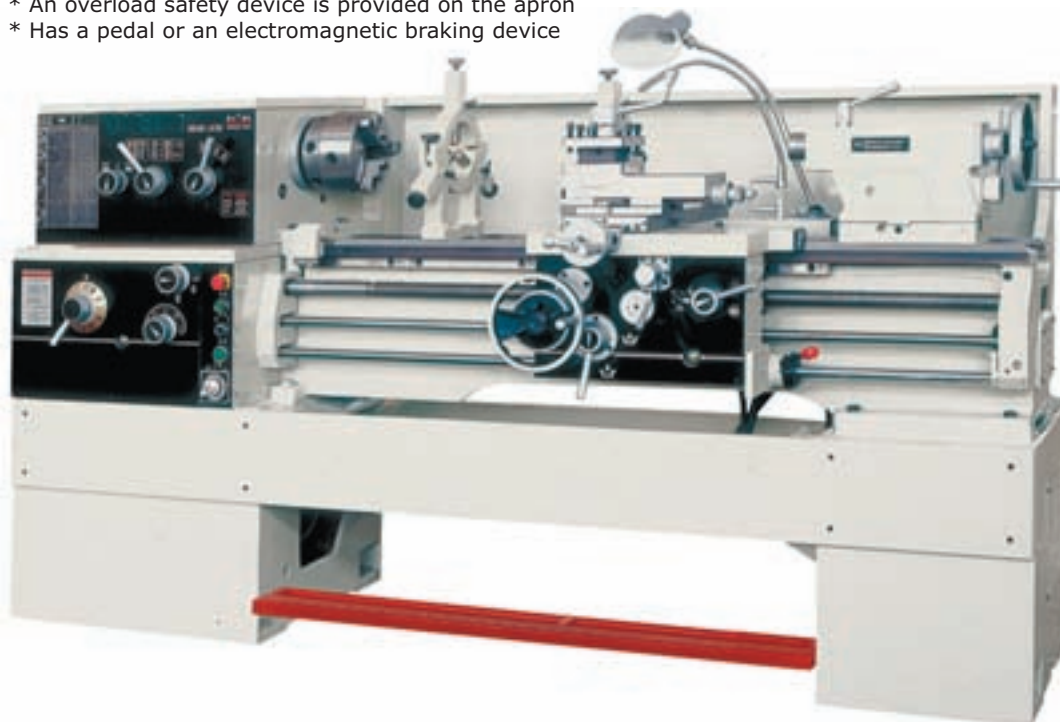
Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-3018	921-3019	921-3020
Swing over bed	460mm		
Swing over carriage	275mm		
Distance between centers	750mm	1000mm	1500mm
Spindle bore taper	52		
Taper of bore	MT6		
Number of spindle speeds	12		
Range of spindle speeds	40-1800rpm		
24 Metric threads	0.5~20mm/24		
61 Inch Threads	72~1-5/8t.p.i/61		
45 Diameter Pitches	96~3-1/4D.P/45		
20 Module Threads	0.25~10M.P/20		
Longitudinal Feed	0.04-2.46mm (0.0015"-0.0913")		
Cross Feed	0.03-1.23mm(0.0006"-0.0365")		
Tailstock Barrel Outer diameter	60mm		
Tailstock Bore Taper	MT4		
Tailstock Barrel Travel	120mm		
Max. travel of compound rest	100mm		
Max. cross slide travel	240mm		
Max. size of tool shank(W×H)	20×20mm		
Power of main motor(kw)	4/5.5		
Overall dimensions(mm)	2140×1000×1200	2360×1000×1200	2860×1000×1200
Net weight(kg)	1700	1780	1940

Gap Bed Engine Lathe

- * The guide ways and all gears in the headstock are hardened and precision-ground
- * The spindle system is high in rigidity and accuracy
- * The machines have powerful headstock gear train, high rotating accuracy and smooth running with low noise.
- * An overload safety device is provided on the apron
- * Has a pedal or an electromagnetic braking device



Standard accessories:

- 3 jaw chuck
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

Optional accessories:

- 4 jaw lathe chuck
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-3118	921-3119	921-3120
Swing over bed	460mm		
Swing over carriage	275mm		
Swing over gap	630mm		
Distance between centers	750mm	1000mm	1500mm
Effective gap length	200mm		
Spindle bore taper	52		
Taper of bore	MT6		
Number of spindle speeds	12		
Range of spindle speeds	40-1800rpm		
24 Metric threads	0.5~20mm/24		
61 Inch Threads	72~1-5/8t.p.i/61		
45 Diameter Pitches	96~3-1/4D.P/45		
20 Module Threads	0.25~10M.P/20		
Longitudinal Feed	0.04-2.46mm (0.0015"-0.0913")		
Cross Feed	0.03-1.23mm(0.0006"-0.0365")		
Tailstock Barrel Outer diameter	60mm		
Tailstock Bore Taper	MT4		
Tailstock Barrel Travel	120mm		
Max. travel of compound rest	100mm		
Max. cross slide travel	240mm		
Max. size of tool shank(W×H)	20×20mm		
Power of main motor(kw)	4/5.5		
Overall dimensions(mm)	2140×1000×1200	2360×1000×1200	2860×1000×1200
Net weight(kg)	1700	1780	1940

Gep Bed Engine Lathe

- * Hardened and ground bed ways.
- * 12 speeds all geared head stock.
- * 3HP(2.4kW)three phase motor.
- * Foot brake giving rapid braking.
- * Emergency stop button equipped on the front of headstock.
- * Jog button for easy gear engagement and inching spindle.
- * Extra safety switch shuts down machine automatically for changing belt or gear for threading cutting.



Standard accessories:

- 3 jaw chuck (dia. 160mm)
- Change gears
- Chasing dial indicator
- Full length splash guard
- Solid center MT3
- Drill sleeve
- Coolant system
- Work lamp.
- Travel stopper

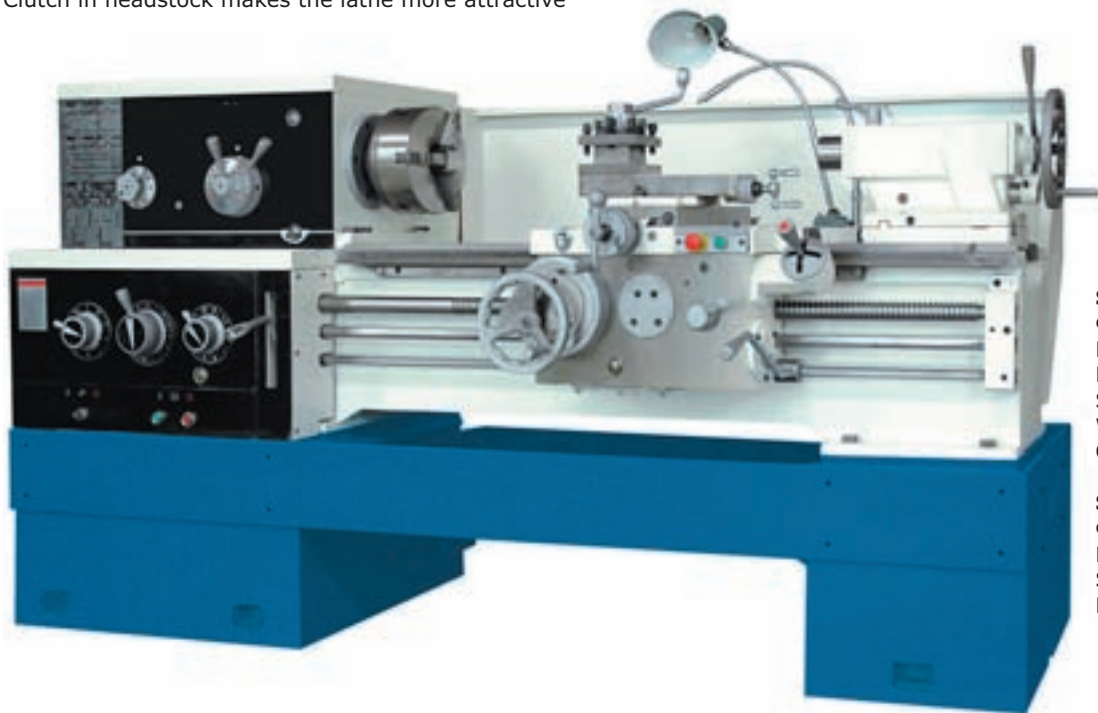
Optional accessories:

- 4 jaw lathe chuck (Dia. 200mm)
- Face plate 200mm.
- Steady rest.
- Follw rest
- T slotted compound tool post
- Taper Turning attachment.
- Live center.

Order No.	921-5214	921-5314
Max. swing over bed	356mm/14"	
Max. swing over slide	210mm (8-1/5")	
Max. swing in gap	508mm (20")	
Width of bed	260mm (10-1/5")	
Distance between centers	750mm (30")	1000mm(40")
Taper of spindle bore	MT5	
Diameter of spindle hole(mm)	40mm (1-1/2")	
Number of spindle speeds	12	
Range of spindle speeds	40-1800RPM	
Spindle nose	D1-4	
Metric threads	37 threads 0.4mm to 7mm	
Inch threads	28 kinds 4-56TPI	
Range of longitudinal feeds	0.043-0.653mm (0.0012"-0.0294")	
Range of cross feeds	0.024-0.359mm (0.0004"-0.0103")	
Diameter of leadscrew	22 (7/8")	
Pitch threads of leadsrew	4mm or 8TPI	
Travel of tailstock quill	120 (4-3/4")	
Diameter of tailstock quill	45 (1-25/32")	
Taper hole of tailstock quill	MT3	
Power of main motor	2.4Kw	
Packing size of lathe	1990x760x1435mm	
Net weight	1250kg	

Engine Lathe

Hardened and grinded bed way and gears in headstock are with long life and low noise.
Spindle system is of high rigidity and precision.
Rapid feed structure is available on Apron.
Clutch in headstock makes the lathe more attractive



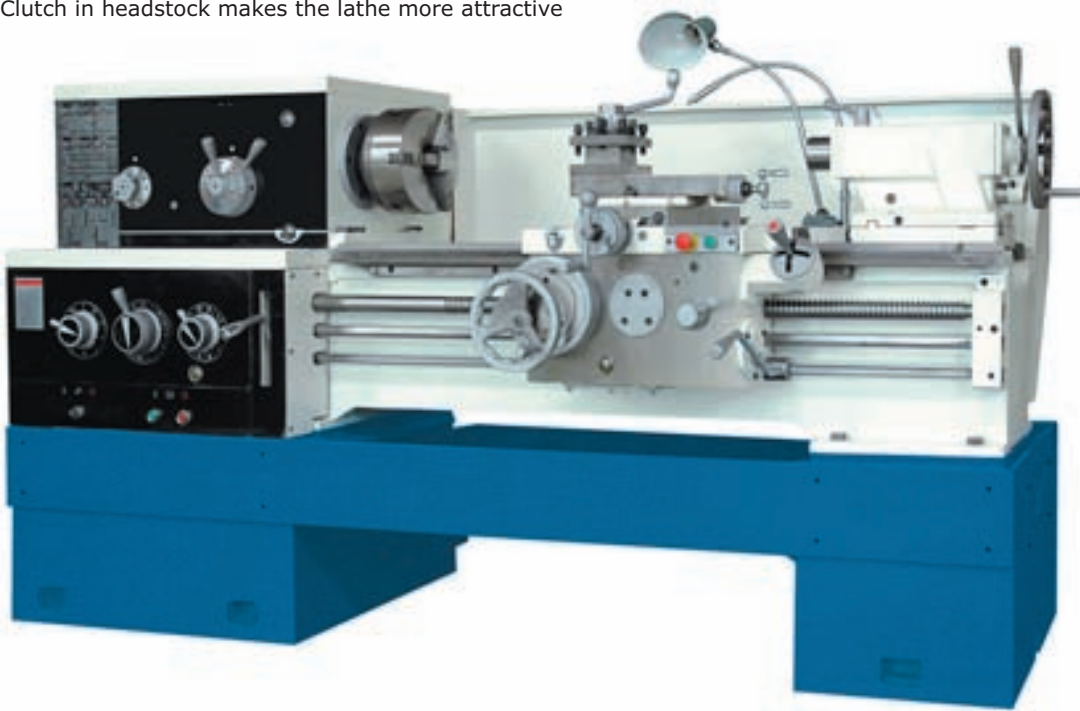
Standard accessories:
 Φ250 3-jaw chuck
 Face plate
 Morse taper sleeve MT6/MT5
 Solid center MT5
 Wrenches
 Operation manual

Special accessories:
 Φ300 4-jaw chuck
 Drive plate
 Steady rest
 Follow rest

Model	920-0001	920-0002	920-0003
Swing over bed	420mm		
Swing over carriage	220mm		
Max. length of workpiece	1000mm	1500mm	2000mm
Spindle bore	Φ56mm		
Taper of bore	MT6		
Number of speeds	24		
Range of speeds	9-1600rpm		
Metric Threads	0.5-224mm/48		
Inch Threads	72-1/8tpi/48		
Diameter Pitch Threads	56-1/4D.P/45		
Module Threads	0.5-112M.P/42		
Range of feeds Leadscrew	0.028-6.43mm		
Range of feeds Cross	0.012-2.73mm		
External diameter of Tailstock sleeve	75mm		
Taper of bore of Tailstock sleeve	MT5		
Max. Travel of Tailstock sleeve	150mm		
Max. travel of compound rest	145mm		
Max. cross slide travel(mm)	320mm		
Max. size of tool shank (W×H)	25×25mm		
Power of main motor	7.5KW		
Overall dimensions (L×W×H)(cm)	250×100×128.5	300×100×128.5	350×100×128.5
Net weight	2150kg	2350kg	2550kg

Gap Bed Engine Lathe

Hardened and grinded bed way and gears in headstock are with long life and low noise.
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Rapid feed structure is available on Apron.
Clutch in headstock makes the lathe more attractive



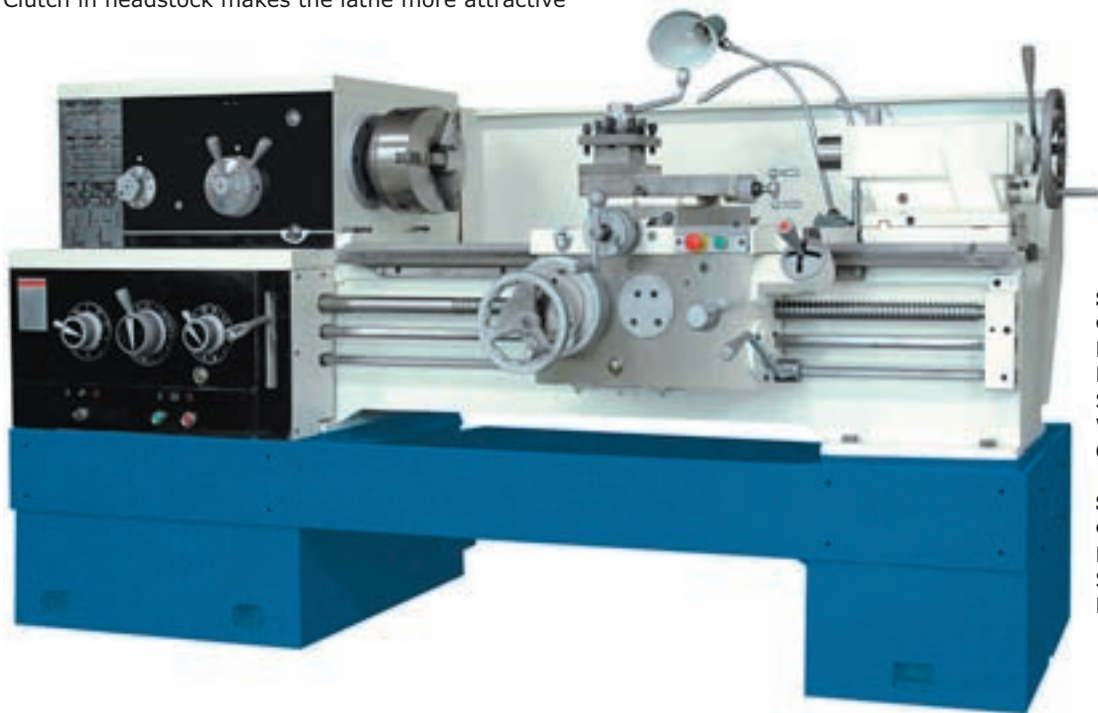
Standard accessories:
 Φ250 3-jaw chuck
 Face plate
 Morse taper sleeve MT6/MT5
 Solid center MT5
 Wrenches
 Operation manual

Special accessories:
 Φ300 4-jaw chuck
 Drive plate
 Steady rest
 Follow rest

Model	920-0004	920-0005	920-0006
Swing over bed	420mm		
Swing over carriage	220mm		
Swing In Gap	630mm		
Max. length of workpiece	1000mm	1500mm	2000mm
Spindle bore	Φ56mm		
Taper of bore	MT6		
Number of speeds	24		
Range of speeds	9-1600rpm		
Metric Threads	0.5-224mm/48		
Inch Threads	72-1/8tpi/48		
Diameter Pitch Threads	56-1/4D.P/45		
Module Threads	0.5-112M.P/42		
Range of feeds Leadscrew	0.028-6.43mm		
Range of feeds Cross	0.012-2.73mm		
External diameter of Tailstock sleeve	75mm		
Taper of bore of Tailstock sleeve	MT5		
Max. Travel of Tailstock sleeve	150mm		
Max. travel of compound rest	145mm		
Max. cross slide travel(mm)	320mm		
Max. size of tool shank (W×H)	25×25mm		
Power of main motor	7.5KW		
Overall dimensions (L×W×H)(cm)	250×100×128.5	300×100×128.5	350×100×128.5
Net weight	2150kg	2350kg	2550kg

Engine Lathe

Hardened and grinded bed way and gears in headstock are with long life and low noise.
Spindle system is of high rigidity and precision.
Rapid feed structure is available on Apron.
Clutch in headstock makes the lathe more attractive



Standard accessories:
 Φ250 3-jaw chuck
 Face plate
 Morse taper sleeve MT6/MT5
 Solid center MT5
 Wrenches
 Operation manual

Special accessories:
 Φ300 4-jaw chuck
 Drive plate
 Steady rest
 Follow rest

Model	920-0007	920-0008	920-0009
Swing over bed	520mm		
Swing over carriage	320mm		
Max. length of workpiece	1000mm	1500mm	2000mm
Spindle bore	Φ56mm		
Taper of bore	MT6		
Number of speeds	24		
Range of speeds	9-1600rpm		
Metric Threads	0.5-224mm/48		
Inch Threads	72-1/8tpi/48		
Diameter Pitch Threads	56-1/4D.P/45		
Module Threads	0.5-112M.P/42		
Range of feeds Leadscrew	0.028-6.43mm		
Range of feeds Cross	0.012-2.73mm		
External diameter of Tailstock sleeve	75mm		
Taper of bore of Tailstock sleeve	MT5		
Max. Travel of Tailstock sleeve	150mm		
Max. travel of compound rest	145mm		
Max. cross slide travel(mm)	320mm		
Max. size of tool shank (W×H)	25×25mm		
Power of main motor	7.5KW		
Overall dimensions (L×W×H)(cm)	250×100×134	300×100×134	350×100×134
Net weight	2220kg	2400kg	2600kg

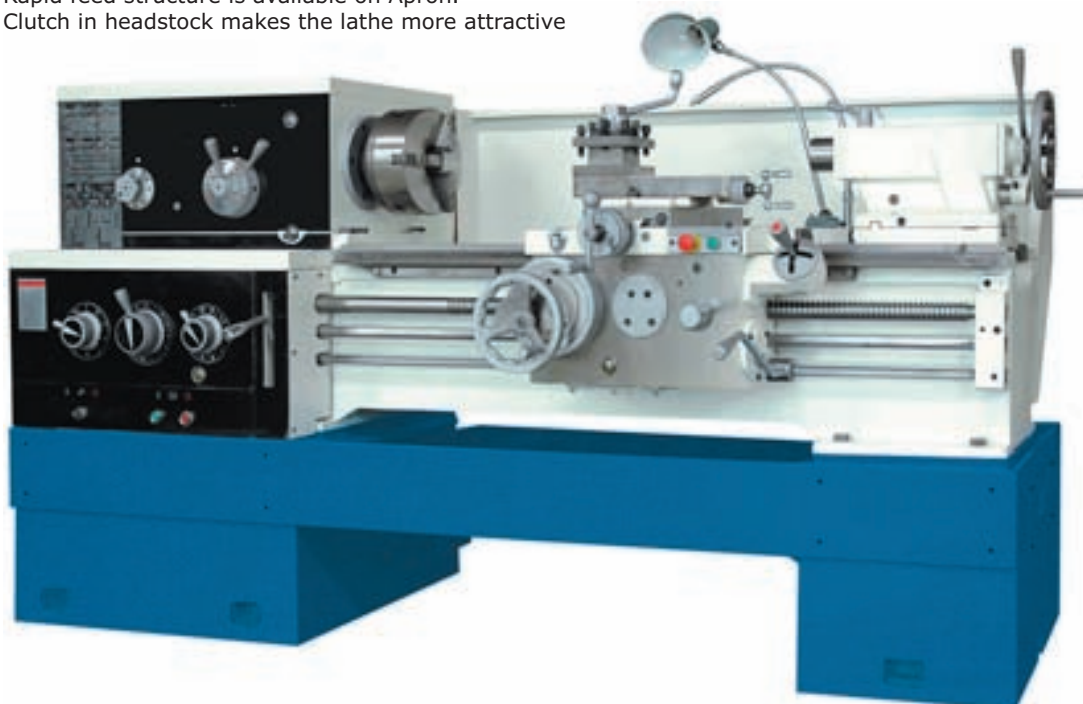
Gap Bed Engine Lathe

Hardened and grinded bed way and gears in headstock are with long life and low noise.

Spindle system is of high rigidity and precision.

Rapid feed structure is available on Apron.

Clutch in headstock makes the lathe more attractive



Standard accessories:

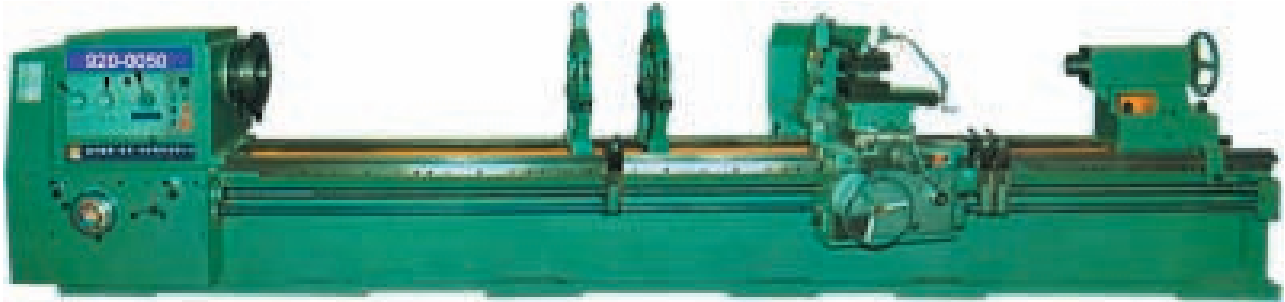
- Φ250 3-jaw chuck
- Face plate
- Morse taper sleeve MT6/MT5
- Solid center MT5
- Wrenches
- Operation manual

Special accessories:

- Φ300 4-jaw chuck
- Drive plate
- Steady rest
- Follow rest

Model	920-0010	920-0011	920-0012
Swing over bed	520mm		
Swing over carriage	300mm		
Swing In Gap	730mm		
Max. length of workpiece	1000mm	1500mm	2000mm
Spindle bore	Φ56mm		
Taper of bore	MT6		
Number of speeds	24		
Range of speeds	9-1600rpm		
Metric Threads	0.5-224mm/48		
Inch Threads	72-1/8tpi/48		
Diameter Pitch Threads	56-1/4D.P/45		
Module Threads	0.5-112M.P/42		
Range of feeds Leadscrew	0.028-6.43mm		
Range of feeds Cross	0.012-2.73mm		
External diameter of Tailstock sleeve	75mm		
Taper of bore of Tailstock sleeve	MT5		
Max. Travel of Tailstock sleeve	150mm		
Max. travel of compound rest	145mm		
Max. cross slide travel(mm)	320mm		
Max. size of tool shank (W×H)	25×25mm		
Power of main motor	7.5KW		
Overall dimensions (L×W×H)(cm)	250×100×134	300×100×134	350×100×134
Net weight	2220kg	2400kg	2600kg

Engine Lathe



- * For turning of steel, cast iron and non-ferrous metal parts up to 10 meters.
- * Large power and good rigidity suitable for power and high-speed cutting.
- * Functions as end-facing; cylindrical and internal turning; Inch, module and pitch threading; Drilling and boring.
- * Wide variable spindle speed range for rough and finish turning.
- * High strength resin cast iron bed. Ultra-high frequency hardened and precision guideways.
- * Over-load protection mechanism in the apron.
- * Rapid longitudinal and cross travel.

Order No.	920-0050 to 920-0060	920-0072 to 920-0082
Max. swing diameter over bed	800mm	630mm
Max. length of workpiece machined	1000/1500/2000/3000/4000/5000/6000/7000/8000/9000/10000mm	
Max. swing diameter over saddle	510mm	350mm
Width of bed	600mm	
Max. workpiece weight between centers	3T	
Spindle bore diameter	Φ100mm	
Taper of spindle bore	Metric 120#	
Range of spindle speed	6-800r/min (Two grade, stepless)	
Spindle-head type	C 11	
Longitudinal feeds range	0.1-12.2mm/r	
Transversal feeds range	0.05-6.6mm/r	
Carriage rapid-moving speed	3.8m/min	
Metric threads range	1-120mm (47 kinds)	
Inch threads range	28-1/2 t/inch 25 kinds	
Module threads range	0.5-60mm 45 kinds	
Pitch threads range	28-1 t/inch 29 kinds	
Tool post transverse travel	449mm	
Top tool post travel	200mm	
Diameter of tailstock spindle	Φ120mm	
Travel of tailstock spindle	200mm	
Taper of tailstock spindle	MT6	
Main motor power	15kW	
Rapid motor power	1.1kW	
Coolant motor power	0.15kW	
General power	16.25kW	

* Please specify length of workpiece when order.

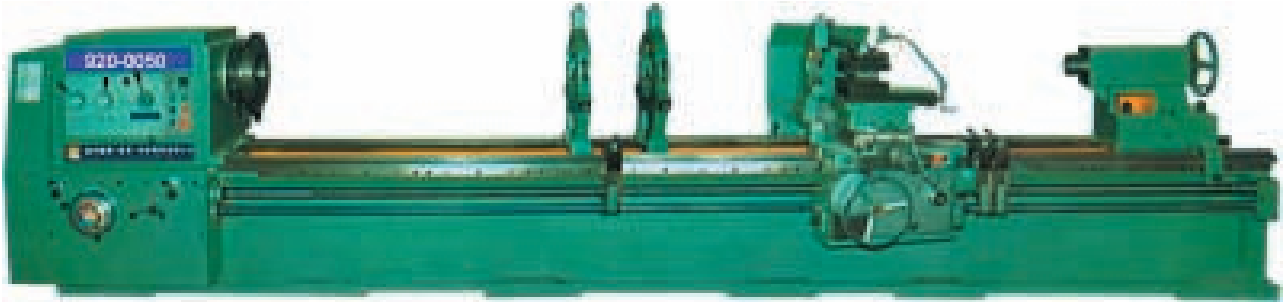
Standard accessories:

1. four-jaw chuck Φ 1250mm
2. Steady rest (For 2m and over)
3. Follow rest (For 2m and over)
4. MT6 Center
5. Center bush
6. Tools
7. Foundation screws

Optional accessories:

1. Metric chasing dial device
2. Inch chasing dial device
3. Inch leadscrew
4. T-type toolpost

Gap Bed Lathe



- * For turning of steel, cast iron and non-ferrous metal parts up to 10 meters.
- * Large power and good rigidity suitable for power and high-speed cutting.
- * Functions as end-facing; cylindrical and internal turning; Inch, module and pitch threading; Drilling and boring.
- * Wide variable spindle speed range for rough and finish turning.
- * High strength resin cast iron bed. Ultra-high frequency hardened and precision guideways.
- * Over-load protection mechanism in the apron.
- * Rapid longitudinal and cross travel.

Order No.	920-0061 to 920-0071	920-0083 to 920-0093	920-0094 to 920-0104
Max. swing diameter over bed	800mm	630mm	1000mm
Max. length of workpiece machined	1000/1500/2000/3000/4000/5000/6000/7000/8000/9000/10000mm		
Max. swing diameter over saddle	510mm	350mm	710mm
Swing diameter × useful width over gap	1000 × 350mm	800 × 350mm	1200 × 350mm
Width of bed	600mm		
Max. workpiece weight between centers	3T		
Spindle bore diameter	Φ100mm		
Taper of spindle bore	Metric 120#		
Range of spindle speed	6-800r/min (Two grade, stepless)		
Spindle-head type	C 11		
Longitudinal feeds range	0.1-12.2mm/r		
Transversal feeds range	0.05-6.6mm/r		
Carriage rapid-moving speed	3.8m/min		
Metric threads range	1-120mm (47 kinds)		
Inch threads range	28-1/2 t/inch 25 kinds		
Module threads range	0.5-60mm 45 kinds		
Pitch threads range	28-1 t/inch 29 kinds		
Tool post transverse travel	449mm		
Top tool post travel	200mm		
Diameter of tailstock spindle	Φ120mm		
Travel of tailstock spindle	200mm		
Taper of tailstock spindle	MT6		
Main motor power	15kW		
Rapid motor power	1.1kW		
Coolant motor power	0.15kW		
General power	16.25kW		

* Please specify length of workpiece when order.

Standard accessories:

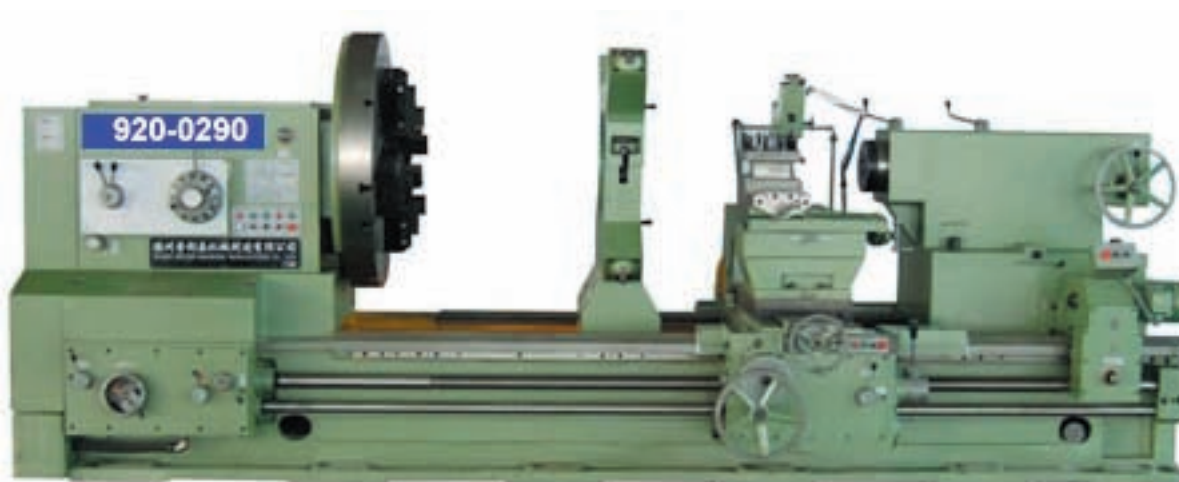
1. four-jaw chuck Φ 1250mm
2. Steady rest (For 2m and over)
3. Follow rest (For 2m and over)
4. MT6 Center
5. Center bush
6. Tools
7. Foundation screws

Optional accessories:

1. Metric chasing dial device
2. Inch chasing dial device
3. Inch leadscrew
4. T-type toolpost

Heavy Duty Gap Bed Lathe

The lathes turn end-faces, cylindrical surfaces and internal holes of various parts as well as metric, inch, module and pitch threads. The top slides can be operated individually by power for cutting short taper surface also, can be turned automatically through the compound movement combining longitudinal feed with the top slide feed. The lathe can be used for drilling, boring and trepanning.



Order No.	920-0290 to 920-0299	920-0310 to 920-0319	920-0330 to 920-0339	920-0350 to 920-0359	920-0370 to 920-0379
Max.swing diameter over bed	1250	1400	1600	1800	1900
Max.swing diameter over	880	1030	1230	1400	1500
Width of bed	1100mm				
Max.length of workpiece	1000 mm/2000mm/3000mm/4000mm/5000mm/6000mm/7000mm/8000mm				
Spindle nose	A15				
Spindle bore diameter	130mm				
Taper of spindle bore	Metric No.140#				
Range of spindle speed	3.15-315r/min 21kinds				
Longitudinal feeds range	0.1-12mm/r 56 kinds				
Transversal feeds range	0.05-6mm/r 56kinds				
Metric thread range	1-120mm 44kinds				
Inch thread range	3/8-28TPI 31kinds				
Module thread range	0.5-60mm 45kinds				
Pitch thread range	1-56TPI 25kinds				
Tailstock sleeve taper	Metric 80#				
Tailstock sleeve diameter	260mm				
Tailstock sleeve travel	200mm				
Main motor power	30kW				
Rapid motor power	1.5kW				
Coolant pump power	0.125kW				

* Please specify length of workpiece when order.

Standard accessories:

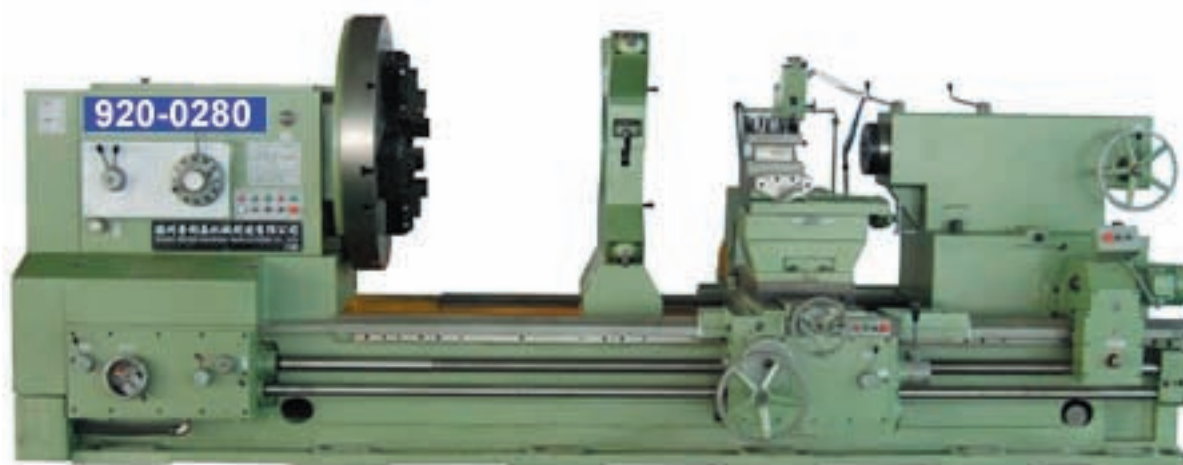
1. four-jaw chuck Φ 1250mm
2. Steady rest (For 2m and over)
3. Follow rest (For 2m and over)
4. MT6 Center
5. Center bush
6. Tools
7. Foundation screws

Optional accessories:

1. Metric chasing dial device
2. Inch chasing dial device
3. Inch leadscrew
4. T-type toolpost

Heavy Duty Lathe

The lathes turn end-faces, cylindrical surfaces and internal holes of various parts as well as metric, inch, module and pitch threads. The top slides can be operated individually by power for cutting short taper surface also, can be turned automatically through the compound movement combining longitudinal feed with the top slide feed. The lathe can be used for drilling, boring and trepanning.



Order No.	920-0280 to 920-0289	920-0300 to 920-0309	920-0320 to 920-0329	920-0340 to 920-0349	920-0360 to 920-0369
Max.swing diameter over bed	1250	1400	1600	1800	1900
Max.swing diameter over	880	1030	1230	1400	1500
Width of bed	1100mm				
Max.length of workpiece	1000 mm/2000mm/3000mm/4000mm/5000mm/6000mm/7000mm/8000mm				
Spindle nose	A15				
Spindle bore diameter	130mm				
Taper of spindle bore	Metric No.140#				
Range of spindle speed	3.15-315r/min 21kinds				
Longitudinal feeds range	0.1-12mm/r 56 kinds				
Transversal feeds range	0.05-6mm/r 56kinds				
Metric thread range	1-120mm 44kinds				
Inch thread range	3/8-28TPI 31kinds				
Module thread range	0.5-60mm 45kinds				
Pitch thread range	1-56TPI 25kinds				
Tailstock sleeve taper	Metric 80#				
Tailstock sleeve diameter	260mm				
Tailstock sleeve travel	200mm				
Main motor power	30kW				
Rapid motor power	1.5kW				
Coolant pump power	0.125kW				

* Please specify length of workpiece when order.

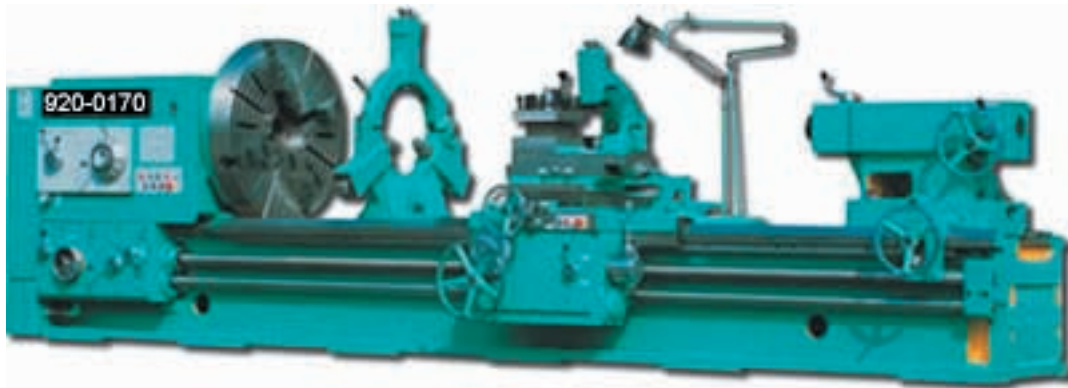
Standard accessories:

1. four-jaw chuck Φ 1250mm
2. Steady rest (For 2m and over)
3. Follow rest (For 2m and over)
4. MT6 Center
5. Center bush
6. Tools
7. Foundation screws

Optional accessories:

1. Metric chasing dial device
2. Inch chasing dial device
3. Inch leadscrew
4. T-type toolpost

Engine Lathe



The lathes turn end-faces, cylindrical surfaces and internal holes of various parts as well as metric, inch, module and pitch threads. The top slides can be operated individually by power for cutting short taper surface also, can be turned automatically through the compound movement combining longitudinal feed with the top slide feed. The lathe can be used for drilling, boring and trepanning.

Order No.	920-0120 to 920-0131	920-0144 to 920-0155	920-0168 to 920-0179	920-0192 to 920-0203
Swing over bed	1000	1250	1400	1600
Swing over slide	630	880	1030	1030
Max. length of workpiece	1000mm/2000mm/3000mm/4000mm/5000mm/ 6000mm/7000mm/8000mm/9000mm/10000mm			
Spindle nose	A15			
Spindle bore diameter	130mm			
Taper of spindle bore	Metric No.140#			
Range of spindle speed	3.15-315r/min 21kinds			
Longitudinal feeds range	0.1-12mm/r 56 kinds			
Transversal feeds range	0.05-6mm/r 56kinds			
Rapid speed,Z axis	3740mm/min			
Rapid speed,X axis	1870mm/min			
Rapid speed,uppe rtool- post	935mm/min			
Metrec thread range	0-120mm 44kinds			
Inch thread range	3/8-28 teeth/iuch. 31kinds			
Modular thread range	0.5-60mm 45kinds			
Pitch thread range	1-56teech/iuch 25kinds			
Tailstock sleeve taper	Morse NO.6			
Tail stock sleeve diameter	140mm			
Tails tock sleeve travel	300mm			
Main motor power	22kW			
Rapid motor power	1.5kW			
Coolantpumppower	0.125kW			

* Please specify length of workpiece when order.

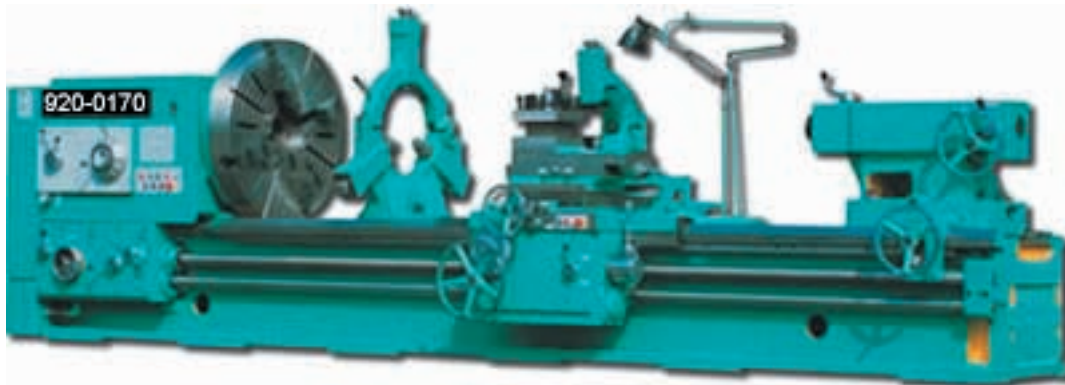
Standard accessories:

1. four-jaw chuck Φ 1250mm
2. Steady rest (For 2m and over)
3. Follow rest (For 2m and over)
4. MT6 Center
5. Center bush
6. Tools
7. Foundation screws

Optional accessories:

1. Metric chasing dial device
2. Inch chasing dial device
3. Inch leadscrew
4. T-type toolpost

Engine Gap Bed Lathe



The lathes turn end-faces, cylindrical surfaces and internal holes of various parts as well as metric, inch, module and pitch threads. The top slides can be operated individually by power for cutting short taper surface also, can be turned automatically through the compound movement combining longitudinal feed with the top slide feed. The lathe can be used for drilling, boring and trepanning.

Order No.	920-0132 to 920-0143	920-0156 to 920-0167	920-0180 to 920-0191	920-0204 to 920-0215
Swing over bed	1000	1250	1400	1600
Swing over slide	630	880	1030	1030
Max. swing over gap	1450	1700	1850	2050
Width of bed	755mm			
Max. length of workpiece	1000mm/2000mm/3000mm/4000mm/5000mm/6000mm/ 7000mm/8000mm/9000mm/10000mm/11000mm/12000mm			
Spindle nose	A15			
Spindle bore diameter	130mm			
Taper of spindle bore	Metric No.140#			
Range of spindle speed	3.15-315r/min 21kinds			
Longitudinal feeds range	0.1-12mm/r 56 kinds			
Transversal feeds range	0.05-6mm/r 56kinds			
Rapid speed,Z axis	3740mm/min			
Rapid speed,X axis	1870mm/min			
Rapid speed,uppe rtool- post	935mm/min			
Metrec thread range	0-120mm 44kinds			
Inch thread range	3/8-28 teeth/iuch. 31kinds			
Modular thread range	0.5-60mm 45kinds			
Pitch thread range	1-56teech/iuch 25kinds			
Tailstock sleeve taper	Morse NO.6			
Tail stock sleeve diameter	140mm			
Tails tock sleeve travel	300mm			
Main motor power	22kW			
Rapid motor power	1.5kW			
Coolantpumppower	0.125kW			

* Please specify length of workpiece when order.

Standard accessories:

1. four-jaw chuck Φ 1250mm
2. Steady rest (For 2m and over)
3. Follow rest (For 2m and over)
4. MT6 Center
5. Center bush
6. Tools
7. Foundation screws

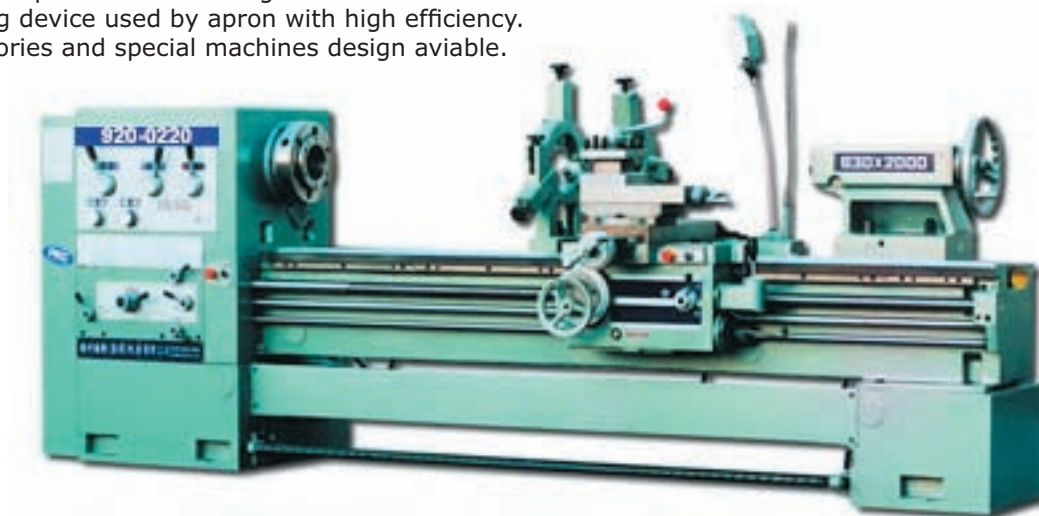
Optional accessories:

1. Metric chasing dial device
2. Inch chasing dial device
3. Inch leadscrew
4. T-type toolpost

Engine Lathe

Main Features:

- * Large spindle bore(Φ 120mm).
- * High accuracy and low noise for its hardened and ground gears in the headstock.
- * New slide bearing patented by the State has good antivibration and constant spindle accuracy.
- * Optional double aprons for extra long lathes.
- * Rapid removing device used by apron with high efficiency.
- * Special accessories and special machines design aviable.



Order No.	920-0220 to 920-0228	920-0229 to 920-0237	920-0238 to 920-0246	920-0247 to 920-0255	920-0256 to 920-0264	920-0265 to 920-0273
Max.swing Dia.over bed (mm)	630	630	710	710	800	800
Max.swing Dia.over saddle (mm)	390	390	460	460	550	550
Max.swing over gap (mm)		830		910		1000
Max.length of workpiece	1m, 1.5m, 2m, 3m, 4m, 5m, 6m, 8m					
Spindle bore diameter	120mm					
Spindle taper	Camlock D11					
Range of spindle speed	12-1000 rpm (18 speeds)					
Cross feed	0.082-1.59mm/r (35 feeds)					
Longitudinal feed	0.027-0.522mm/r (35 feeds)					
Range of spindle speed	12-1000 rpm (18 speeds)					
Range of metric thread (mm)	1-192 (57 threads)					
Range of inch thread (tpi)	2-24 (30 threads)					
Range of module thread (mm)	0.25-48 (40 threads)					
Range of pitch thread (DP)	1-96 (37 threads)					
Tailstock quill taper	MT5					
Quill Travel	250mm					
Quill bore diameter	100mm					
Total power of moter	7.875 KW					
Rapid travel Motor	0.25KW					
Coolant pump motor	0.125KW					

* Please specify length of workpiece when order.

Standard accessories:

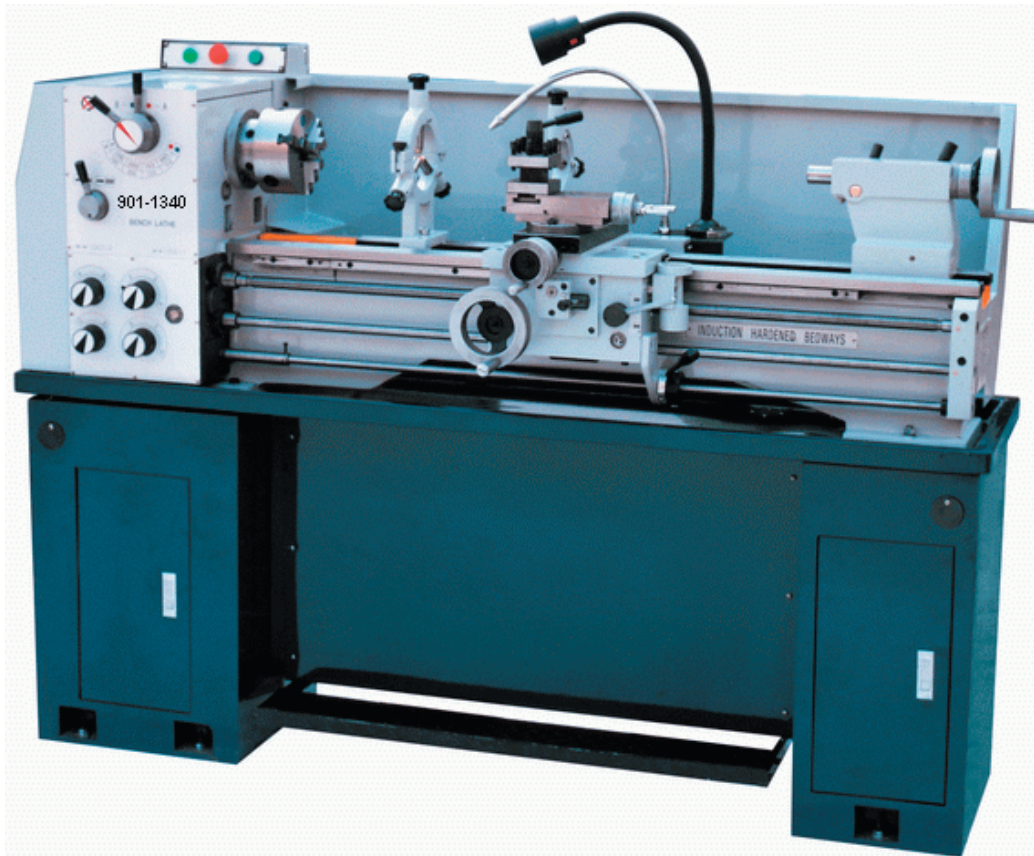
- 1.3-jaw self-centering chuck
2. center bush
3. center MT No.5
4. oil gun
5. tools
6. foundation screw and wedge for nuts
7. operation and maintenance book
8. steady rest
9. follow rest
10. face plate

11. drive plate
12. chasing dial device
13. light
14. coolant pump

Optional accessories:

1. taper turning attachment
2. large diameter steady rest Φ 150-390mm
3. digital readout
4. revolving center

Bench Lathe

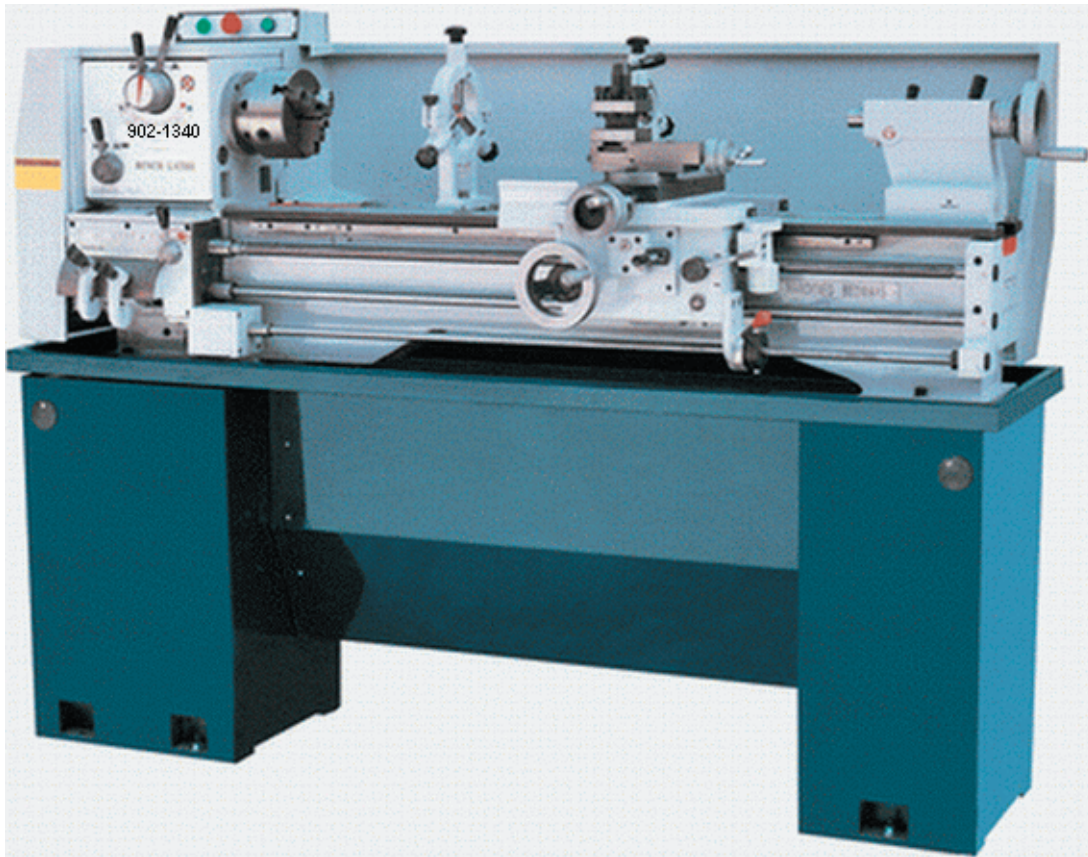


Order NO.	901-1340
Swing over bed	13" (330mm)
Distance between centers	40" (1000mm)
Swing over gap	18-3/4" (476mm)
Spindle Bore Diameter	1-1/2" (38mm)
Camlock Spindle Nose	D 1-4" ASA Standard (ISO)
Taper of spindle nose	MT5
Step of speeds	8 steps
Range of speed	70-2000 r/min
Inch thread(34 kinds)	4~56T.P.I.
Metric thread(26 kinds)	0.4~7.00mm
Longitudinal inch feeds (32 kinds)	0.002-0.0548"/rev
Longitudinal metric feeds (32 kinds)	0.052-1.392mm/rev
Cross inch feeds (32 kinds)	0.0007-0.0187"/rev
Cross metric feeds (32 kinds)	0.014-0.380mm/rev
Diameter of Tailstock Sleeve	1-1/4" (32mm)
Travel of Tailstock Sleeve	3-3/4" (95mm)
Taper of Tailstock	MT3
Motor Power	1.5KW or 2 HP
Voltage/Frequency	As per Customer's requirement
Package Size	1920 x 760 x 760mm
Net Weight/Gross Weight	500kg/560kg
20FT Container Load	18pcs

Standard Accessories

- * 8" 3-Jaw chuck
- * 8" 4-Jaw chuck
- * 10" face plate
- * Steady rest
- * Follow rest
- * Coolant system
- * Full length splash guard
- * Built-in stand
- * Dual inch/metric dials
- * Turret micrometer stop
- * Driving plate
- * Extra 8" D1-4 backplate
- * Centers, center sleeve, service tools, manual and toolbox

Bench Lathe



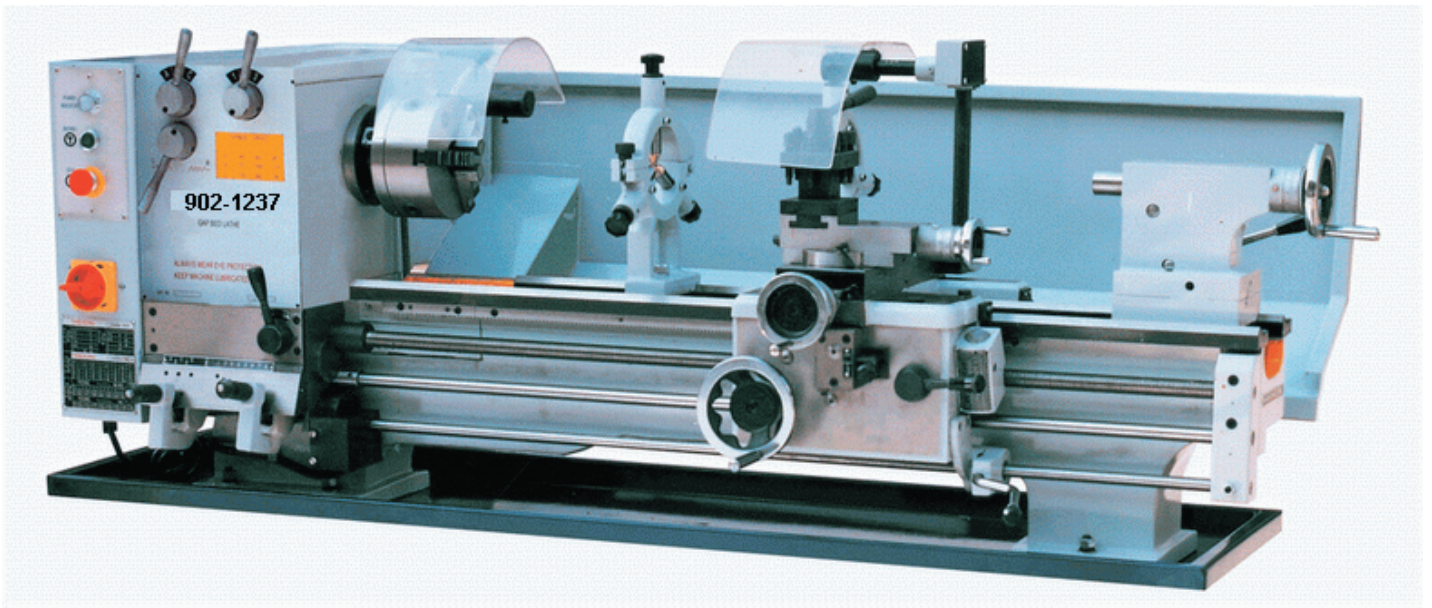
MODEL	902-1340
Swing over bed	13" (330mm)
Distance between centers	40" (1000mm)
Swing over gap	18-3/4" (476mm)
Spindle Bore Diameter	1-1/2" (38mm)
Spindle size and type	D 1-4" Camlock
Spindle nose table	MT5
Number of spindle speed	8
Range of speed	70-2000 r/min
Range of inch thread (40 threads)	4~112T.P.I.
Range of metric thread (23 threads)	0.25~11mm
Range of diametral thread (25 threads)	8~64D.P.
Range of moulder threads (15 threads)	0.25~3M.P.
Range of longitudinal inch feeds (40 feeds)	0.0036~0.1005"/rev
Range of longitudinal metric feeds (40 feeds)	0.091~2.553mm/rev
Range of cross inch feeds (40 feeds)	0.0012~0.0345"/rev
Range of cross metric feeds (40 feeds)	0.025~0.690mm/rev
Diameter of Tailstock barrel	1-1/4" (32mm)
Tailstock barrel travel	3-3/4" (95mm)
Tailstock barrel taper	MT3
Motor	1.5KW or 2 HP
Voltage/Frequency	As per Customer's requirement
Package Size	1920 x 760 x 760mm
Net Weight/Gross Weight	495kg/555kg
20FT Container Load	18pcs

Standard Accessories

- * 8" 3-Jaw chuck
- * 8" 4-Jaw chuck
- * 10" face plate
- * Steady rest
- * Follow rest
- * Coolant system
- * Full length splash guard
- * Built-in stand
- * Dual inch/metric dials
- * Turret micrometer stop
- * Driving plate
- * Extra 8" D1-4 backplate
- * Centers, center sleeve, service tools, manual and toolbox

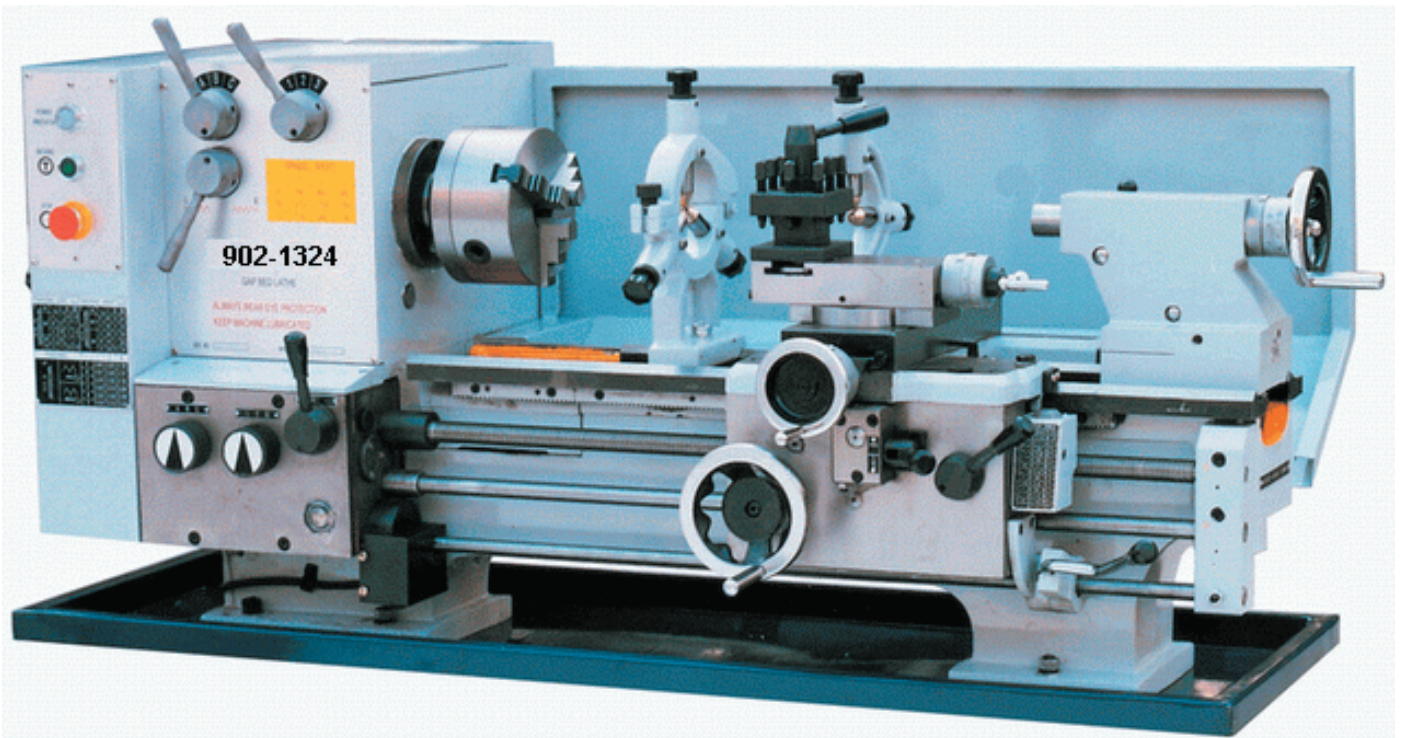
*Optional stand

Bench Lathe



Order No.	902-1237	902-12224
Swing over bed	305mm	305mm
Distance between centers	940mm	530mm
Swing over gap	440mm	440mm
Swing over carriage	173mm	173mm
SPINDLE		
Spindle Bore Diameter	38mm	38mm
Taper of spindle	M.T.5	M.T.5
Step of speed	12 kinds	9 kinds
Range of speed	64-1500r.p.m.	64-1500r.p.m.
FEED SYSTEM (COLSED BOX)		
Thread of lead screw	8T.P.I.	8T.P.I.
Metric thread can open	0.5-3.5mm	0.5-3.5mm
Inch thread can open	7-1/2-48T.P.I.(14 kinds)	7-1/2-48T.P.I.(14 kinds)
Range of feed amount	0.051-0.152mm/r (9kinds)	0.051~0.152mm/r(9 kinds)
OR FEED SYSTEM (NORTON LEVER BOX)		
Thread of lead screw	8T.P.I.	8T.P.I.
Metric thread can open	0.25~7.5mm	0.25~7.5mm
Inch thread can open	4-112T.P.I. (40kinds)	4-112T.P.I. (40kinds)
Range of feed amount	0.12-0.42mm/r (16kinds)	0.12-0.42mm/r (16kinds)
Saddle travel	850mm	510mm
Cross travel	150mm (5-29/32")	150mm (5-29/32")
Compound travel	90mm (3-6/11")	90mm (3-6/11")
Diameter of Tailstock Sleeve	1-1/4" (32mm)	1-1/4" (32mm)
Travel of Tailstock Sleeve	100mm	100mm
Taper of Tailstock	M.T.3	MT3
MOTOR		
	1.1KW (1.5HP)	1.1KW (1.5HP)
Voltage/Frequency	As per customer's requirement	
Packing size Machine	1780 x 740 x 750mm	1420 x 740 x 750mm
Netweight/Gross Weight	395kg/445kg	380kg/430kg
20FT container load	24pcs	27pcs

Bench Lathe



Order NO.	902-1324
Swing over bed	13" (330mm)
Distance between centers	530mm
Swing over gap	18-57/64" (480mm)
Swing over carriage	7-43/64" (195mm)
Spindle Bore Diameter	1-1/2" (38mm)
Taper of spindle nose	M.T.5
Step of speed	9 kinds
Range of speed	64~1500RPM
Range of speed (50HZ)	(60Hz)
Thread of lead screw	8TPI
Metric thread	0.25-7.5mm
Inch thread	4-112T.P.I.
Range of feeds (16 kinds)	0.12-0.42mm/r
Saddle travel	20-25/64" (510mm)
Cross travel	150mm (5-29/32")
Compound travel	90mm (3-6/11")
Diameter of Tailstock Sleeve	1-1/4" (32mm)
Travel of Tailstock Sleeve	100mm
Taper of Tailstock	M.T.3
MOTOR POWER	1.1KW (1.5HP)
Voltage/Frequency	As per customer's requirement
Package Size	1420 x 740 x 750mm
Net Weight/Gross Weight	382kg/432kg
20FT Container Load	27pcs/20'container

*Optional stand.

Standard Accessories

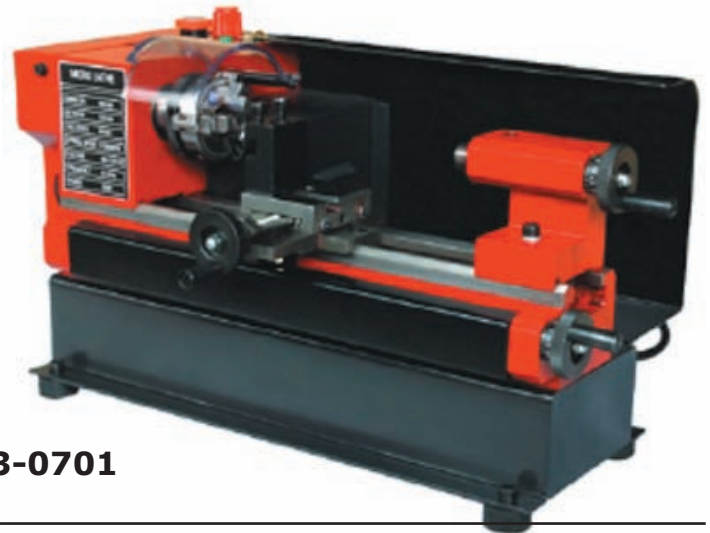
- * 8" 3-Jaw chuck
- * 8" 4-Jaw chuck
- * 10" face plate
- * Steady rest
- * Follow rest
- * Coolant system
- * Full length splash guard
- * Built-in stand
- * Dual inch/metric dials
- * Turret micrometer stop
- * Driving plate
- * Extra 8" D1-4 backplate
- * Centers, center sleeve, service tools, manual and toolbox

BABY LATHE**Specifications**

Swing over bed: 110 mm
 Distance between centers: 125 mm
 Hole through spindle: 10 mm
 Tailstock screw: M14x1mm
 Spindle speed: 100-3800 rpm+10%
 Cross slide travel: 50mm
 Motor output power: 150W
 Overall dimension(LxWxH):440x270x210mm
 Weight(net/gross): 13/22kg
 Packing size(LxWxH): 600x400x310mm

Standard Attachment

Dia.50mm Three jaw chuc
 Wrench set
 Oil can

Order No.903-0701**Features**

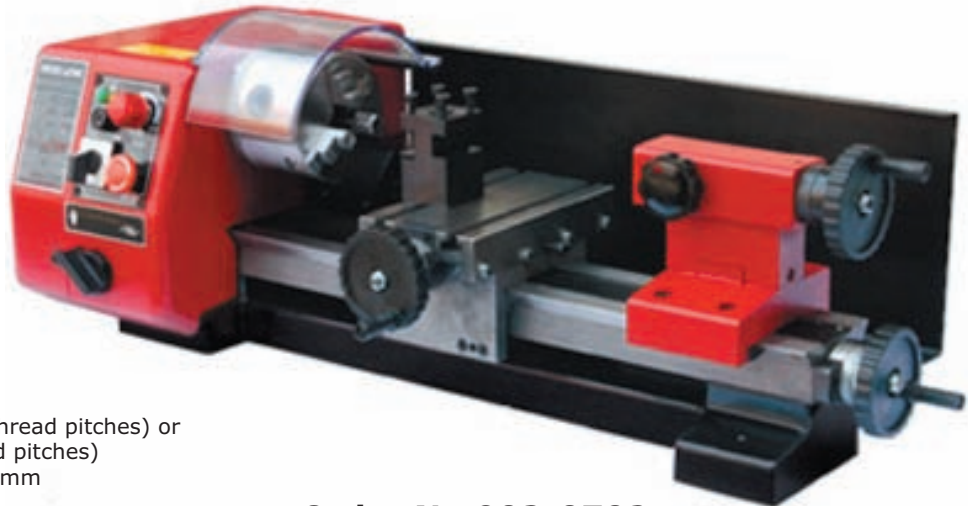
Variable speed
 Over-load protection
 Inside leadscrew

Standard Attachment

Dia.80mm Three jaw chuck
 Dead center MT1
 Wrench set Oil can

Specifications

Swing over bed: 140 mm
 Distance between centers: 250 mm
 Hole through spindle: 10 mm
 Spindle taper: MT2
 Tailstock taper: MT1
 Spindle speed: 100-2000 rpm±10%
 Motor output power: 150W
 Range of threads: Metric 0.5-1.25mm(5 thread pitches) or
 Inch 16-24TPI(5 thread pitches)
 Overall dimension(LxWxH): 620x300x220mm
 Weight(net/gross): 23kg/32kg
 Packing size(LxWxH):680x340x305mm

MICRO LATHE**Order No.903-0702****MINI LATHE****Standard Attachment**

Dia.80mm Three jaw chuck
 MT2 center
 Change gear set
 Wrench set
 Oil can

Specifications

Swing over bed: 180 mm
 Distance between centers: 350 mm
 Hole through spindle: 20 mm
 Spindle taper: MT3
 Tailstock taper: MT2
 Spindle speed: Low range100-1200 rpm±10%
 High range 100-3000 rpm±10%
 Motor output power: 350W
 Range of threads: Metric 0.4-2.0mm(10 thread pitches) or
 Inch 12-52TPI(8 thread pitches)
 Weight(net/gross): 44kg/56kg
 Packing size(LxWxH): 870x340x370mm

**Order No.903-0717**

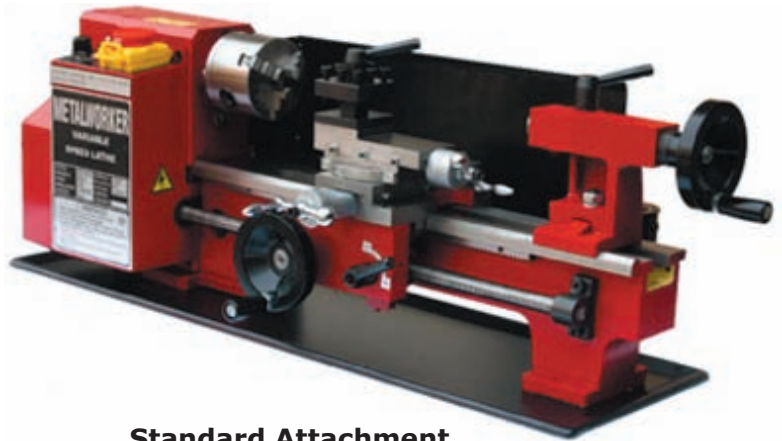
MINI LATHE

Features

- Safety switch
- Variable speed
- Four position turret post
- Complete set of changing gear
- High accurate

Specifications

Order No.	903-0715	903-0716
Swing over bed	180 mm	180 mm
Distance between centers	200 mm	300 mm
Hole through spindle	20 mm	20 mm
Spindle taper	MT3	MT3
Tailstock taper	MT2	MT2
Spindle speed	low range	100-1100 rpm±10%
	high range	100-2500 rpm±10%
output power	250 W	
Range of threads(12 metric or 8 inch thread)	Metric 0.4-2.0mm	
	or Inch 12-52 TPI	
Net/Gross weight	33/36 kg	37/40 kg



Standard Attachment

- Dia.80mm Three jaw chuck
- MT2 center
- Change gear set
- Wrench set
- Oil can

BENCH LATHE

Features

- Brushless motor
- Touching switch panel
- Digital spindle speed read out
- Cross and longitudinal auto feed
- Cut metric and Inch screw
- Quick lock tailstock

Specifications

- Swing over bed: 210 mm
- Distance between centers: 450 mm
- Hole through spindle: 20 mm
- Spindle taper: MT3
- Tailstock taper: MT2
- Spindle speed: 150-2000 rpm+10%
- Compound travel: 70mm
- Cross slide travel: 100mm
- Motor output power: 1000W
- Thread range: Metric 0.25-3.0mm and Inch 5-24 TPI
- Overall dimension(LxWxH): 1000x550x400mm
- Weight(net/gross): 94kg/125kg
- Packing size(LxWxH): 1080x660x610mm



Standard Attachment

- Dia.100mm Three jaw chuck
- Dead center
- Change gear set
- Wrench set
- Oil can

Order No.903-0737

MICRO MULTI-PURPOSE MACHINE

Specifications

Cutting

- Swing over bed: 140 mm
- Distance between centers: 250 mm
- Spindle taper: MT2
- Tailstock taper: MT1
- Spindle speed: 100-2000 rpm±10%
- Range of threads: Metric 0.5-1.25mm(5 thread pitches) or Imperial 16-24TPI(5 thread pitches)

Drilling and milling

- Max.drilling/milling capacity: 10 mm
- Travel of drilling/milling spindle: 30 mm
- Drilling/milling spindle speed: 100-1500rpm±10%
- T-slot: 8 mm
- Output power: 150 w
- Net/Gross weight: 45/57 kg
- Packing size(LxWxH):690x430x 15mm

Standard Attachment

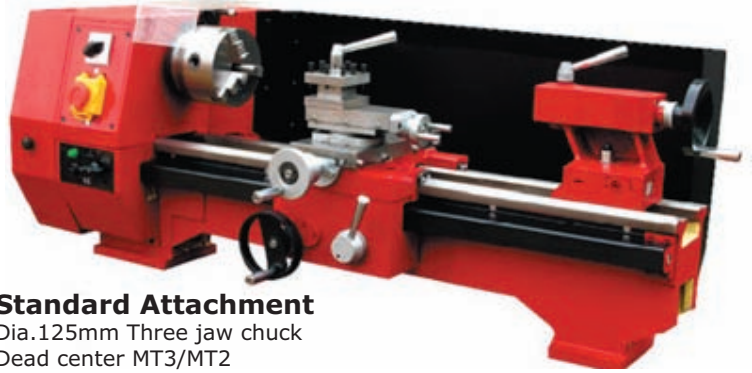
- Dia.80mm Three jaw chuck
- Dia.10mm Drill chuck
- Wrench set
- Oil can

Order No.904-1301



BENCH LATHE

Order No.	903-0718	903-0719
Swing over bed	250 mm	250 mm
Distance between centers	400 mm	500 mm
Hole through spindle	20 mm	20 mm
Spindle taper	MT3	MT3
Tailstock taper	MT2	MT2
Spindle speed(6 stpes)	125-2000 rpm	
Motor output power	550W	
Range of threads (12 metric or 8 inch thread)	Metric 0.4-3.0mm or inch 10-44TPI	
Net/Gross weight	125kg/160kg	145kg/180kg
Packing size	1100*680*610mm	



Standard Attachment
 Dia.125mm Three jaw chuck
 Dead center MT3/MT2
 Change gear set
 Wrench set
 Oil can

MULTI-PURPOSE MACHINE

Order No.	904-1302	904-1306	
Drilling capacity	13mm	13mm	
End milling capacity	16mm	16mm	
Face milling capacity	30mm	30mm	
Drilling & milling spindle taper	MT3 or R8	MT3 or R8	
Spindle speed	low range	100-1100rpm	100-1100rpm
	high range	100-2500rpm	100-2500rpm
Output power	350W	350W	
Spindle rotary angle	-25°-+45°	-25°-+45°	
Weight(net/gross)	32/47kg	32/47kg	
Packing size	810*420*500mm	810*420*500mm	
Overall dimension	1050*680*860mm	1200*680*860mm	

Standard Attachment

Dia.13mm drill chuck with taper shank
 Dia.125mm three jaw chuck
 Dead centers MT3 and MT2
 Mill table Gear set



Features

Milling/drilling & grinding function
 Brushless motor
 Touch switch
 Spindle speed read out

Specifications

Milling and drilling

Max.Drilling capacity: 16mm
 Spindle speed: Milling/drilling 200-2500 rpm+10%
 Spindle taper: MT3
 Table longitudinal: 200mm
 Table cross travel: 120mm
 Spindle box travel: 200mm
 End mill capacity: 16mm
 Face mill capacity: 50mm
 Max.distance spindle to table: 200mm
 Table effective size: 450x120mm
 T-slot size: 8mm
 Motor output power: 1000W
 Overall dimension(LxWxH): 570x520x1600mm
 Weight(Net/Gross): 185/230kg
 Packing size(LxWxH): 800x760x1780mm

Grinding

Spindle speed: Grinding 2500 rpm+10%
 Grinding wheel size: 100x16x20mm

UNIVERSAL MILLING/DRILLING & GRINDING MACHINE

Standard Attachment

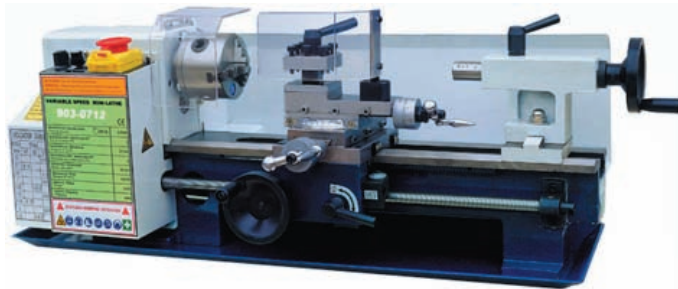
Grinding attachment
 Cutting attachment
 Drill chuck Grinding wheel
 Tool set Oil can



Order No.904-1307

VARIABLE SPEED MINI LATHE

- * The mini lathe is used for turning, facing, making models, bushings, spindles, prototypes, etc.
- * Variable speed DC motor from 50 to 2500rpm.



Order No.	903-0708	903-0712	903-0714
Distance between center	200mm	300mm	350mm
Swing over bed	180mm		
Swing over cross slide	110mm		
Spingle taper	MT3		
Tailstock taper	MT2		
Chuck diameter	80mm		
Spindle bore	20mm		
Cross slide travel	65mm		
Tool slide travel	35mm		
Range of metric threads	0.5-2.5mm		
Range of imperial threads	12-52TPI		
Spindle accuracy	0.01mm		
Spindle speed	50-2500RPM		
Power of motor	400W/550W		
Vol./Freq.	230V/50Hz or 120V/60Hz		
Net weight	35kg	38kg	40kg
Gross weight	38kg	42kg	45KG
Packing size (cm)	66X31X32	76X31X32	81X31X32

VARIABLE SPEED MINI LATHE

- * The mini lathe is used for turning, facing, making models, bushings, spindles, prototypes, etc.
- * Variable speed DC motor from 50 to 2500rpm.
- * Spindle speed digital readout display.
- * Spindle speed adjusted by MCU.Rotary direction"F"or"R"changed by key.



Order No.	903-1708	903-1712	903-1714
Distance between center	200mm	300mm	350mm
Swing over bed	180mm		
Swing over cross slide	110mm		
Spingle taper	MT3		
Tailstock taper	MT2		
Chuck diameter	80mm		
Spindle bore	20mm		
Cross slide travel	65mm		
Tool slide travel	35mm		
Range of metric threads	0.5-2.5mm		
Range of imperial threads	12-52TPI		
Spindle accuracy	0.01mm		
Spindle speed	50-2500RPM		
Power of motor	400W/550W		
Vol./Freq.	230V/50Hz or 120V/60Hz		
Net weight	35kg	38kg	40kg
Gross weight	38kg	42kg	45KG
Packing size (cm)	66X31X32	76X31X32	81X31X32

VARIABLE SPEED MINI LATHE

Features:

- * Designed to perform various types of processing jobs. Counterface turning, drilling, threading, and cutting jobs on materials made up of round bar and bar materials can be performed with this machine. This machine can be used in areas such as miniprecision parts processing, sample processing and modeling works.
- * DC motor driven.
- * Variable spindle speed readout from 50 to 2500RPM.
- * Adjustable feed for different workpieces.



Order No.	903-2708	903-2712	903-2714
Distance between center	200mm	300mm	350mm
Swing over bed	180mm		
Swing over cross slide	110mm		
Spindle taper	MT3		
Tailstock taper	MT2		
Chuck diameter	80mm		
Spindle bore	20mm		
Cross slide travel	65mm		
Tool slide travel	35mm		
Range of metric threads	0.5-2.5mm		
Range of imperial threads	12-52TPI		
Spindle accuracy	0.01mm		
Spindle speed	50-2500RPM		
Power of motor	400W/550W		
Vol./Freq.	230V/50Hz or 120V/60Hz		
Net weight	35kg	38kg	40kg
Gross weight	38kg	42kg	45KG
Packing size (cm)	66X31X32	76X31X32	81X31X32

BENCH LATHE

Features:

- * This precision mini lathe is designed to perform various tapes of processing jobs. Counterface turning, drilling, boring, threading, and cutting jobs on materials made up of round bar and bar materials can be performed with this machine. This machine can be used in areas such as mini precision parts processing, sample processing and modeling works.
- * This machine AC motor driven.
- * The spindle speed: 100, 250, 350, 500, 900, 1800RPM(50HZ) 120, 300, 420, 600, 1080 2150RPM(60HZ)
- * The feed speed can be adjusted according to the requirements of different workpieces.



Order No.	903-3920	903-3930
Distance between centers	500mm	750mm
Swing over bed	230mm	
Swing over cross slide	135mm	
Spindle taper	MT3	
Tailstock Barrel Taper	MT2	
Chuck diameter	100mm	
Spindle bore	20mm	
Cross slide travel	125mm	
Compound Travel	48mm	
Range of metric threads	0.5-3mm	
Range of imperial threads	8-56TPI	
Spindle accuracy	0.01mm	
Spindle speed	100-1800RPM(50Hz)	
Power of motor	750W	
Vol./Freq.	230V/50Hz or 120V/60Hz	
Net weight	105kg	135kg
Gross weight	120kg	150kg
Packing size (CM)	106X58X57	130x58x57

GEAR-DRIVEN LATHE

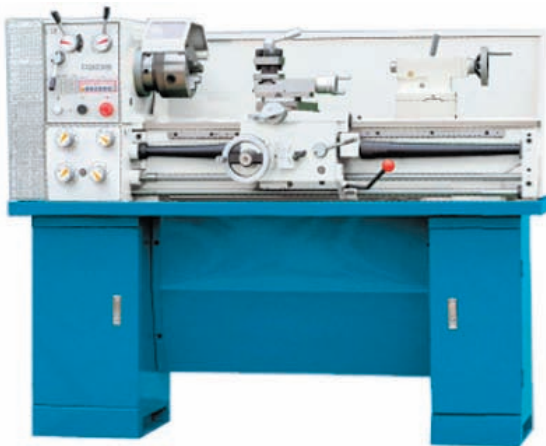
Specifications

Max.swing over bed: 320mm
 Max.swing over gap: 470mm
 Max.turning dia.over cross slide: 198mm
 Max.length to be turned: 1000mm
 Speed steps: 8
 Speed range: 70-2000rpm
 Spindle bore: dia. 38mm
 Taper of spindle bore: MT5
 Longitudinal: 0.078-1.044 or 0.052-1.392
 Transverse: 0.017-0.226 or 0.014-0.376
 Metric threads: 0.45-10 or 0.4-7
 Whitworth threads: 21/4-40 or 4-56
 Cross slide travel: 160mm
 Top slide travel: 76mm
 Swiveling angle of turret: 45 degree
 Distance from the tool bearing surface to centerline: 18mm
 Movement of tailstock quill: 100mm
 Taper of tailstock quill bore: MT3
 Power of main drive motor: 1.1 or 1.5KW
 Packing size (1package)(LxWxH) : 198x75x145cm
 Gross weight(kg): 670



Order No.903-0734

GEAR-DRIVEN LATHE



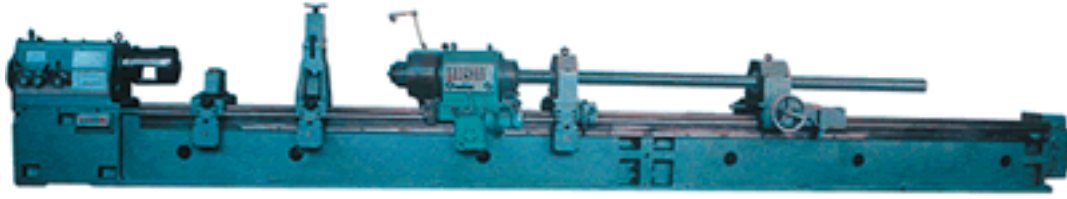
GEAR-DRIVEN LATHE



Order No.	903-0730	903-0731
Max.swing over bed	300mm	300mm
Max.swing over gap	450mm	450mm
Max.turning over cross slide	178mm	178mm
Max.length to be turned	710	910mm
Speed steps	9	18
Speed range	65~1810rpm	65~1810rpm
Spindle bore dia	38mm	38mm
Taper of spindle bore	MT5	MT5
Longitudinal	0.079~1.291	0.079~1.291
Transverse	0.017~0.276	0.017~0.276
Metric threads	0.4~7	0.4~7
Whitworth threads	4~60	4~60
Cross slide travel	150mm	150mm
Top slide travel	76mm	76mm
Swiveling angle of turret	45 degree	45 degree
Distance from the tool bearing surface to centerline	14mm	14mm
Movement of tailstock quill	100mm	100mm
Taper of tailstock quill bore	MT3	MT3
Power of main drive motor	1.1or1.5KW	1.1or1.5KW
Packing size(LxWxH)	148*75*140cm	148*75*140cm
Gross weight(kg)	550	550

Order No.	903-0732	903-0733
Max.swing over bed	320mm	320mm
Max.swing over gap	470mm	470mm
Max.turning dia.over cross slide	198mm	198mm
Max.length to be turned	880mm	1000mm
Speed steps	8	8
Speed range	70~2000rpm	70~2000rpm
Spindle bore dia	38mm	38mm
Taper of spindle bore	MT5	MT5
Longitudinal	0.079~1.291	0.079~1.291
Transverse	0.017~0.276	0.017~0.276
Metric threads	0.4~7	0.4~7
Whitworth threads	4~60	4~60
Cross slide travel	160mm	160mm
Top slide travel	76mm	76mm
Swiveling angle of turret	± 45 °	± 45 °
Distance from the tool bearing surface to centerline	18mm	18mm
Movement of tailstock quill	100mm	100mm
Taper of tailstock quill bore	MT3	MT3
Power of main drive motor	1.1or1.5KW	1.1or1.5KW
Packing size(LxWxH)	168*75*140cm	185*75*140cm
Gross weight(kg)	560	600

Deep Hole Boring Machine



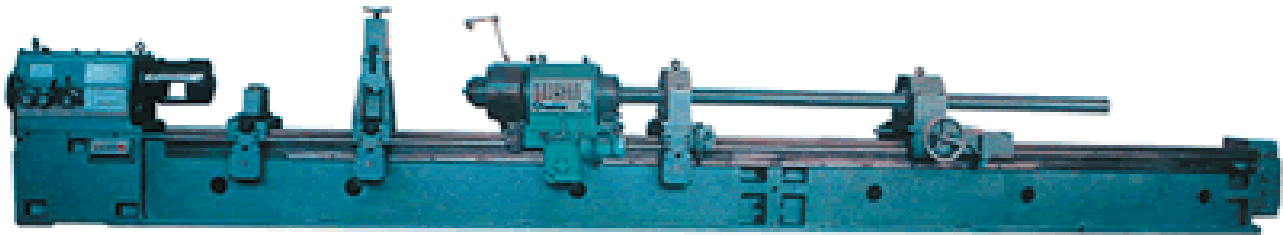
- * For deep round through holes, blind holes, step holes in machine spindles, hydraulic cylinders, pneumatic cylinders etc.
- * Mostly used for boring holes with forward chip removal mechanism. Can be used for rolling to.
- * Strong rigidity of the bed, high precision and wide spindle speed range.
- * Japan Anchin A.C. servo motor.
- * Hydraulic guide carriage and workpiece clamping. Dial clamping display.
- * Customized design and production available.

Order No.	905-0200 to 905-0207	905-0210 to 920-0217	905-0229
Max. boring dia	250mm	350mm	550mm
Max. boring depth	1000mm/2000mm/3000mm/4000mm/ 5000mm/6000mm/7000mm/8000mm		12000mm
Workpiece clamped dia. range	60-330mm	220-450mm	345-750mm
Height from spindle center to bed	350mm	450mm	625mm
Spindle bore diameter	Φ75mm	Φ130mm	
Taper of spindle bore	Φ85mm 1:20	Metric 140#	
Range of spindle speed	40-500r/min 11Kinds	3.15-315r/min 21Kinds	
Feed speed range(infinite)	5-1000mm/min infinite		
Carriage rapid-moving speed	2m/min		
Main motor power	30kW		
Hydraulic pump motor power	1.5kW		
Carriage rapid motor power	3kW		
Feed motor power	4.4kW		
Cool pump motor power	5.5kW 4 group	5.5kW 3 group	
Rated pressure for cooling system	2.5MPa	0.36MPa	
Flow of cooling system	100 200 300 400L/min	300 600 900L/min	
Rated working pressure for hydraulic system	6.3MPa		

Dimension and weight of the machine

Max. Length of workpiece	Order No.	Overall Size (cm)	Net Weight	Gross Weight	Order No.	Overall Size (cm)	Net Weight	Gross Weight
1000mm	905-0200	795x315x155	12T	13T	905-0210	798x350x185	12.7T	13.6T
2000mm	905-0201	995x315x155	14.5T	15T	905-0211	998x350x185	15.1T	16.4T
3000mm	905-0202	1195x315x155	16.3T	17T	905-0212	1198x350x185	16.8T	18.2T
4000mm	905-0203	1395x315x155	18.8T	20T	905-0213	1398x350x185	19.1T	20.7T
5000mm	905-0204	1595x315x155	20.6T	22T	905-0214	1598x350x185	21.1T	22.5T
6000mm	905-0205	1795x315x155	22.5T	23T	905-0215	1798x350x185	22.5T	24.4T
7000mm	905-0206	1995x315x155	24.5T	25T	905-0216	1998x350x185	24.2T	26.2T
8000mm	905-0207	2195x315x155	26.2T	28T	905-0217	2198x350x185	26.4T	29T

Deep Hole Boring Machine



- * For deep round through holes, blind holes, step holes in machine spindles, hydraulic cylinders, pneumatic cylinders etc.
- * Mostly used for boring holes with forward chip removal mechanism. Can be used for rolling too.
- * Strong rigidity of the bed, high precision and wide spindle speed range.
- * Japan Anchin A.C. servo motor.
- * Hydraulic guide way carriage and hydraulic for machining workpieces of short length.
- * Boring bar rear oil pumping and clamping with 4 jaw lathe chucks for machining workpiece of long length.
- * Unique oil pumping device with spindle structure dramatically increases the maximum load capacity and rotation tolerance.
- * Twin rectangular bed ways hardened and ground ensures max. loading capacity, higher leading tolerance.
- * For boring application, rolling in building machine tools, locomotives, ships, coal mining equipment, hydraulic machines, electrical machines, pneumatic machines etc..
- * Makes surface finish to 0.4 to 0.8 microns.
- * Three machining methods are available. 1) Workpieces rotate, cutting tools rotate with reciprocating feed. 2) workpieces rotate, cutting tools reciprocates feed. 3) Workpieces do not move, cutting tools rotate with reciprocating feed.
- * Customized design and production available.

Order No.: 905-0230 to 905-0241

Max. boring dia Φ 250- Φ 500mm

Max. boring depth: 1000mm/2000mm/3000mm/4000mm/5000mm/6000mm/7000mm
/8000mm/9000mm/10000mm/12000mm

Workpiece clamped dia. range: Φ 300- Φ 650mm

Height from spindle center to bed: 625mm

Spindle bore diameter: Φ 130mm

Taper of spindle bore" Metric 140#

Range of spindle speed: 3.15 to 315r/min 21speeds

Boring headstock speed range and speed numbers: 60 to 300r/min 6 speeds (1m to 3m standard configuration)

Variable feed speed range: 5-1000mm/min

Carriage rapid travel speed: 2000mm/min

Main motor power: 30kW,960r/min

Boring Headstock Motor: 22kW,1460r/min (1m to 3m standard configuration)

Hydraulic pump motor power: 1.5kW,1440r/min

Carriage rapid motor power: 3kW

Japan Servo feed Motor: 7.5kW

Cool pump motor power: 5.5kW, 960r/min (3 group)

Rated pressure for cooling system: 0.36MPa

Flow of cooling system: 300, 600, 900L/min

Total Power: 76KW

Dimension and weight of the machines

Order No.	Max. Length of workpiece	Machine Weight (kg)	Overall Sizes (cm)
905-0230	1000mm	18000	950x380x190
905-0231	2000mm	20000	1150x380x190
905-0232	3000mm	22000	1350x380x190
905-0233	4000mm	24000	1550x380x190
905-0234	5000mm	26000	1750x380x190
905-0235	6000mm	28000	1950x380x190
905-0236	7000mm	30000	2350x380x190
905-0237	8000mm	32000	2550x380x190
905-0238	9000mm	34000	2750x380x190
905-0239	10000mm	36000	3150x380x190
905-0240	11000mm	38000	3350x380x190
905-0241	12000mm	40000	3500x380x190

Manual Feed Surface Grinder



Specification:

- * Cross travel: 8-1/4"
- * Longitudinal travel: 13-7/8"
- * Maximum work height: 8-3/4"
- * Work table: 6" x 12-1/2"
- * T-slots: 1/2" x 15-1/2"
- * Graduations: .001"
- * Motor: 3/4HP, 110V single phase

Accessory kit:

- * 3mm, 4mm and 5mm hex key wrenches
- * 17 & 19mm open end wrench
- * 6" adjustable wrench
- * Screwdrivers
- * Adjustable spanner
- * Diamond dressing tool with holder
- * 7" diameter, 1/2" thick grinding wheel
- * 14" tool box
- * Stand sold separately

Order No. 904-3001

Manual Feed Surface Grinder



Max. Grinding Width	165mm
Max. Grinding Length	470mm
Max. Grading Height	350mm
Table Size	155x460mm
Optional Magnetic Chcuk Size	150x400mm
Max. Longitudinal Travel	500mm
Max. Cross Travel	185mm
Max. distance from table surface to spindle center	450mm
Feed of vertical handwheel per revolution	1mm
Feed of vertical handwheel per graduation	0.005mm
Grinding wheel size (ODxWxID)	200x13x31.75cm
Spindle speed	60HZ/3450rpm or 50HZ/2850rpm
Power of spindle motor	1.5KW
Machine weight	720kg
Shipping Size	134x112x193cm

Order No. 904-3002

Manual Feed Surface Grinder

Max. Grinding Width	220mm
Max. Grinding Length	470mm
Max. Grading Height	350mm
Table Size	210x450mm
Optional Magnetic Chcuk Size	200x400mm
Max. Longitudinal Travel	500mm
Max. Cross Travel	240mm
Max. distance from table surface to spindle center	450mm
Feed of vertical handwheel per revolution	1mm
Feed of vertical handwheel per graduation	0.005mm
Grinding wheel size (ODxWxID)	200x13x31.75cm
Spindle speed	60HZ/3450rpm or 50HZ/2850rpm
Power of spindle motor	1.5KW
Machine weight	800kg
Shipping Size	140x112x199cm

Order No. 904-3003



Features:

- * Many features of larger grinders.
- * Excellent for small shop.
- * Large dial and fine thread screws for high precision.
- * Super slide table
- * Cabinet stand
- * Swarf guard
- * Diamond wheel dresser with holder
- * Tool Box
- * Wheel balancing kit

Manual Feed Surface Grinder



Order No.	904-3004	904-3005
Max. Grinding Width	165mm	220mm
Max. Grinding Length	470mm	520mm
Max. Grading Height	350mm	350mm
Table Size	150x460mm	200x520mm
Optional Magnetic Chcuk Size	150x400mm	200x450mm
Max. Longitudinal Travel	500mm	570mm
Max. Cross Travel	200mm	250mm
Max. distance from table surface to spindle center	450mm	
Feed of vertical handwheel per revolution	2mm	
Feed of vertical handwheel per graduation	0.005mm	
Grinding wheel size (ODxWxID)	200x20x31.75cm	
Spindle speed	60HZ/3450rpm or 50HZ/2850rpm	
Power of spindle motor	1.5KW	
Machine weight	1000kg	1000kg
Shipping Size (cm)	167x156x193	167x170x199

Surface Grinder



- * Saddle moving.
- * Hydraulically controlled longitudinal travel.
- * AC motor powered cross travel.
- * Manual wheelhead vertical movement.

Order No.	904-3020	904-3371	904-3373	904-3374	904-3375	904-3376
Table size(WxL)	200x460mm	250x500mm	305x635mm	305x1020mm	406x813mm	406x1020mm
Max.longitudinal travel	510x238mm	560x275mm	765x340mm	1130x340mm	910x450mm	1130x450mm
Max.distance from spindle center to table surface	450mm		580mm			
Magnetic chuck size	200x450mm	250x500mm	300x600mm	300x1000mm	400x800mm	400x1000mm
Speed of table longitudinal movement	7-25m/min					
Table transverse movement	0.1~8mm Auto feed					
	990mm/min Rapid speed					
	0.02mm/div. eed of handwheel					
Feed of handwheel for Wheelhead vertical movement	0.005mm/div					
Grinding Wheel Speed	2850rpm (50Hz) 3450rpm (60Hz)		1450rpm (50HZ), 1750rpm (60Hz)			
Grinding wheel Size(ODxWxID)	200x20x31.75mm		350x40x127mm			
Motor of spindle	1.5kw	2.2KW	5.5kw			
Hydraulic motor	0.75KW		2.2kw			
Cooling pump motor	0.04kw		0.125kw			
Cross Feed Motor	0.04kw					
Total rated power	3KW	3.7KW	9kw			
Max. Load (Including Magnetic Chuck)	120kg	180kg	270kg	400kg	500kg	600kg
height of machine	1675mm		1890mm			
Gross weight	1600KG	1800KG	2800kg	3500kg	3800kg	4300kg
Shipping Size (CM)	178X150X216	212X202X221	235x222x215	295x222x221	285x227x218	295x227x221

Surface Grinder



- * Saddle moving.
- * Hydraulically controled longitudinal travel.
- * AC motor powered cross travel.
- * Rapid motorized wheelhead vertical feeding at 460mm/min.
- * 0.25KW vertical feeding motor.

Order No.	904-3021	904-3372	904-3022	904-3023	904-3024	904-3025
Table size(WxL)	200x460mm	250x500mm	305x635mm	305x1020mm	406x813mm	406x1020mm
Max.longitudinal travel	510x238mm	560x275mm	765x340mm	1130x340mm	910x450mm	1130x450mm
Max.distance from spindle center to table surface	450mm		580mm			
Magnetic chuck size	200x450mm	250x500mm	300x600mm	300x1000mm	400x800mm	400x1000mm
Speed of table longitudinal movement	7~25mm/min					
Table transverse movement	0.1~8mm Auto feed					
	990mm/min Rapid speed					
	0.02mm/div. eed of handwheel					
Feed of handwheel for Wheelhead vertical movement	0.005mm/div					
Grinding Wheel Speed	2850rpm (50Hz) 3450rpm (60Hz)		1450rpm (50HZ), 1750rpm (60Hz)			
Grinding wheel Size(ODxWxID)	200x20x31.75mm		350x40x127mm			
Motor of spindle	1.5kw	2.2KW	5.5kw			
Hydraulic motor	0.75KW		2.2kw			
Cooling pump motor	0.04kw		0.125kw			
Cross Feed Motor	0.04kw					
Total rated power	3KW	3.7KW	9kw			
Max. Load (Including Magnetic Chuck)	120kg	180kg	270kg	400kg	500kg	600kg
height of machine	1675mm		1890mm			
Gross weight	1600KG	1800KG	2800kg	3500kg	3800kg	4300kg
Shipping Size (CM)	191X172X216	232X202X221	235x222x215	295x222x221	285x227x218	295x227x221

SURFACE GRINDER



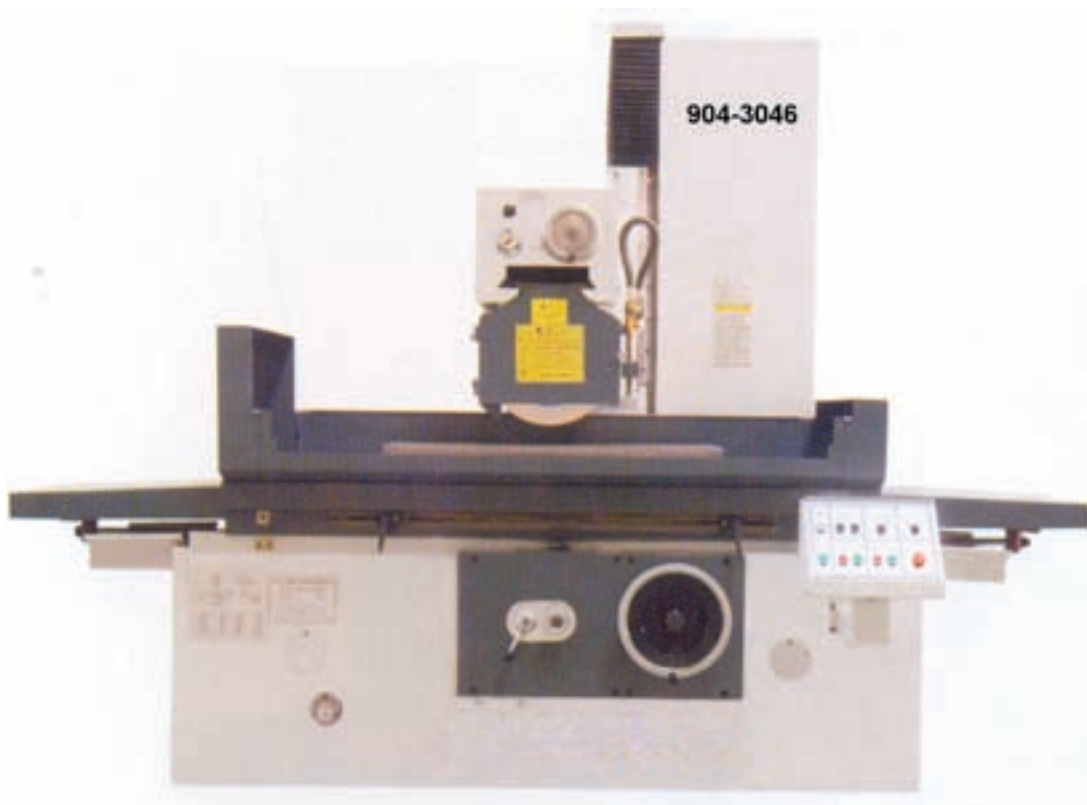
Order No.	904-3041	904-3042	904-3377	904-3378
Table Size (mm)	300*1000	300*1000	300*1000	320*1000
Distance between Table and Spindle Center	600mm	1000mm	1400mm	600mm
Table Cross Feed Speed	3~27m/min			
Table Slot size	3*18mm			
Wheelhead Criss Travel	0.5~4.5m/min continuous feed			
	3~30mm/stroke intermittent feed speed			
Wheelhead Vertical Travel	400 mm/min Motorized Feed speed			
	0.005 mm handwheel feed graduation			
Wheelhead Motor	Power (kw)	7.5kw		
	speed(rpm)	1440rpm		
Total power (kw)	11	11.2	11.2	11
Max. Load Capacity (kg)	470	900	1170	500
Magnetic Chuck Size (mm)	300*680			300*1000
Wheel Size (mm)	400*40*127			
Overall Height (mm)	2030	2510	2930	203
Floor Aread (cm)	286x185	286x185	286x185	286x187

SURFACE GRINDER



Order No.	904-3043	904-3044	904-3045
Table Size (mm)	400*1000	400*1600	400*2200
Distance between Table and Spindle Center	600mm		
Table Cross Feed Speed	3~25m/min		
Table Slot size	3*18mm		
Wheelhead Cross Travel	0.5~4.5mm/min Continuous feed		
	3~30mm/stroke Intermittent feed		
	0.02mm handwheel feed		
Wheelhead Vertical Travel	400mm/min motorized feed		
	0.005mm/min manual feed		
Wheelhead Motor	7.5kw		
	1440rps		
Total power (kw)	11	13.5	13.5
Max. Load Capacity (kg)	620	1000	1380
Magnetic Chuck Size (mm)	400*1000	400*800 (2)	400*1000 (2)
Wheel Size (mm)	400*40*127		
Floor Area (cm)	311x167x223	425x167x223	575x167x223

SURFACE GRINDER



Order No.	904-3046	904-3047	904-3048	904-3049	904-3050	904-3051
Table Size (mm)	500*1000	500*1600	500*2200	630*1250	630*1600	630*2200
Distance between Table and Spindle Center	700mm					
Table Cross Feed Speed	3~27m/min					
Table Slot size	3*22mm					
Wheelhead Cross Travel	0.5~4.5m/min continuous feeding speed					
	3~30mm/stroke intermittent feeding speed					
	0.01mm handwheel graduation					
Wheelhead Vertical Travel	400mm/min rapid motorized feeding speed					
	0.005mm handwheel feed per graduation					
Wheelhead Motor	7.5kw					
	1440rpm					
Total power (kw)	12.25	13.75	15.75	13.75kw	15.75kw	15.75kw
Max. Load Capacity (kg)	700	1240	1410	1010	1290	1780
Magnetic Chuck Size (mm)	500*1000	500*800 (2)	500*1000(2)	630*1250	630*800	630*1000 (2)
Wheel Size (mm)	400*40*203					
Overall Height (mm)	311*210*233	425*210*233	575*210*233	330x220x241	532x220x241	575x220x241

SURFACE GRINDER, Column Moving Surface Grinder



Order No.	904-3379	904-3381	904-3383	904-3385	904-3387
Table Size (mm)	500*1000	500*1600	610*1260	610*1600	610*2200
Max. Distance from table surface to spindle center (mm)	600				
Magnetic Chuck Size (mm)	500*1000*1	500*800*2	600*1000*1	600*800*2	600*1000*2
Table Cross feed speed	5-25m/min				
Wheelhead automatic cross feed speed	0.5-20mm/t				
Wheelhead power driven feed speed	1.25m/min				
Wheelhead manual feed speed	0.02mm/div				
Wheelhead vertical rapid feed speed	230m/min				
Wheelhead vertical manual feed speed	0.002mm/div				
Grinding wheel speed (rpm)	1450 (50HZ) , 1740(60HZ)				
Grinding wheel size (mm)	355*(20-50)*127mm				
Spindle Motor	7.5KW				
Max. load (including magnetic chuck)	700	880	970	1230	1690
Total power	12		14		
Machine Height (mm)	2390				
Floor Area (mm)	4700*2200	7120*2200	4000*2400	4700*2400	6000*2400
Weight	5500	6000	6500	7000	8000

SURFACE GRINDER, Column Moving Surface Grinder with automatic wheelhead vertical feeding



Order No.	904-3380	904-3382	904-3384	904-3386	904-3388
Table Size (mm)	500*1000	500*1600	610*1260	610*1600	610*2200
Max. Distance from table surface to spindle center (mm)	600				
Magnetic Chuck Size (mm)	500*1000*1	500*800*2	600*1000*1	600*800*2	600*1000*2
Table Cross feed speed	5-25m/min				
Wheelhead automatic cross feed speed	0.5-20mm/t				
Wheelhead power driven feed speed	1.25m/min				
Wheelhead manual feed speed	0.02mm/div				
Wheelhead vertical automatic feed	0.005, 0.01, 0.015, 0.02, 0.03, 0.04 mm/t				
Wheelhead vertical rapid feed speed	230m/min				
Wheelhead vertical manual feed speed	0.002mm/div				
Grinding wheel speed (rpm)	1450 (50HZ) , 1740(60HZ)				
Grinding wheel size (mm)	355*(20-50)*127mm				
Spindle Motor	7.5KW				
Max. load (including magnetic chuck)	700	880	970	1230	1690
Total power	12		14		
Machine Height (mm)	2390				
Floor Area (mm)	4700*2200	7120*2200	4000*2400	4700*2400	6000*2400
Weight	5500	6000	6500	7000	8000

Surface Grinder



- * Saddle moving.
- * Hydraulically controled longitudinal travel.
- * AC motor powered cross travel.
- * Rapid motorized wheelhead vertical feeding at 240mm/min.
- * 0.50KW vertical feeding servo motor.

Order No.	904-3026	904-3027	904-3028	904-3029	904-3030	904-3031
Table size(WxL)	200x460mm	250x500mm	305x635mm	305x1020mm	406x813mm	406x1020mm
Max.longitudinal travel	510x238mm	560x275mm	765x340mm	1130x340mm	910x450mm	1130x450mm
Max.distance from spindle center to table surface	450mm		580mm			
Magnetic chuck size	200x450mm	250x500mm	300x600mm	300x1000mm	400x800mm	400x1000mm
Speed of table longitudinal movement	7~25mm/min					
Table transverse movement	0.1~8mm Auto feed					
	990mm/min Rapid speed					
	0.02mm/div. eed of handwheel					
Feed of handwheel for Wheelhead vertical movement	0.005mm/div					
Grinding Wheel Speed	2850rpm (50Hz) 3450rpm (60Hz)		1450rpm (50HZ), 1750rpm (60Hz)			
Grinding wheel Size(ODxWxID)	200x20x31.75mm		350x40x127mm			
Motor of spindle	1.5kw	2.2KW	5.5kw			
Hydraulic motor	0.75KW		2.2kw			
Cooling pump motor	0.04kw		0.125kw			
Cross Feed Motor	0.04kw					
Total rated power	3KW	3.7KW	9kw			
Max. Load (Including Magnetic Chuck)	120kg	180kg	270kg	400kg	500kg	600kg
height of machine	1675mm		1890mm			
Gross weight	1600KG	1800KG	2800kg	3500kg	3800kg	4300kg
Shipping Size (CM)	191X172X216	232X202X221	235x222x215	295x222x221	285x227x218	295x227x221

SURFACE GRINDER with Moveable Column

Imported special wheelhead spindle.
 6 front and 2 rear precision bearings.
 Rigid thicker spindle
 Completely enclosed lubrication system
 3 axis guideways covered with wear resistant tape, lubricated with automatic independent lubrication system for smooth movement, long durability, reliability and precision stability.
 Y and Z AC servo motor with PLC control system for automatic surface grinding.
 X axis comes with dual hydraulic cyclinders.
 Photoelectric switch.
 Electrical-hydraulic valve to control directions.
 Independent hydraulic station.



Order No.	904-3011	904-3012	904-3013	904-3014	904-3015
Table Size (mm)	610*1600mm	610*2200mm	810*1600mm	810*2200mm	810*3000mm
Max. Travel (mm)	720*1840mm	720*2440mm	920*1840mm	920*2440mm	920*3300mm
Max.Distance from table surface to spindle centerline (mm)	820mm (925mm optional)				
Magnetic Chuck Size (mm)	600*800mm	600*1000mm	800*800mm	800*1000mm	800*1000mm
Optional Magnetic Chuck Nos.	2	2	2	2	3
Table Longitudinal Movement Speed	5-25mm/min				
Automatic Wheelhead Cross Feed Speed	1-30mm/t				
Wheelhead Cross Rapid Travel speed	0.05m/min				
Wheelhead Electronic Controlled feed	0.005mm/graduation				
Auto Wheelhead Vertical Rapid Speed	0.005-0.05mm/t				
Wheelhead vertical movement	0.05-2m/min				
Wheelhead Electronic Controlled Vertical feed	0.005mm/graduation				
Grinding Weel Speed	960rpm (1450rpm optional)				
Grinding Wheel Size	500*100*305mm (450x75x203mm optional)				
Spindle Motor	18.5KW				
Max.loading capacity of Table(with magnetic chuck)	1230kg	1690kg	1630kg	2240kg	3060kg
Total Power	28.5				31KW
Overall Height (mm)	2700				
Floor space(L*W) (cmxcm0	470*300	600*300mm	470*350mm	600*350mm	820*360mm
Gross Weight	8500kg	9500kg	10000kg	11500kg	14000kg

**Program Controlled Guide Way Grinder
Moveable Column Type**



Order No.	904-3394	904-3395	904-3396	904-3397	904-3398
Table Size (mm)	610*1600	610*2200	810*1600	810*2200	810*3000
Max. Grinding Aread	610*1600	610*2200	810*1600	810*2200	810*3000
Max. Grinding Height (mm)	790				
Longitudinal Table Travel Speed (mm/min)	6~23				
Wheelhead Vertical Rotation Speed (m/min)	+30°,+5°,-30°,-5°				
Wheelhead Cross Rapid Speed (m/min)	0.05-2				
Wheelhead Electronic Controlled Cross Feed Speed (mm/gra)	0.005				
Wheelhead Vertical Rapid Speed (m/min)	0.05-2				
Wheelhead Electronic Controlled VerticalFeed Speed (mm/gra)	0.005				
Grinding wheel speed (rpm)	1450				
Grinding wheel size	To be determined by the customer				
Spindle Motor (kw)	5.5				
Max. Load (kg)	1230	1690	1630	2240	3060
Total power	17				
Machine Height (mm)	2920				
Floor area (cmxcm)	470*300	600*300	470*350	600*350	820*360
Machine Weight (kg)	8500	9500	10000	11500	14000

UNIVERSAL CNC CYLINDRICAL GRINDERS



Order No.	904-3088	904-3089	904-3090	904-3091	904-3092
Distance Between Center (mm)	600	1000	1000	1500	2000
Center Height (mm)	140		180		
Max. Grinding Diameter (mm)	275	275	360	360	360
Max. Load (kg)	100	100	150	200	300
Grinding Wheel Size (mm)	400x50x127		500x50x127		
Peripheral speed (m/s)	45				
Power of Main Motor (KW)	4	4	7.5		
Work head Speed (rpm)	10-1000	10-1000	10-800		
Center Taper	4	4	5		
Tailstock Taper	4				
Quil Travel (mm)	40				
Machine Weight (kg)	4000	4500	4700	5200	5700
Overall Size	300x270x180	390x270x180	420x295x205	530x295x205	640x295x205

- * Roundness: 0.0025mm
- * Uniformity of dia. in longitudinal section: 0.005mm
- * Surface roughness: Ra0.32

CNC SURFACE GRINDER with Moveable Column and Horizontal Spindle

Imported special wheelhead spindle.
 6 front and 2 rear precision bearings.
 Rigid thicker spindle
 Completely enclosed lubrication system
 3 axis guideways covered with wear resistant tape, lubricated with automatic independent lubrication system for smooth movement, long durability, reliability and precision stability.
 Y and Z AC servo motor with PLC control system for automatic surface grinding.
 X axis comes with dual hydraulic cycliners.
 Photoelectric switch.
 Electrical-hydraulic valve to control directions.
 Independent hydraulic station.



Order No.	904-3389	904-3390	904-3391	904-3392	904-3393
Table Size (mm)	610*1600mm	610*2200mm	810*1600mm	810*2200mm	810*3000mm
Max. Travel (mm)	720*1840mm	720*2440mm	920*1840mm	920*2440mm	920*3300mm
Max.Distance from table surface to spindle centerline (mm)	820mm (925mm optional)				
Magnetic Chuck Size (mm)	600*800mm	600*1000mm	800*800mm	800*1000mm	800*1000mm
Optional Magnetic Chuck Nos.	2	2	2	2	3
Table Longitudinal Movement Speed	5-25mm/min				
Automatic Wheelhead Cross Feed Speed	1-30mm/t				
Wheelhead Cross Rapid Travel speed	0.05m/min				
Wheelhead Electronic Controlled feed	0.005mm/graduation				
Auto Wheelhead Vertical Rapid Speed	0.005-0.05mm/t				
Wheelhead vertical movement	0.05-2m/min				
Wheelhead Electronic Controlled Vertical feed	0.005mm/graduation				
Grinding Weel Speed	960rpm (1450rpm optional)				
Grinding Wheel Size	500*100*305mm (450x75x203mm optional)				
Spindle Motor	18.5KW				
Max.loading capacity of Table(with magnetic chuck)	1230kg	1690kg	1630kg	2240kg	3060kg
Total Power	28.5				31KW
Overall Height (mm)	2700				
Floor space(L*W) (cmxcm0)	470*300	600*300mm	470*350mm	600*350mm	820*360mm
Gross Weight	8500kg	9500kg	10000kg	11500kg	14000kg

High Precision Vertical Universal CNC Grinder

- * Oil spray lubrication.
- * X/Z Position Accuracy ± 0.005
- * X/Z Repeatability ± 0.003
- * Table Rotation Accuracy $\pm 0.003^\circ$
- * Rotary Table Repeatability: $\pm 0.001^\circ$
- * Roundness Accuracy < 0.001
- * Cylindricity Accuracy $0.005/300$

Standard kit:

- * Grinding wheel dresser
- * Magnetic separator
- * Coolant tank
- * X/Z Linear feedback device.
- * ATC
- * Automatic grinding wheel balancer device.
- * Backlash elimination.
- * Flange
- * Machine mouting and levelling tools.



Order No.	904-3362	904-3363	904-3364	904-3365	904-3366	904-3367	904-3368
Max. Grinding Diameter (mm)	50-500	80-800	100-1000	120-1200	160-1600	200-2000	250-2500
Max. Grinding Depth (mm)	400			450			
Max. Grinding Height (mm)	500			700			
Max. Load	1000		2500	3000	5000	8000	10000
Grinding Wheel Speed (rpm)	2000-20000				1500-15000	1000-10000	1000-8000
Grinding Wheel Diameter	25-180	40-200	50-250	60-250	80-250	100-250	100-250
Grinding Wheel Shaft Taper	HSK-A50		HSK-A63				
Dia. Of Rotary table (mm)	500	700	900	1100	1500	1900	2400
Table Rotary Speed (rpm)	10-500			5-100			
Max. X and Z travel (mm)	X:1000 Z:700	X:1150 Z:700	X:1250 Z:700	X:1350 Z:700	X:1550 Z:700	X:1750 Z:700	X:2000 Z:700
X and Z axis Travel Speed (mm/min)	0-3000						
Ballscrew Lead	10mm						
X and Z axis Min. Setting	0.0001mm						
Spindle Sero Motor Power	5.5	7					
Grding Wheel Servo Motor Power	7.5	11	18				
X/Z Servo Motor	2			4			
Grinding Wheel Dresser Motor	1.2			1.8			
Water Tank Capacity	200L	600L					
Total Power	25KVA	30KVA	40KVA				
Floor Aread (LxWxH) (cm)	380*300*320	400*325*330	420*345*330	440*360*330	480*400*330	520*420*330	570*450*330
Machine Weight	8000	10000	13000	15000	18000	22000	25000
CNC Control System	FAGOR 8055 CNC						

CNC ROLLER GRINDER



Order No.	904-3340	904-3341 904-3342	904-3343 904-3344 904-3345	904-3346 904-3347 904-3348 904-3349	904-3350 904-3351 904-3352 904-3353	904-3354 904-3355 904-3356 904-3357	904-3358 904-3359 904-3360 904-3361
Max. Grinding Diameter (mm)	500	630	800	1000	1250	1600	2000
Distance between centers (m)	3	3,4	3,4,5	4,5,6,7	4,5,6,7	6,8,10,12	8,10,11,12
Max. convex (concave) amount≤	2	3	3	3	3	3	3
Max. Load (kg)	3	6.3	15	25	25	60	100
Variable Workpiece Speed (rpm)	10-100	8-125	7-70	5-50	5-50	3.5-40	4-40
Longitudinal tailstock moving speed (mm/min)	1000	1000	1800	1800	1800	1055	1310
Supporting Dia. Of Stead Rest (mm)	50-300	90-320	90-450	90-400	90-400	300-600	300-600
		300-450	300-680	350-600	350-780	600-950	600-950
Longitudinal carriage moving speed (mm/min)	20-3000	20-3000	20-4000	50-4000	50-4000	50-4000	50-4000
Max. Carriage Cross Travel (mm)	300	560	560	900	900	950	950
Rapid Carriage Cross Travel Speed (mm/min)	400	400	300	625	625	625	625
Wheelhead continuous Cross Feed Speed	0.001-1.2(mm/min)						
Wheelhead Periodical Cross Feed Speed	0.001-0.12mm/stroke						
Electronic handwheel Feed Amount	0.001mm/pulse						
Grinding Wheel Size (mm)	750*75*305			900*100*305			
Grinding Wheel Peripheral Speed (mm/s)	45	35(45)	35(45)	35(45)	35(45)	35(45)	35(45)
Measuring Range of Measuring Device (mm)	50-500	50-650	50-800	50-1200	50-1300	50-1600	50-2000
Worked Motor (kw)	5.5	15	30	45	45	55	90
Grindingwheel Motor (kw)	30	30(55)	45(55)	75	75	75	75
Wheel Cross Feed Motor (kw)	1.1	1.5	1.5	1.5	1.5	1.5	1.5
Carriage Longitudinal Moving Motor (kw)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Servo Motor for Grinding Convex (kw)	0.4	0.4	0.4	0.8	0.8	0.8	0.8

* Roundness: 0.001~ 0.003mm * form error: 0.001~0.003mm
 * Cylindricity: 0.001~0.003mm * Surface roughness: Ra 0.1um

NC Double Column Surface Grinding Machine Fixed Crossrail Type

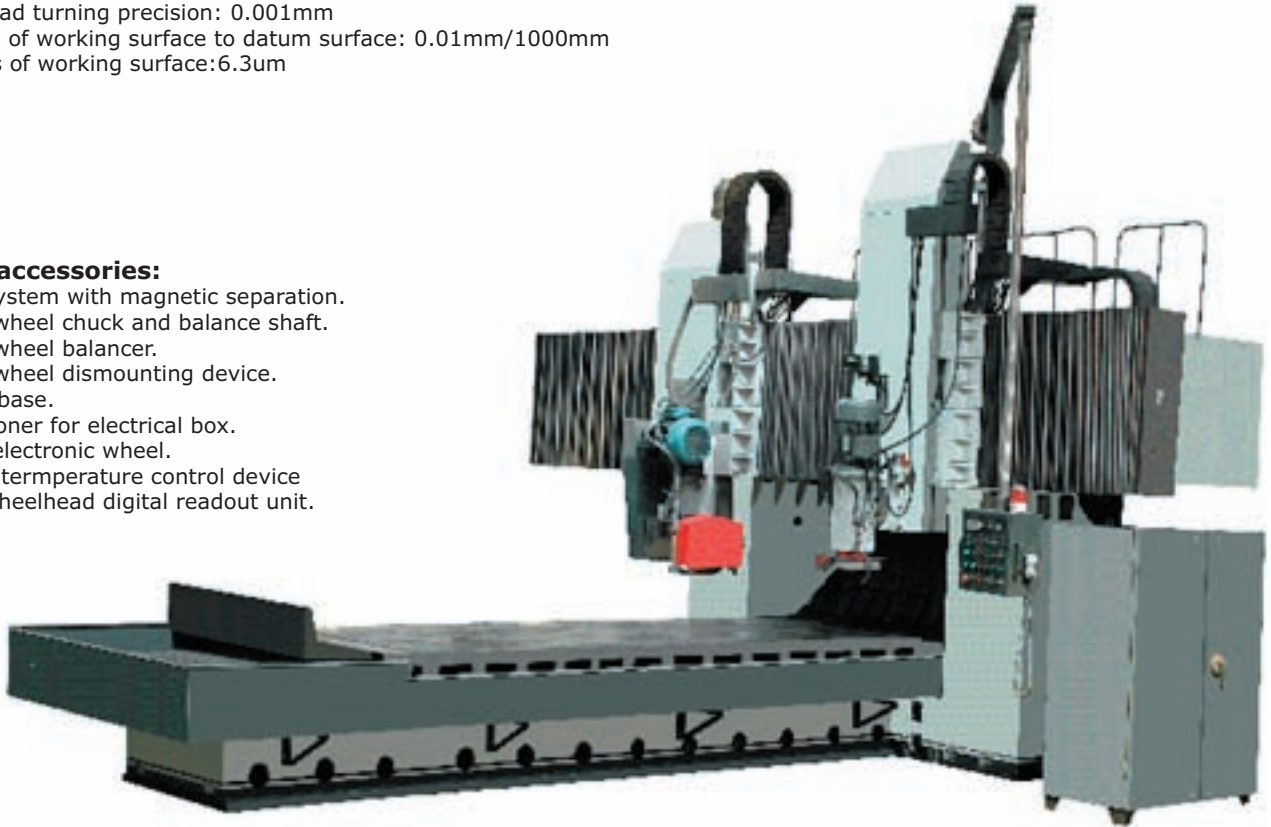
- * Variable wheelhead cross travel speed: 20-1200mm/min
- * Variable wheelhead Intermittent feed: 5-40mm/feed
- * Auto micro feed of electrical hand wheel per graduation: 0.005mm
- * Variable wheelhead vertical speed: 20-800mm/min
- * Auto micro feed of electrical hand wheel per graduation: 0.005mm
- * Auto.feed range: 0.005/0.01/0.02/0.03/0.05mm/feed
- * Variable Intermittent feed: 5-40mm/feed(optional for vertical wheelhead)
- * Variable Iongitudinal speed: 5-24m/min
- * Vertical head turning precision: 0.001mm
- * Parallelism of working surface to datum surface: 0.01mm/1000mm
- * Roughness of working surface:6.3um

Optional accessories.

1. Fabric belt filtering device
2. Floating grinding wheel angle dresser
3. Magnetic chuck
4. Y and Z axis digita readout (DRO)

Standard accessories:

1. Coolant system with magnetic separation.
2. Grinding wheel chuck and balance shaft.
3. Grinding wheel balancer.
4. Grinding wheel dismounting device.
5. Diamond base.
6. Airconditioner for electrical box.
7. Y, Z axis electronic wheel.
8. Hydraulic temperature control device
9. Vertical wheelhead digital readout unit.



Order No.	904-3250 to 904-3256	904-3257 to 904-3262	904-3263 to 904-3275	904-3276 to 904-3287
Table Width (mm)	1250	1600	2000	2500
Table Length (mm)	2000-8000	2500-8000	3500-16000	4500-16000
Grinding Width (mm)	1400	2000	2400	3000
Grinding Length (mm)	2000-8000	2500-8000	3500-16000	4500-16000
Grinding Height (mm)	800	1000	1200	1200
Distance Between Columns (mm)	1600	2200	2600	3200
Horizontal Spindle Motor	22KW			
Spindle speed	1300rpm			
Minimum feed	0.005mm			
Grinding Wheel Size	Φ500*100*Φ203mm			
Vertical spindle motor	11KW			
Vertical spindle speed	1450/2970rpm			
Vertical Min. Feed	0.005mm			
Vertical Grinding Wheel	Φ400*50*Φ127mm			
Tilting anlge of Vertical Grinding Wheelhead	±110°			

CNC Double Column Surface Grinding Machine Fixed Crossrail Type

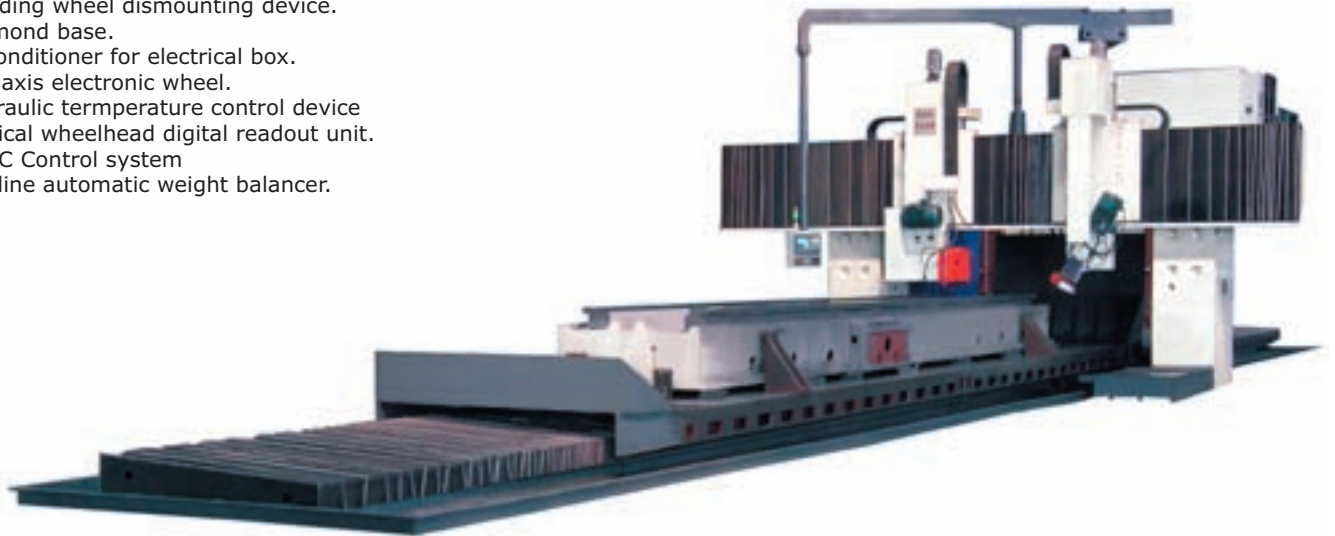
- * Variable wheelhead cross travel speed: 20-1200mm/min
- * Variable wheelhead Intermittent feed: 5-40mm/feed
- * Auto micro feed of electrical hand wheel per graduation: 0.005mm
- * Variable wheelhead vertical speed: 20-800mm/min
- * Auto micro feed of electrical hand wheel per graduation: 0.005mm
- * Auto.feed range: 0.005/0.01/0.02/0.03/0.05mm/feed
- * Variable Intermittent feed: 5-40mm/feed(optional for vertical wheelhead)
- * Variable Longitudinal speed: 5-24m/min
- * Vertical head turning precision: 0.001mm
- * Parallelism of working surface to datum surface: 0.01mm/1000mm
- * Roughness of working surface:6.3um

Optional accessories.

1. Fabric belt filtering device
2. Floating grinding wheel angle dresser
3. Magnetic chuck

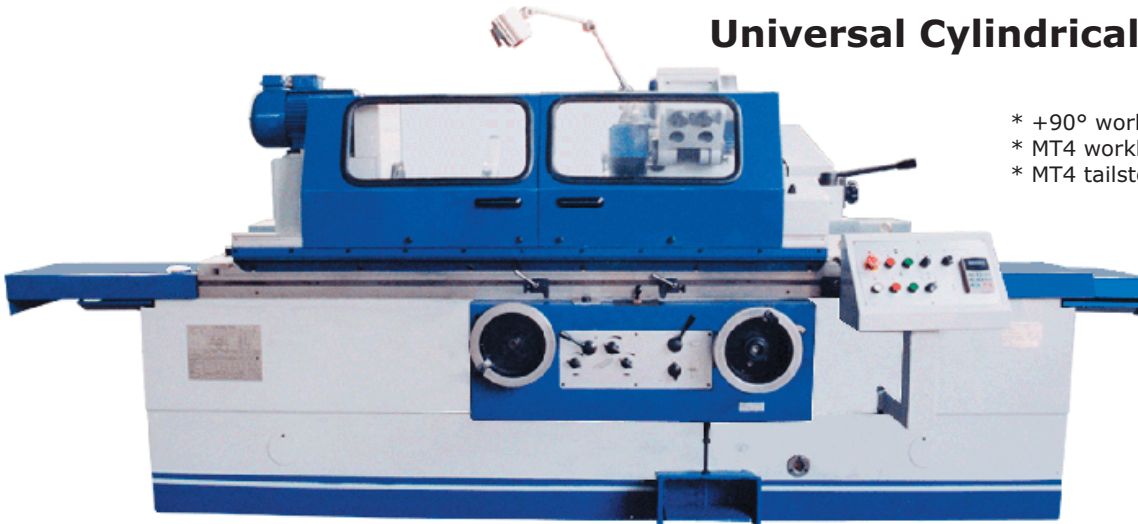
Standard accessories:

1. Coolant system with magnetic separation.
2. Grinding wheel chuck and balance shaft.
3. Grinding wheel balancer.
4. Grinding wheel dismounting device.
5. Diamond base.
6. Airconditioner for electrical box.
7. Y, Z axis electronic wheel.
8. Hydraulic temperature control device
9. Vertical wheelhead digital readout unit.
10. CNC Control system
11. On line automatic weight balancer.



Order No.	904-3300 to 904-3306	904-3307 to 904-3312	904-3313 to 904-3325	904-3326 to 904-3337
Table Width (mm)	1250	1600	2000	2500
Table Length (mm)	2000-8000	2500-8000	3500-16000	4500-16000
Grinding Width (mm)	1400	2000	2400	3000
Grinding Length (mm)	2000-8000	2500-8000	3500-16000	4500-16000
Grinding Height (mm)	800	1000	1200	1200
Distance Between Columns (mm)	1600	2200	2600	3200
Horizontal Spindle Motor	22KW			
Spindle speed	1300rpm			
Minimum feed	0.005mm			
Grinding Wheel Size	Φ500*100*Φ203mm			
Vertical spindle motor	11KW			
Vertical spindle speed	1450/2970rpm			
Vertical Min. Feed	0.005mm			
Vertical Grinding Wheel	Φ400*50*Φ127mm			
Tilting angle of Vertical Grinding Wheelhead	±110°			
CNC Control System	FANUC, SIMENSE, MITSUBISHI			

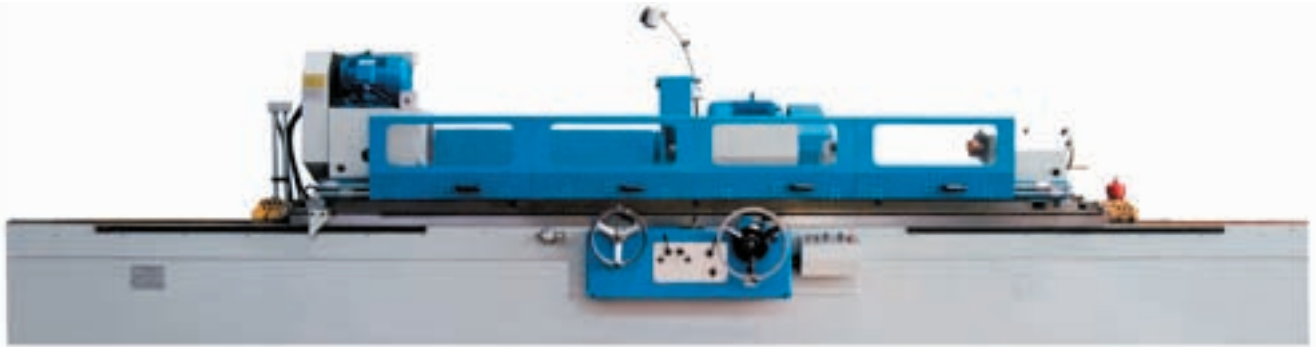
Universal Cylindrical Grinder



- * +90° workhead swivel angle.
- * MT4 workhead center taper.
- * MT4 tailstock center taper.

Order No.	904-3060 904-3061	904-3081, 904-3082 904-3062, 904-3063 904-3083, 903-3084	904-3085 904-3086 904-3087
Distance between centers	500mm 750mm	500/750/1000/1500 /2000/3000mm	1500/2000 /3000mm
Center Height	135mm	180mm	270mm
External Grinding Capacity	5~200mm	8~320mm	25~500mm
Internal Grinding Capacity	25~100mm	30~100mm	30~200mm
Max.length ground(I.D)	100mm	125mm	320mm
Max weight of work piece	100kg	150kg	1000kg
Spindle speed	50HZ: 25~380rpm	50HZ:25-220rpm 60HZ:30-364rpm	50HZ:25-220rpm 60HZ:30-364rpm
Max. wheelhead spindle speed	1670rpm	1670rpm	1330/665rpm
Wheelhead rapid travel	50mm	50mm	100mm
Max wheelhead travel	205mm	246mm	370mm
Max. wheelhead swivel angle	±30°	±30°	-30°
Wheel head travel per handwheel revolution	rough:2.0mm, fine: 0.5mm		rough:4.0mm, fine: 0.5mm
Grinding wheel feel per handweel revolution	rough:0.01mm, fine 0.0025mm		rough:0.002mm, fine: 0.005mm
Max dimension of wheel(ODxWxID)	400x50x203mm		500x75x305mm
Internal Grinding Spindle speed	10000rpm		7000rpm
Dimension of wheelfor internal grinding	max:30x25x10mm min:17x20x6mm	max:50x25x13mm min:17x20x6mm	max:175x32x32mm min:30x25x10mm
Table hand feed per revolution	6mm	6mm	5mm
Max swivelling angle of table	Clockwise	clockwise:3°	3° (1500), 2°(2000, 3000mm)
	Counterclock vise	9° (750), 8° (500)	9° (500), 8° (750), 7° (1000), 6° (1500), 5° (2000),3°(3000)
Longitudinal traverse speed of table	0.1~4m/min	0.1~4m/min	0.1~3m/min
Quill travel	30MM		70mm
Wheelhead motor power	4kw	5.5kw	5/7.5kw
Internal grinding	1.1kw		1.5KW
Power of workhead motor	0.75kw	1.5kw	4kw
Shipping Weight	4100/4300kg	4300KG to 9900KG	11200kg to 17400kg
Shipping Size	260 (300)x206x205CM	300 to 7390x200x205CM	540 to 810x270x210CM

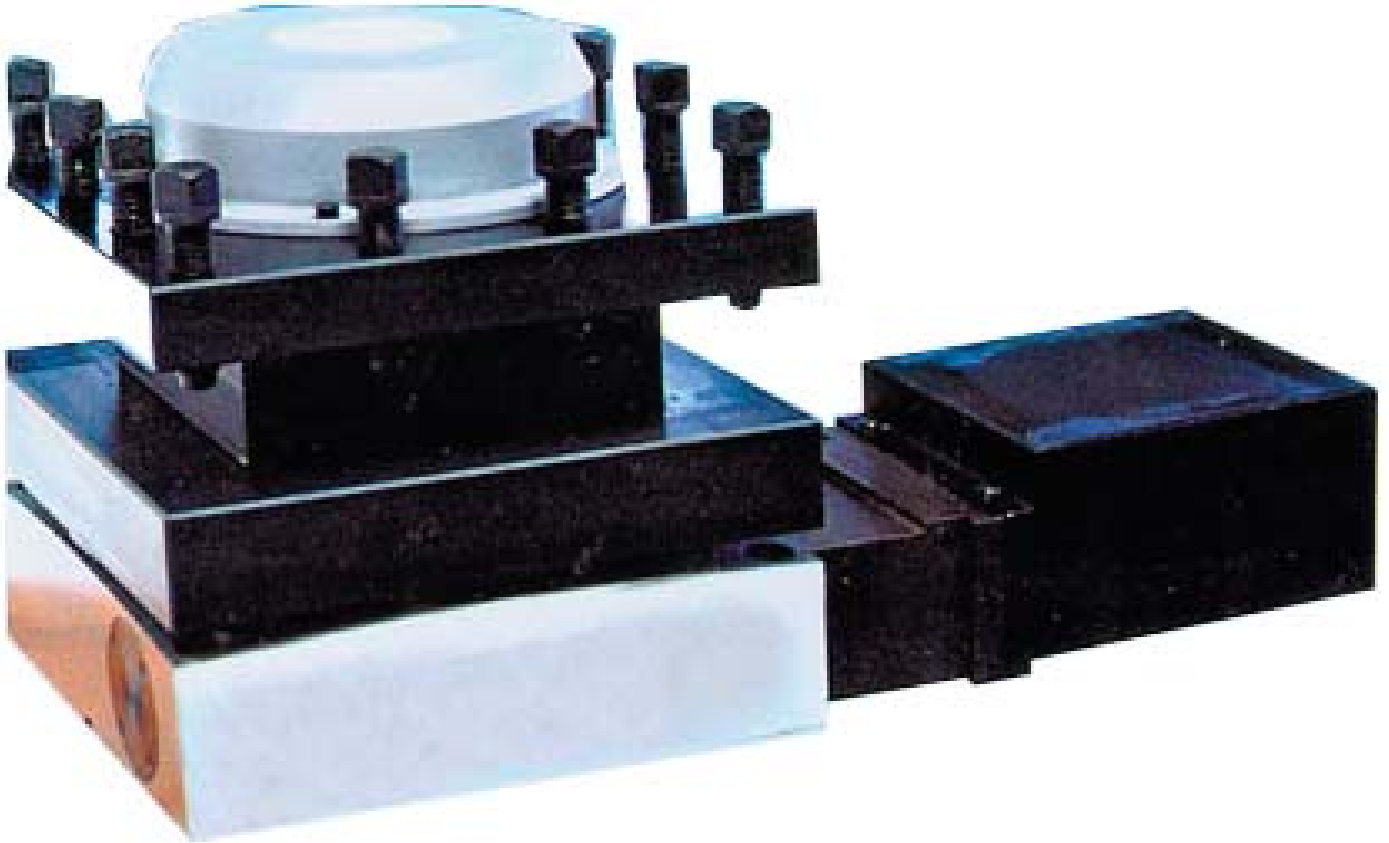
CYLINDRICAL GRINDER



Order No.	904-3064 904-3065	904-3066 to 904-3070	904-3072 to 904-3074	904-3075 to 904-3077	940-3078 to 904-3080
Distance Between Centers (mm)	500,750MM	500,750,1000, 1500,2000,3000	1500,2000, 3000MM	3000,4000, 5000MM	3000,4000, 5000MM
Center Height	135	180	270	335	500
Max. Grinding Outer Diameter (mm)	5-200	8-320	25-500	30-630	50-800
Max. Load (kg)	100	150	1000	3000	5000
Spindle Bore Taper	4	5	6	Metric 80#	Inch 100#
Spindle Speed (RPM)	50HZ:25-380		50HZ:18-140	50HZ:8-150	50HZ:6-80
Grinding Wheel Speed	1335	1100	870	740	740
Max. Wheelhead Rapid Travel	50	50	100	100	100
Max. Travel (mm)	205	235	437.5	437	550
Handwheel Feed per revolution	Rough:2 Fine:0.5	Rough:2 Fine:0.5	Rough:4 Fine:0.5	Rough:6 Fine:0.5	Rough:6 Fine:0.5
Handwheel Feed per graduation (mm)	Rough:0.01 Fine:0.0025	Rough:0.01 Fine:0.0025	Rough:0.02 Fine:0.0025	Rough:0.02 Fine:0.0025	Rough:0.02 Fine:0.0025
Max. Grinding Wheel Size	500*50*203	600*75*305	750*75*305	900*75*305	900*75*305
Wheel peripheral Velocity (m/s)	35				
Manual Table feed speed (mm/rev)	6	6	5	5	5
Max. Table Clockwise swivel angle	3°	3°(500,750,1000, 1500mm) 2°(2000,3000)	3°(1500mm) 2°(2000,3000)	2°(3000) 1°(4000,5000)	2°(3000) 1°(4000,5000)
Max. Table Counterclockwise swivel angle	9°(750) 8°(500)	9°(500) 8°(750) 7°(1000) 6° (1500) 5°(2000) 3°(3000)	6°(1500) 5°(2000) 3 °(3000)	3°(3000) 2°(4000,5000)	3°(3000) 2°(4000,5000)
Max. Table longitudinal Travel Speed (m/min)	0.1-4				
Tailstock Taper (MT)	4	4	6	Metric 80#	Metric 100#
Travel of Tailstock Quill (mm)	30	30	70	100	100
Wheelhead Motor Power (KW)	5.5	11	15	18.5	18.5
Workhead Motor Power (KW)	0.75	1.5	2.2/3.6	5	10

NC TOOL TURRENT

The NC turret is designed to hold several tools and automatically index for common CNC lathes. It utilizes 3-part Hirth coupling as indexing mechanism with indexing sequence mainly controlled by a HALL transducer. It features high accuracy, work reliability and easy maintenance thanks to tailored design.



Order No.	400-1011	400-1012	400-1013	400-1014	400-1015	400-1016	400-1017	400-1018	400-1019
Square Turret Size	206mm	190mm	214mm	166mm	180mm	200mm	200mm	206mm	240mm
Work Positions	4	4	6	4	4	4	6	4	4
Minimum Height from base to Tool Post	100.5mm	122mm		70mm	81mm	100mm		106mm	120mm
Center Height Tool Bits			47mm				125mm		
Position Change Time (second)	3.15	3.5	3	3.24	3.16	3.15	2.66	3.15	2.9
Rotating speed (r/min)	17	20	20	17	17	17	17	17	20
Max. Torque in Horizontal (N.M)	800	560	560	400	800	800	800	800	1000
Max. Torque in Vertical (N.M)	2000	1700	1700	1250	2000	2000	2000	2000	2500
Repeatability	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Net Weight	56kg	56kg	68kg	30kg	39kg	54kg	54kg	60kg	74kg

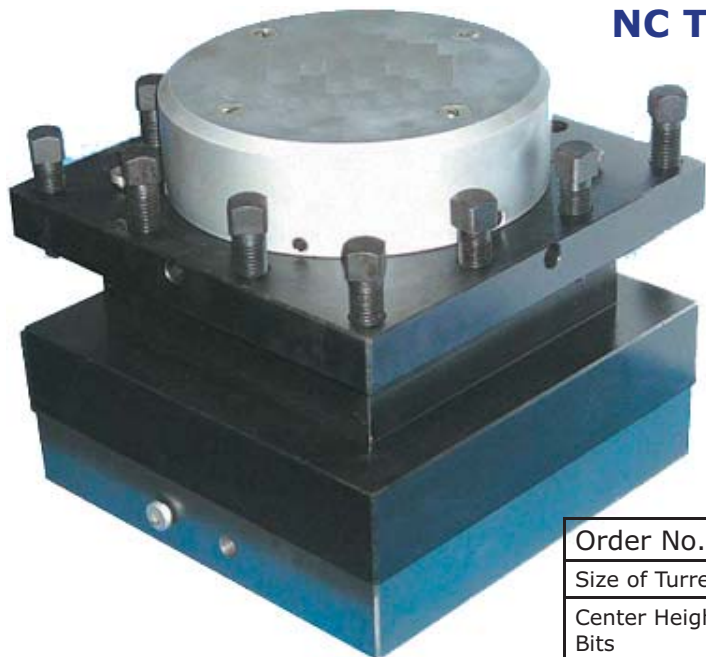
NC TOOL TURRENT

The turret is designed mainly for the NC vertical and horizontal lathe. It clamps and unclamps by Hydraulic pressuer motor, rotate without lifting. It utilizes a face gear coupling as indexing mechanism. So it features high accuracy; reliability; rotating reposefully; good airproof, fit to machining big parts.



Order No.	400-1020	400-1021	400-1022
Minimum Height from base to Post	170mm	200mm	200mm
Position Change Time (second)	3	4	4
Max. Rotating Speed (r/min)	8	8	8
Max. Torque in Horizontal (N.M)	5000	6000	6000
Max. Torque in Vertical (N.M)	2500	3000	3000
Repeatability	0.005	0.005	0.005
System Press (Mpa)	3	3	3
Net Weight	250kg	455kg	485kg

NC TOOL TURRENT



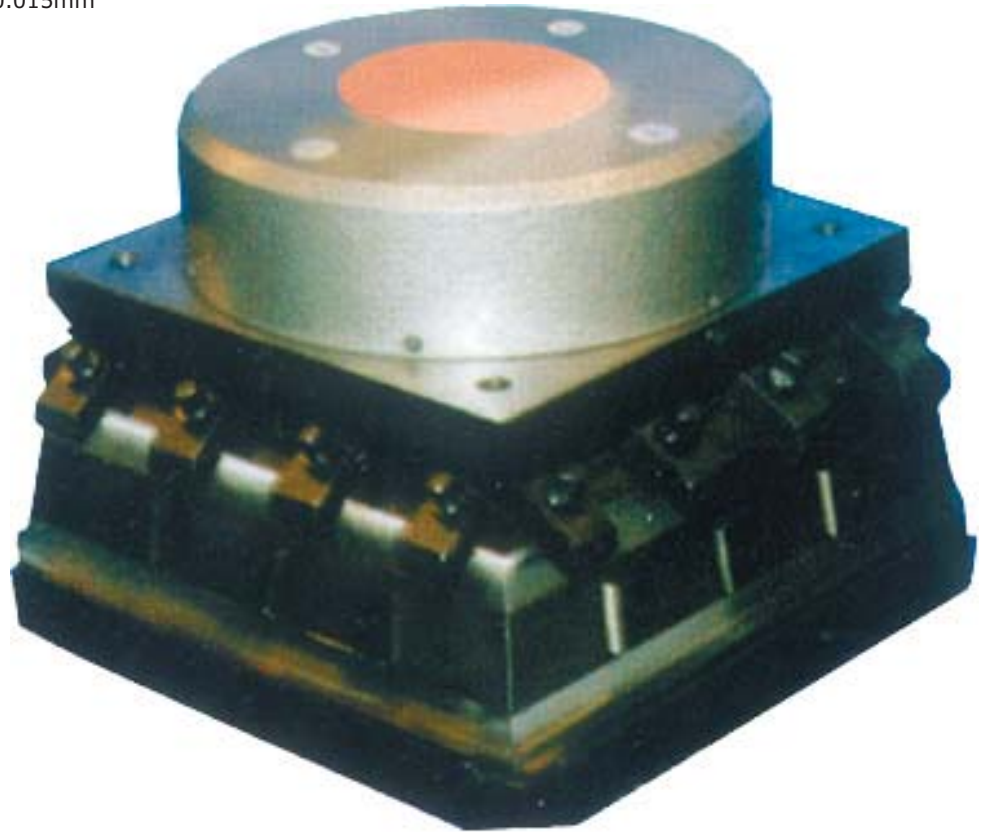
The NC turret is an important accessory for NC lathe and especially applicable for large NC horizontal lathe and NC vertical lathe. It is designed to hold several tools and automatically index . Thus automation and high efficiency of operational procedures can be realized. It utilizes a face gear coupling as indexing mechanism. Indexing sequence is mainly controlled by a positioning face gear and a HORE transducer. So it features high accuracy, reliability, wide application, compact design.

Order No.	400-1023	400-1024	400-1025	400-1026	400-1027
Size of Turrent Squire	300mm	300mm	380mm	380mm	440mm
Center Height of Tool Bits	125mm	120mm	110mm	105mm	145mm
Position Change Time	4s	4s	4s	6s	5s
Max. Clamping force N.M.	27500	27500	34000	60000	63000
Torque of Motor	5	5	6.4	6.4	9.4

NC TOOL TURRENT

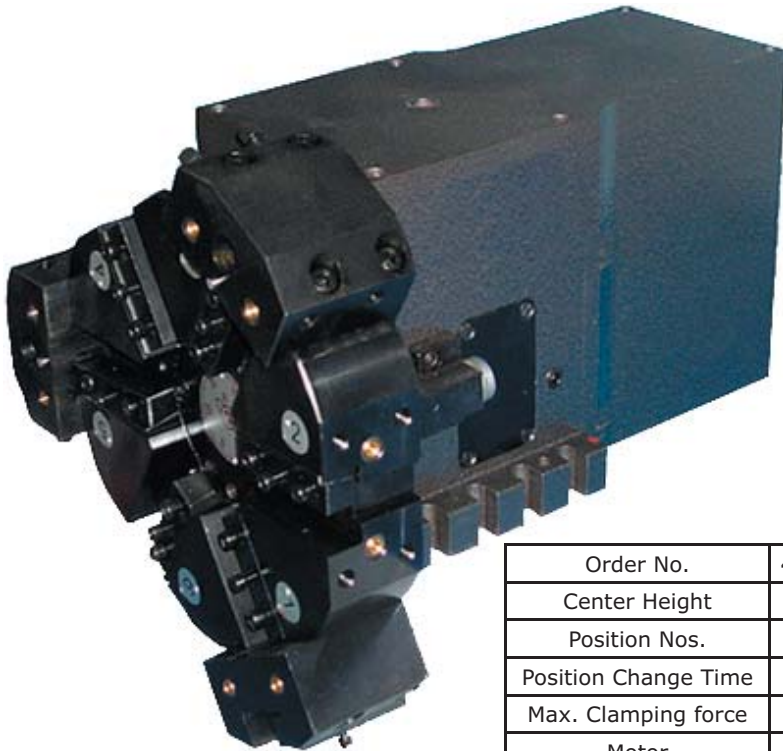
The NC turret is an important accessory for NC lathe and especially suitable for NC vertical lathe and heavy-duty NC horizontal lathe. It is designed to hold several tools and automatically index. A non-lifting face gear coupling is used as indexing mechanism. Indexing sequence is mainly controlled by a HALL transducer. It features high accuracy; work reliability; and easy maintenance thanks to tailored design.

- * Repeatability: $\leq 0.005\text{mm}$
- * Vertical residual deformation: $\leq 0.015\text{mm}$
- * Horizontal elastic deformation: $\leq 0.05\text{mm}$
- * Horizontal residual deformation: $\leq 0.015\text{mm}$



Order No.	Square Size (mm)	Center Height (mm)	Position	Position Change Time	Max. Clamping Force (KN)	Motor Torque (N.M)	Net Weight (KG)	Max. Vertical Torque	Max. Vertal Elastic Deformation	Max. Horizontal Torque
400-1028	300	125	4	4s	27.5	5	140	4 KN.M	0.12mm	2KN.M
400-1029	300	160	6	3.5s	27.5	5	149	4KN.M	0.12mm	2KN.M
400-1030	320	90	4	4s	27.5	5	113	4KN.M	0.08mm	2KN.M
400-1031	320	90	4	6.5s	40	5	116	5KN.M	0.08mm	2KN.M
400-1032	320	94.2	5	6.2s	40	5	119	5KN.M	0.08mm	2KN.M
400-1033	320	90	6	5s	40	5	119	5KN.M	0.08mm	2KN.M
400-1034	380	109	4	4s	34	6.4	175	5KN.M	0.12mm	2.5KN.M
400-1035	380	145	4	6.5s	60	6.4	210	7KN.M	0.08mm	3KN.M
400-1036	380	95	4	6.5s	60	6.4	175	7KN.M	0.08mm	3KN.M
400-1037	380	145	4	6.5s	60	6.4		7KN.M	0.08mm	3KN.M
400-1038	380	135	5	6.2s	60	6.4	260	7KN.M	0.08mm	3KN.M
400-1039	380	109	6	3.5s	34	6.4	170	5KN.M	0.12mm	2.5KN.M
400-1040	380	135	6	5.5S	60	6.4	200	7KN.M	0.12mm	3KN.M
400-1042	440	160	4	8.5s	100	9.4	301	15KN.M	0.12mm	12KN.M
400-1043	440	160	6	8.5s	100	9.4	311	15KN.M	0.05mm	12KN.M
400-1044	450	110	4	4.5s	63	9.4	284	7.5KN.M	0.05mm	3.75KN.M
400-1045	450	105.3	4	8.5s	100	9.4	295	15KN.M	0.05mm	12KN.M

NC TOOL TURRENT



The NC turret is an important accessory for NC lathe and especially applicable for all-pervading NC lathe. It is designed to hold several tools and automatically index. Thus automation and high efficiency of operational procedures can be realized. It utilizes a face gear coupling as indexing mechanism. Indexing sequence is mainly controlled by a positioning face gear and a HORE transducer. So it features high accuracy, reliability, wide application, compact design.

Order No.	400-1046	400-1047	400-1048	400-1049	400-1050
Center Height	63mm	80mm	80mm	100mm	100mm
Position Nos.	6	6	8	6	8
Position Change Time	3s	3s	3s	2.85s	2.85s
Max. Clamping force	20KN	25KN	25KN	40KN	40KN
Motor	120w ,1400rpm				3N.M
Halcel Unit	DC 12-24, 20MA NPN				
Net Weight	50kg	65kg	73kg	113kg	115kg

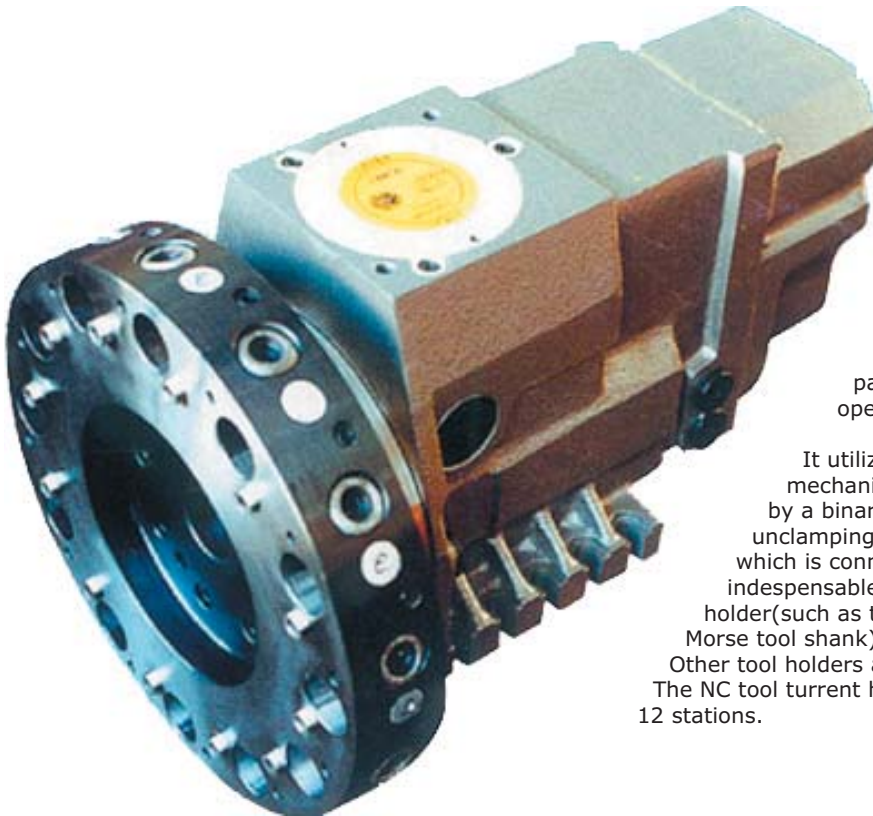
NC TOOL TURRENT

This type of NC tool turret is designed to hold several tools, bidirectionally index and position in the shortest path. It utilizes a face gear coupling as indexing mechanism. Indexing sequence is mainly controlled by a binary absolute encoder. It features compact design; high flexibility; high accuracy and reliable performance. With the matching disc, and various supplementary tool holder, such complicated work procedures as turning, boring, drilling, and milling can be accomplished. Turret disc and tool holder (such as turning holder, boring tool holder, collect and Morse tool shank) are on special orders.



Order No.	400-1071	400-1072
Center Height	80mm	125mm
Station Numbers	8	12
45° position change and clamping time	0.67	1.1
45° position change	0.29	0.47
180° position change and clamping time	1.54	2.5
Max. unbalanced load torque	15N.M	60NM
Angular index accuracy	+/-6"	
Repeatability	+/-2"	
Index Frequency	750/hour	750tims/hour
Power Output Ratio	1:01	01:01.1
Max. Rotary Initial	.8kg.m	1kg.m
Max. Load	40kg	160kg
Input Power Torque	<6N.m	23.5N.M
Optional Servo Motor Power	<1kw	<3.7kw
Coolant Holes	G3/8"	G3/8"
Cable Connecting Hole	M20x1.5	M24x1.5
Weight	30kg	40kg
Size	635x614x507mm	888x764x816mm

NC TOOL TURRENT



The NC turret produced by technology introduced from Baruffaldi S.P.A. Italy, is an important equipment of high performance and key part for full-function NC. lathe. It is designed to hold several tools featuring bidirectional indexing and shortest indexing path. So that automation and high accuracy of operational procedures can be realized.

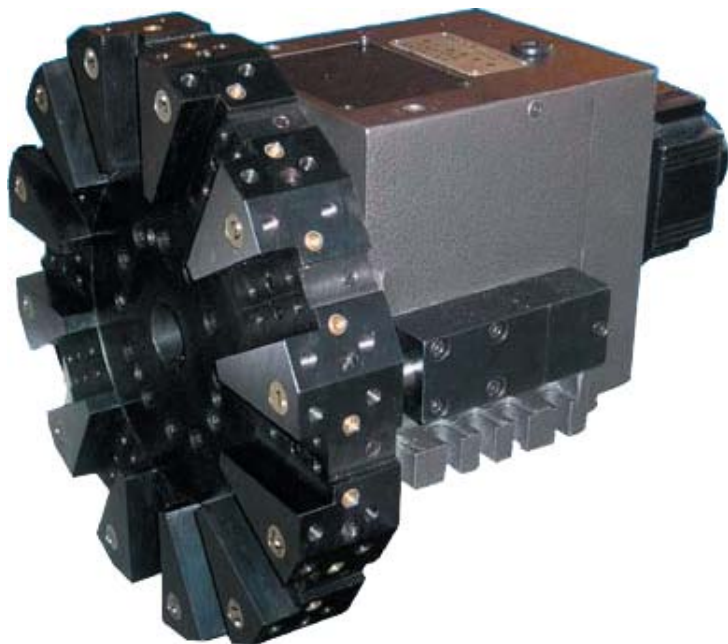
It utilizes a face gear coupling as indexing mechanism. Indexing sequence is mainly controlled by a binary absolute encoder; Clamping and unclamping of turret are signalled by a proximity switch which is connected together with the encoder to PC. With indispensable matching attachment, turret disc, tool holder (such as turning tool holder, boring tool holder, collet and Morse tool shank), complicated work procedures can be realized. Other tool holders are on special orders. The NC tool turret has 6 specifications, with each having both 8 and 12 stations.

Order No.	400-1060	400-1061	400-1062	400-1063	400-1064	400-1065
Center Height	63mm	80mm	80mm	100mm	100mm	125mm
Station Numbers	6	8	12	8	12	8
30°position change and clamping time	/	0.58	0.5	0.8	0.68	0.95
30°position change	1	0.19	0.16	0.27	0.22	0.32
45°position change and clamping time	0.32	0.67	0.58	0.95	0.79	1.1
45°position change	0.84	0.29	0.25	0.4	0.34	0.47
180°position change and clamping time	1.78	1.54	1.33	2.15	1.8	2.5
Max. unbalanced load torque	10N.m	15N.M	15Nm	40Nm	40NM	60NM
Angular index accuracy	+/-6"					
Repeatability	+/-2"					
Weight	30kg	40kg	40KG	120kg	120kg	160KG

Order No.	400-1066	400-1067	400-1068	400-1069	400-1070
Center Height	125mm	160mm	160mm	200mm	200mm
Station Number2	12	8	12	8	12
30°position change and clamping time	0.8	1.5	0.9	1.8	1.02
30°position change	0.27	0.5	0.3	0.62	0.34
45°position change and clamping time	0.95	1.75	1.06	2.1	1.19
45°position change	0.4	0.75	0.45	0.9	0.5
180°position change and clamping time	2.15	4	2.44	5.23	2.7
Max. unbalanced load torque	60NM	160NM	160NM	470NM	470NM
Angular index accuracy	+/-6"				
Repeatability	+/-2"				
Weight	160kg	380kg	380kg	500kg	500KG

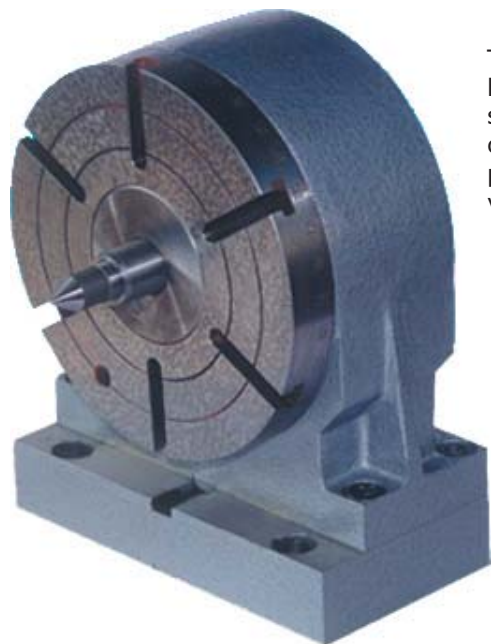
NC TOOL TURRENT

The NC tool turrents index with servo motor, clamp and unclam with oil and rotate without lifting. Minutely orientating with a face gear, they rotate in two sides and choose tool in the shortest distance. It features high accuracy, reliability, more load and wide application.



Order No.	400-1073	100-1074
Center Height	80mm	100mm
Station Numbers	8 or 12	8 or 12
30° position change and clamping time	.58s	.45s
30° position change	.20s	.15s
45° position change and clamping time	.67s	.50s
45° position change	.29s	.2s
180° position change and clamping time	1.54s	1s
Max. unbalanced load torque	15N.M	40NM
Angular index accuracy	+/-6"	
Repeatability	+/-2"	
Index Frequency	750times/hour	
Max. Rotary Initial	1.3kgm	45kgm
Max. Load	40kg	120kg
Controll Pressure	3.5MPa	3.5MPa

NC TAILSTOCK



The NC rotary tailstock is one of the accessories for the NC rotary table. It has the function of the commonly tailstock, and that can totation and clamp synchronization with the table. It applies the air pressure (or hudraulic) collets, chuck or centre to clamp the work-pisce with table, and carries out the performance: direct and indirect dividing, plate processing, plate-slotting and various cam-curring.

Order No.	400-1095	100-1096
Table Diameter	Ø250mm	Ø400mm
Center Height	160mm	260mm
Center Thru Hole Diamter	Ø70	Ø115mm
Center Bore Diameter	Ø80H7x24	Ø120H6x20
Locking Key Size	18mm	18mm
Clamping torque (0.5MPa air)	350NM	500NM
Clamping torque (1MPa Oil)	700NM	
Clamping torque (1.5MPa oil)		1500NM
Max. Load	100kg	100kg



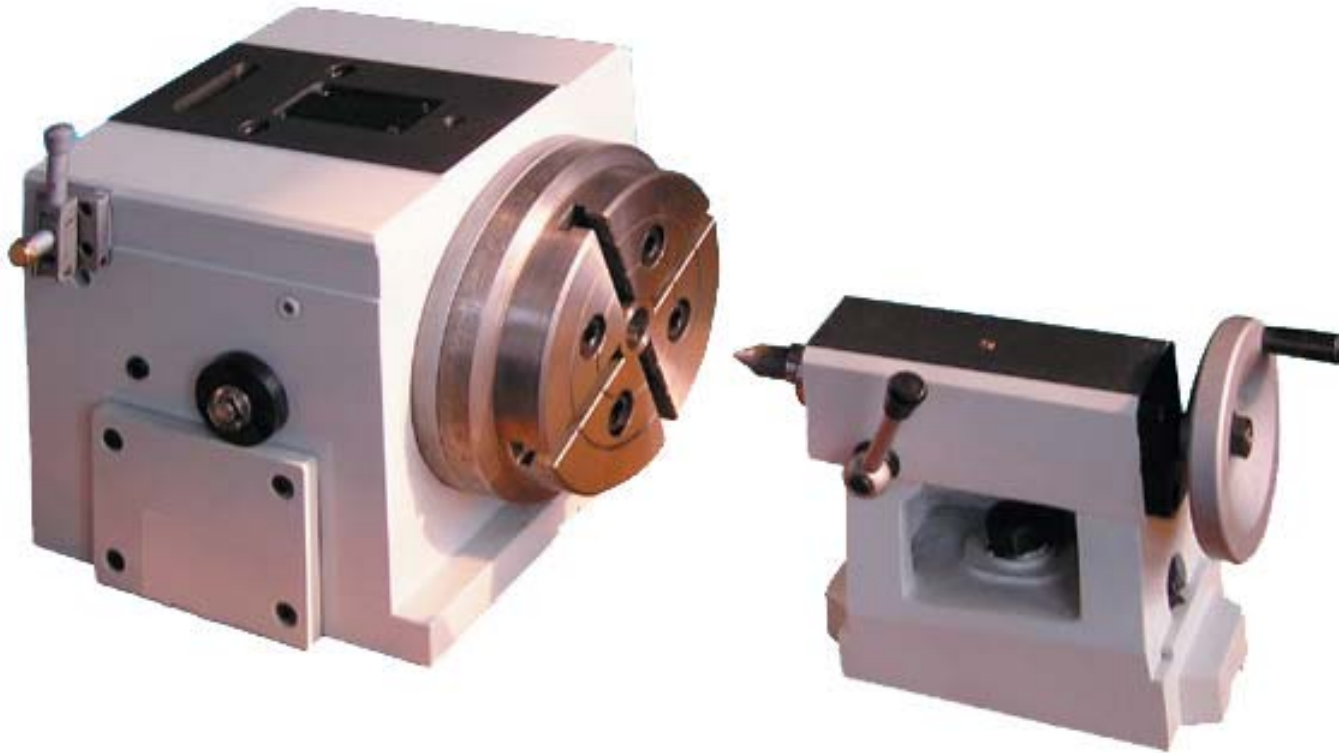
Z-AXES SETTER, INNER GAUGE TYPE

Order No.	Range	Grad.	Accuracy
102-3094	2"	0.001"	0.0006"
102-3095	50mm	0.01mm	0.015mm

NC DIVIDING HEAD

The NC dividing head is one of the main accessories for the NC machine and machining center, it can also be used as one of the main accessories of semi-auto milling machine, boring machine or other machine tool.

Connected with the CNC control device or the control system of the machine and the 4-6 bar pressure air, the NC dividing head can carry out the performance of clamping, unclamping and circular indexing at arbitrary angle for the work-piece. this product can be used vertically and horizontally.



Order No.	400-1080	400-1081	400-1082	400-1083	400-1084	400-1085	400-1086	400-1087
Center Height	110mm	110mm	110mm	125mm	125mm	140mm	145mm	150mm
Table Diameter			Ø125	Ø160				
Table T Slot Size			10H12	10H10				
Gear Ratio	1:90						1:60	
Center Bush Diameter			Ø16H7	Ø20H7				
Inde Tram Bush Diameter	Ø10H8							
Spinle Nose Mouting Size	5C 2.87"x10		Ø52H6	Ai6				
Collet	5C			3J, 5C			3J,5C	
Motor Torque	less than 2.94NM							
Air Press	0.4-0.6Mpa						0.4-0.5MPa	
Repeatability	7.5"							
Dividing Accuracy	60"						45"	
Max. Tangent Torque	90NM			120NM				
Max. Speed	11.1rpm						33.3rpm	
Max. Horizton Load	100KG	100KG	100KG	150KG	150KG	150	150	
Max. Vertical Load	50kg	50kg	50kg	80kg	80kg	80kg	80kg	
Net Weight	35KG	50KG	50KG	80KG	80kg	90kg	90kg	

NC DIVIDING HEAD

The indexers utilize a worm and worm wheel type indexing. It is an ideal accessory for NC milling machine, NC boring machine and machining center as well as for semi-automatic precision milling machine, boring machine and etc. It is designed by applying air pressure(or hydraulic)to clamp or unclamp the spindle. Matched with NC control box, servo motor and encoder, high accurate indexing to any desired angles can be done.

This indexer spindle utilizes a standard register taper. With the aid of face plate, chuck, 5c or 3j collets and tailstock, indexing and cutting for different kinds of workpieces such as long bars or shaftes can be realized.



Order No.	400-1088	400-1089
Center Height	160mm	210mm
Face Plate Diameer	Ø200mm	Ø315mm
T slot size	10H10	14H10
T slot numbers	4	4 or 8
Center Bushing Diameter	Ø25H7	Ø30H7
Indexer Tran Bushing Diameter	Ø10H7	Ø15H7
Width of locking key	18mm	22mm
Spindle Nose Size	5"	8"
Collet	3J	
Total Reduction Ratio	1:180	1:180
Air (Hydraulic) Press	0.5MPa	
Servo Motor	0.8KW (6Nm)	1.1KW (12Nm)
Max. Tanget Torque	300Nm	380Nm
Repeatability	5"	5"
Divinding Accuracy	30"	30"
Max. Speed	11.1rpm	11.1rpm
Net Weight	132kg	260kg
Max. Workload	120kg	175kg

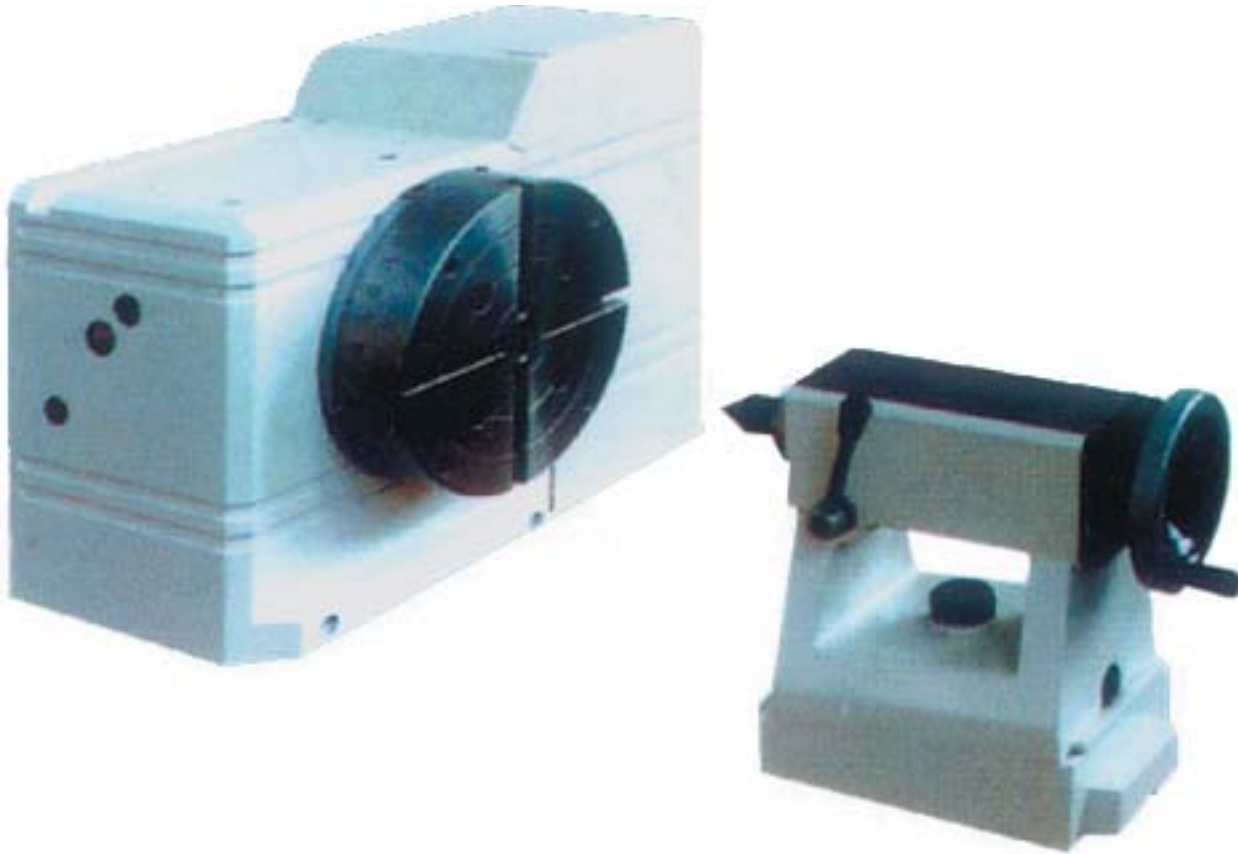
Z-AXES SETTER, BACK INSERT TYPE

Order No.	Range	Grad.	Accuracy
102-3096	2"	0.001"	0.0006"
102-3097	50mm	0.01mm	0.015mm



NC DIVIDING HEAD

The NC dividing head is the necessary accessories for the NC milling machine, boring machine and other machine tools as well. The FK series NC products can be mounted on the table of machine tool by both horizontal and vertical ways. They can be mounted on the table of machine tool by both horizontal and vertical ways. The clamping power is supplied by both hydraulic and pneumatic way. While the spindle unclamped, the NC controlling system can realized the dividing works for the multiple of 5degree through the driving of the servo motor and the feedback of the encoder.

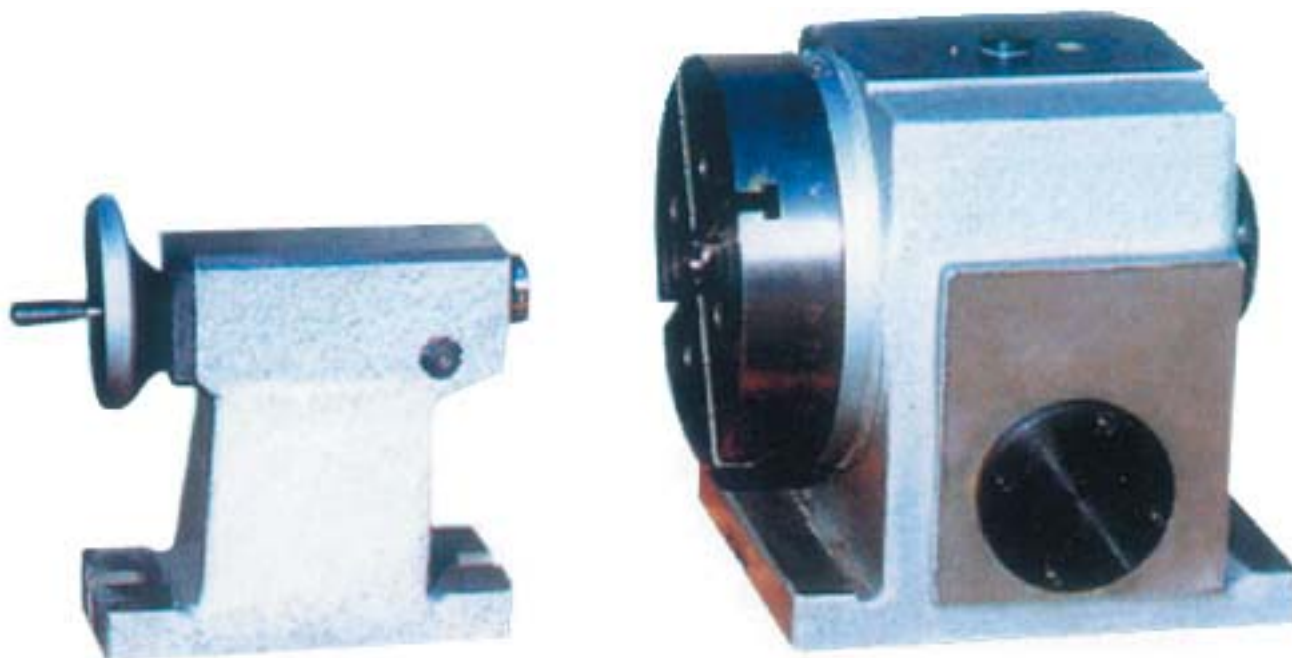


Order No.	400-1090	400-1091	400-1092
Center Height	140mm	175mm	220mm
Face Plate Diameer	Ø160mm	Ø200mm	Ø315mm
T slot size	10H10	10H10	14H10
T slot numbers	4	4	6
Center Bushing Diameter	Ø20H7	Ø25H7	Ø30H7
Indexer Tran Bushing Diameter	Ø10H7	Ø10H7	Ø15H7
Width of locking key	18mm	18mm	18mm
Teeth No. of Gear Coupling	72	72	72
Angle of Equal Dividing	5 degree		
Air (Hydraulic) Pressure	0.5-0.7MPa/0.5-7MPa		
Servo Motor	0.3KW		
Max. Tanget Torque	300Nm	380Nm	
Repeatability	3"	3"	3"
Divinding Accuracy	10"		
Net Weight	50kg	75kg	150kg
Max. Workload	100kg	125kg	350kg

NC DIVIDING HEAD

The index is designed to utilize a three-piece precision face gear coupling. It is an ideal accessory for NC boring machine and machining center as well as semi-automatic precision milling machine, boring machine and etc. because of the preset function control used for the indexer, high accurate positioning can be carried out by 5° increment. The indexing is realized by applying air pressure.

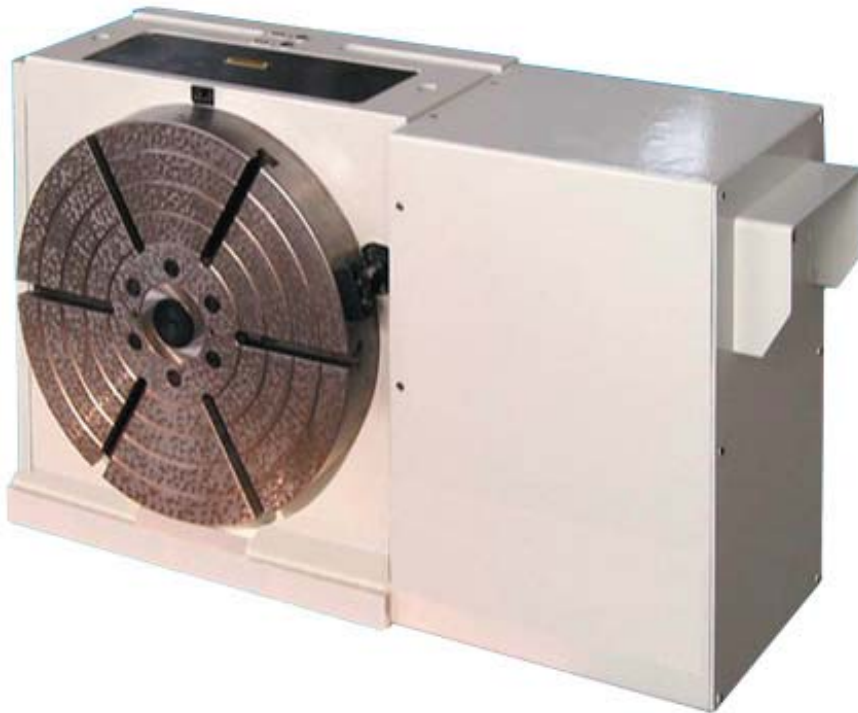
The spindle nose has a standard register taper. The workpieces mounted on the face plate can be easily positioned and finished. If a chuck with short taper recess is fitted onto the spindle nose, larger or longer bars can be held. When using 5C or 3J collet in the spindle bore, smaller or shorter hard draw bars can be held for machining. With the help of centers on indexer and tailstock, cutting of long shaft can be performed.



Order No.	400-1093	400-1094
Center Height	160mm	200mm
Face Plate Diameter	Ø200mm	Ø315mm
T slot size	10H10	14H10
T slot numbers	4	4 Or 8
Center Bushing Diameter	Ø25H7	Ø30H7
Indexer Tran Bushing Diameter	Ø10H7	Ø10H7
Width of locking key	18mm	22mm
Teeth No. of Gear Coupling	72	72
Collet	3J	
Increment	5 degree	
Max. Target Torque	300Nm	380Nm
Repeatability	5"	3"
Dividing Accuracy	15"	10"
Unbalanced Error	20.7Nm	42Nm
Max. Cutting Torque	390Nm	680Nm
Max. Workload	40kg	65kg
Net Weight	95kg	239kg

HORIZONTAL & VERTICAL NC ROTARY TABLE

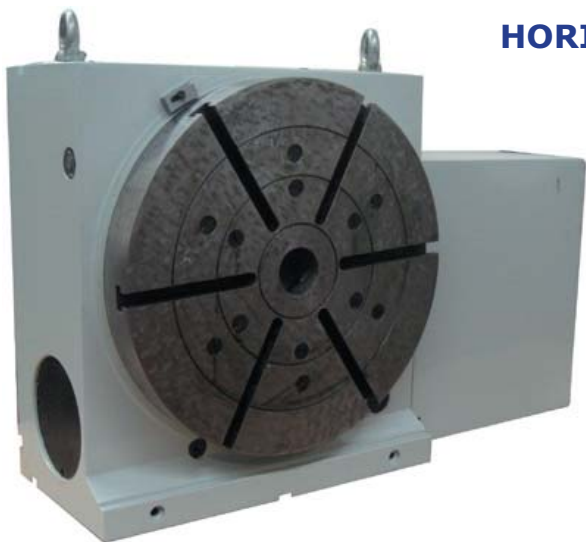
The horizontal and vertical rotary tables are for cnc milling machines, installed on the machine tables both vertically and horizontally, as the 4th axis of the CNC machines. Integrated with the proper control system of the CNC machine, these CNC rotary tables achieve equal or unequal division at any increment for hole drilling, threading, slotting and curved surfacing. The minimum division is 0.001 degree.



The servo motors, drivers vary with the control systems of the CNC milling machines and are supplied separately. Contact us for compatibility. Tailstocks are optional accessories.

Order No.		410-0228	410-0229	410-0230	410-0231	410-0232
Turntable diameter (mm)		Φ500	Φ630	Φ800	Φ1000	Φ1200
Center height (mm)		310	400	465	580	720
Total thickness(mm)		300	350	390	530	984
Center bore diameter (mm)		Φ60H6x25	Φ70H6x30	Φ135H6x35	Φ165H6x50	Φ80H7x100
Locating key size (mm)		22	22	22	22	22
T-slot size(mm)		6-18	6-18	8-18	12-22	4-28
Worm gear ratio		1:160	1:120	1:120	1:132	1:132
Total reduction ratio		1:180	1:180	1:360	1:360	1:360
Max.speed (r/min)		8.3	8.3	5.6	4.2	4.2
Table graduation angle per pulse		0.001°	0.001°	0.001°	0.001°	0.001°
Servo motor	Output power	≥1.4	≥1.4	≥3.8	≥3.8	≥5
	Torque (Nm)	≥12	≥15	≥25	≥25	≥35
Dividing accuracy		20"	20"	15"	15"	15"
Repeatability accuracy		6"	4"	4"	4"	4"
Clamp torque	Oil 15×100000Pa	750	1500	6000	Oil 35x100000Pa 7800	Oil 35x100000Pa 1000
	Air 6×100000Pa	250	500	2000		
Load capacity hor. (kg)		400	600	2000	3500	5000
Load capacity vert. (kg)		200	300	750	1500	2500
Max. inertia of vertical (kg.cm.s ²)		100	200	400	450	550
Max. torque capacity (N.m)		1700	2500	4000	5000	5500
Net weight(Kg)		680	1125	1350	2020	3000

HORIZONTAL & VERTICAL NC ROTARY TABLE



The horizontal and vertical rotary tables are for cnc milling machines, installed on the machine tables both vertically and horizontally, as the 4th axis of the CNC machines. Integrated with the proper control system of the CNC machine, these CNC rotary tables achieve equal or unequal division at any increment for hole drilling, threading, slotting and curved surfacing. The minimum division is 0.001 degree.

The servo motors, drivers vary with the control systems of the CNC milling machines and are supplied separately. Contact us for compatibility.
Tailstocks are optional accessories.

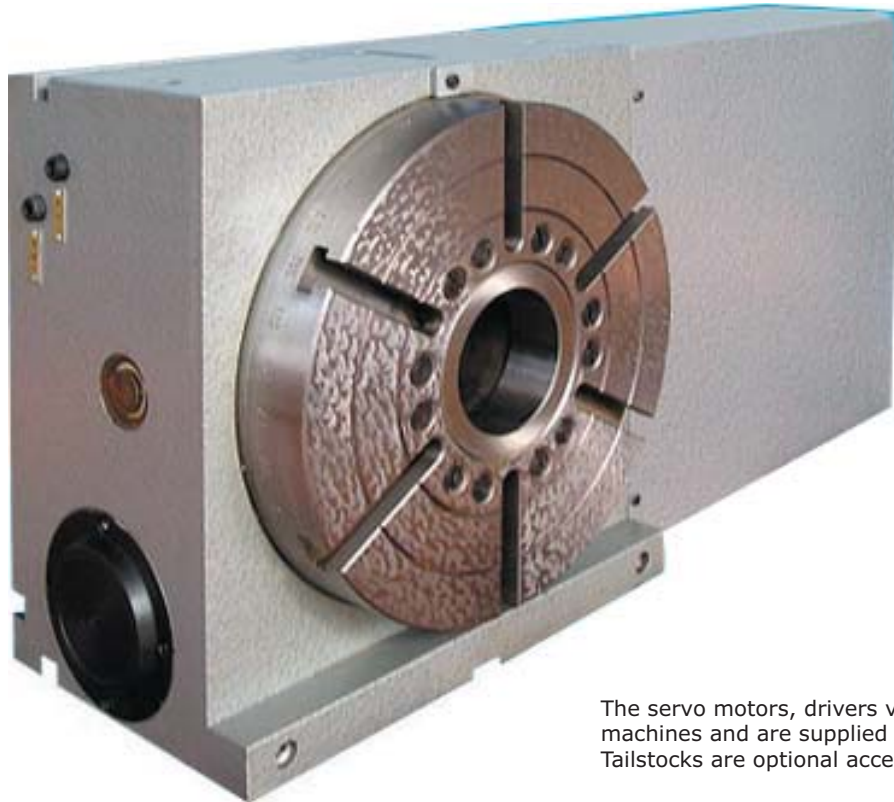
Order No.	410-0221	410-0222	410-0223	410-0224	410-0225	410-0226	410-0227	
Turntable diameter (mm)	Φ160	Φ210	Φ250	Φ315	Φ400	Φ500	Φ630	
Center height (mm)	135	140	160	210	260	310	400	
Total thickness(mm)	170	180	190	210	250	300	350	
Center bore diameter (mm)	Φ20H6	Φ25H6	Φ30H6	Φ40H6	Φ50H6	Φ60H6	Φ70H6	
Locating key size (mm)	14	14	18	18	18	22	22	
T-slot size(mm)	4-12	4-12	6-12	6-14	6-14	6-18	6-18	
Worm gear ratio	1:80	1:90	1:90	1:90	1:120	1:150	1:120	
Total reduction ratio	1:90	1:90	1:180	1:180	1:180	1:180	1:180	
Max.speed (r/min)	16.6	16.6	11.1	11.1	11.1	11.1	11.1	
Table graduation angle per pulse	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	
Servo motor	Output power	≥0.9	≥0.9	≥0.8	≥0.8	≥1.1	≥1.4	≥1.4
	Torque (Nm)	≥3	≥3	≥5	≥5	≥10	≥12	≥12
Dividing accuracy	40"	30"	30"	25"	20"	20"	20"	
Repeatability accuracy	8"	8"	6"	6"	6"	6"	4"	
Clamp torque	Oil 15×100000Pa	300	450	1000	1800	2000	2800	4000
	Air 6×100000Pa	110	150	300	500	650	800	800
Load capacity hor. (kg)	200	200	300	350	500	600	800	
Load capacity vert. (kg)	75	75	150	150	250	300	400	
Max. inertia of vertical (kg.cm.s ²)	15	15	16.4	55.4	55.4	100	200	
Max. torque capacity (N.m)	90	90	300	700	1200	1700	3000	
Net weight(Kg)	55	75	110	200	325	650	1125	

Z-AXES SETTER

Order No.	Range	Grad.	Accuracy
102-3090	2"	0.001"	0.0006"
102-3091	50mm	0.01mm	0.015mm
102-3092	4"	0.001"	0.0008"
102-3093	100mm	0.01mm	0.015mm



**HORIZONTAL & VERTICAL NC ROTARY TABLE
(with through hole)**



The horizontal and vertical rotary tables are for cnc milling machines, installed on the machine tables both vertically and horizontally, as the 4th axis of the CNC machines. Integrated with the proper control system of the CNC machine, these CNC rotary tables achieve equal or unequal division at any increment for hole drilling, threading, slotting and curved surfacing. The minimum division is 0.001 degree.

The through holes in the spindles hold long shafts. Hydraulic or pneumatic collets and lathe chucks can be mounted on these NC tables for automatic feeding and cutting .

The servo motors, drivers vary with the control systems of the CNC milling machines and are supplied separately. Contact us for compatibility. Tailstocks are optional accessories.

Order No.	410-0233	410-0234	410-0235	410-0236	410-0237	410-0238	410-0239	
Turntable diameter (mm)	Φ160	Φ210	Φ250	Φ315	Φ400	Φ500	Φ630	
Center height (mm)	135	140	160	210	260	310	400	
Total thickness(mm)	170	180	190	210	250	300	350	
Center bore diameter (mm)	Φ40H6	Φ60H6	Φ70H6	Φ90H6	Φ130H6	Φ180H6	Φ225H6	
Locating key size (mm)	14	14	18	18	18	22	22	
T-slot size(mm)	4-12	4-12	6-12	6-14	6-14	6-18	6-18	
Worm gear ratio	1:80	1:90	1:90	1:90	1:120	1:150	1:120	
Total reduction ratio	1:90	1:90	1:180	1:180	1:180	1:180	1:180	
Max.speed (r/min)	16.6	16.6	11.1	11.1	11.1	11.1	11.1	
Table graduation angle per pulse	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	
Servo motor	Output power	≥0.9	≥0.9	≥0.8	≥0.8	≥1.1	≥1.4	≥1.4
	Torque (Nm)	≥3	≥3	≥5	≥5	≥10	≥12	≥12
Dividing accuracy		40"	30"	30"	25"	20"	20"	20"
Repeatability accuracy		8"	8"	6"	6"	6"	6"	4"
Clamp torque	Oil 15×100000Pa	300	450	1000	1800	2000	2800	4000
	Air 6×100000Pa	110	150	300	500	650	800	800
Load capacity hor. (kg)		200	200	300	350	500	600	800
Load capacity vert. (kg)		75	75	150	150	250	300	400
Max. inertia of vertical (kg. cm.s2)		15	15	16.4	55.4	55.4	100	200
Max. torque capacity (N.m)		90	90	300	700	1200	1700	3000
Net weight(Kg)		55	75	110	200	325	650	1125

HIGH SPEED HORIZONTAL & VERTICAL NC ROTARY TABLE

The horizontal and vertical rotary tables are for cnc milling machines, installed on the machine tables both vertically and horizontally, as the 4th axis of the CNC machines. Integrated with the proper control system of the CNC machine, these CNC rotary tables achieve equal or unequal division at any increment for hole drilling, threading, slotting and curved surfacing. The minimum division is 0.001 degree. The through holes in the spindles hold long shafts. Hydraulic or pneumatic collets and lathe chucks can be mounted on these NC tables for automatic feeding and cutting .



The servo motors, drivers vary with the control systems of the CNC milling machines and are supplied separately. Contact us for compatibility. Tailstocks are optional accessories.

Order No.		410-0243	410-0244
Turntable diameter (mm)		Φ315	Φ400
Center height (mm)		210	260
Total thickness(mm)		210	250
Center bore diameter (mm)		Φ40H6	Φ50H6
Locating key size (mm)		18	18
T-slot size(mm)		6-14	6-14
Worm gear ratio		1:90	1:120
Total reduction ratio		1:60	1:50
Max.speed (r/min)		25	30
Table graduation angle per pulse		0.001°	0.001°
Servo motor	Output power	≥0.8	≥0.8
	Torque (Nm)	≥5	≥22.4
Dividing accuracy		25"	20"
Repeatability accuracy		6"	6"
Clamp torque	Oil 15×100000Pa	950	2000
	Air 6×100000Pa	500	700
Load capacity hor. (kg)		350	500
Load capacity vert. (kg)		150	300
Max. inertia of vertical (kg.cm.s2)		55.4	55.4
Max. torque capacity (N.m)		700	700
Net weight(Kg)		200	325

HORIZONTAL NC ROTARY TABLE

The horizontal NC rotary tables are for cnc milling machines, CNC boring and milling machines as the 4th axis of the CNC machines. Integrated with the proper control system of the CNC machine, these CNC rotary tables achieve equal or unequal division at any increment for hole drilling, threading, slotting and curved surfacing. The minimum division is 0.001 degree. The through holes in the spindles hold long shafts.



Order No.	410-0247	410-0248	410-0249	410-0250	410-0251	
Turntable Sizes (mm)	Φ520	500x600	Φ630	630x630	Φ800	
Total thickness(mm)	150	295	350	400	410	
Center bore diameter (mm)	Φ60H6	Φ60H6	Φ70H6	Φ70H6	Φ135H6	
T-slot size(mm)	6-18	6-14	6-18	5-18	8-18	
Worm gear ratio	1:160	1:160	1:120	1:120	1:120	
Total reduction ratio	1:180	1:180	1:180	1:180	1:360	
Max.speed (r/min)	11.1	11.1	11.1	11.1	5.5	
Table graduation angle per pulse	0.001°	0.001°	0.001°	0.001°	0.001°	
Servo motor (Optional)	Output power	≥2.1KW	≥2.1KW	≥2.1KW	≥2.1KW	≥3.8KW
	Required torque	22NM	12NM	12NM	12NM	22NM
Motor interface	Fanuc α12	Fanuc α12	Fanuc α12	Fanuc α12	Fanuc α12	
Dividing accuracy	15"	15"	20"	20"	15"	
Repeatability accuracy	6"	6"	4"	4"	4"	
Clamp torque	Oil 15×100000Pa	1650	2100	3000	3000	5880
	Air 6×100000Pa		700	1000	1000	1960
Load capacity hor. (kg)	500	500	2000	2000	3000	
Max. inertia of vertical (kg. cm.s2)		259	1012	1012	2449	
Max. torque capacity (N.m)	1650	1700	3000	3000	4000	
Net weight(Kg)		660	1300	1500	1450	

* The servo motors, drivers vary with the control systems of the CNC milling machines and are supplied separately. Contact us for compatibility.

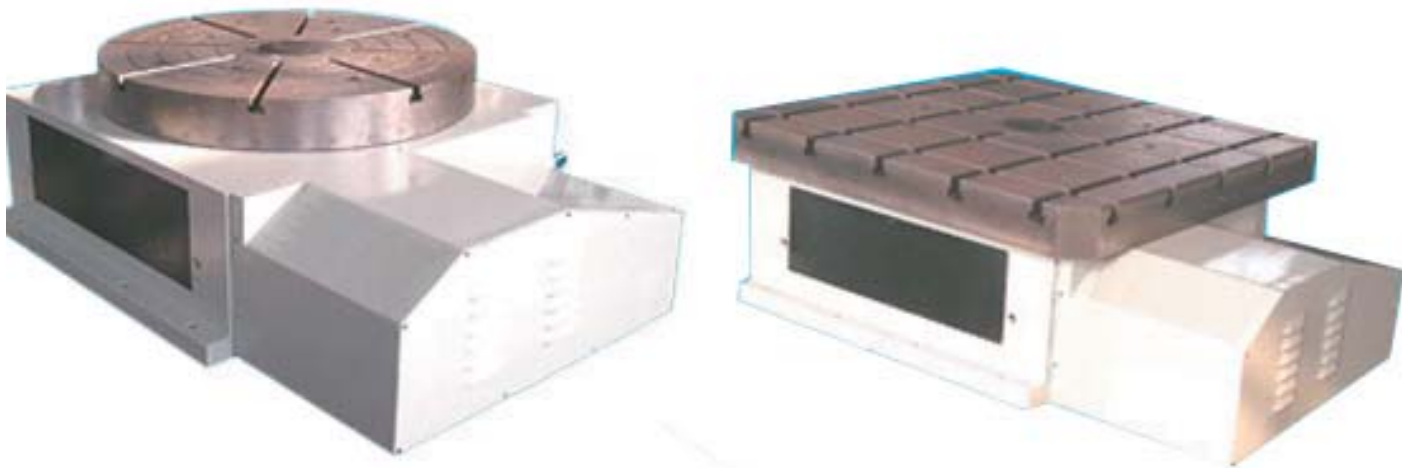
Z-AXES SETTER, OPTICAL TYPE

Order No.	Range	Accuracy
102-3098	50mm	0.015mm
102-3099	100mm	0.02mm



HORIZONTAL NC ROTARY TABLE

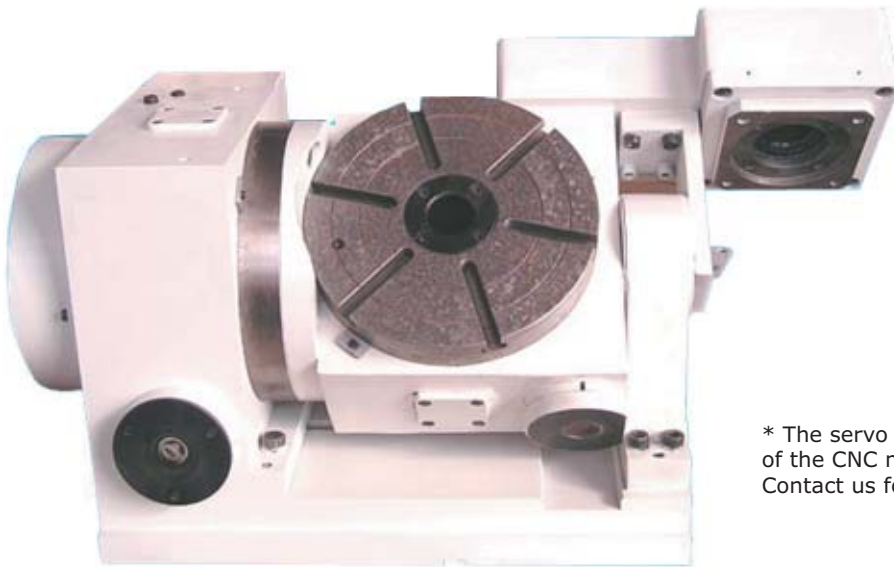
The horizontal NC rotary tables are for cnc milling machines, CNC boring and milling machines as the 4th axis of the CNC machines. Integrated with the proper control system of the CNC machine, these CNC rotary tables achieve equal or unequal division at any increment for hole drilling, threading, slotting and curved surfacing. The minimum division is 0.001 degree. The through holes in the spindles hold long shafts.



Order No.		410-0252	410-0253	410-0254	410-0255	410-0256
Turntable Sizes (mm)		Φ1000	Φ1200	Φ1600	Φ2000	Φ2500
Total thickness(mm)		410	410	460	500	510
Center bore diameter (mm)		Φ135H6	Φ135H6	Φ150H6	Φ150H6	Φ150H6
T-slot size(mm)		8-18	8-22	16-22	16-22	16-22
Worm gear ratio		1:120	1:120	1:180	1:180	1:180
Total reduction ratio		1:360	1:360	1:720	1:540	1:540
Max.speed (r/min)		5.5	3.7	2.7	3.7	3.7
Table graduation angle per pulse		0.001°	0.001°	0.001°	0.001°	0.001°
Servo motor (Optional)	Output power	≥3.8KW	≥3.8KW	≥11.3KW	≥11.3KW	≥11.3KW
	Required torque	22NM	22NM	36NM	36NM	36NM
Motor interface		Fanuc α12	Fanuc α12	Simens 1FK6103	Simens 1FK6103	Simens 1FK6103
Dividing accuracy		15"	15"	15"	15"	15"
Repeatability accuracy		4"	4"	4"	4"	4"
Clamp torque	Oil 15×100000Pa	6000	6150	11760	14700	17640
	Air 6×100000Pa	2000	2050	3920	4900	5880
Load capacity hor. (kg)		3200	3200	8000	10000	12000
Max. inertia of vertical (kg. cm.s ²)		4082	6428	26122	51020	95664
Max. torque capacity (N.m)		4000	4000	6000	6000	6000
Net weight(Kg)		1660	1920	5200	6500	8600

* The servo motors, drivers vary with the control systems of the CNC milling machines and are supplied separately. Contact us for compatibility.

TILTING NC ROTARY TABLE



The tilting NC rotary table is controlled by two-coordinate control system of either the main CNC machine or separate two coordinate control system. It can serve as the 4th and 5th axis of the CNC machine for hole drilling, slot cutting, curved lines and surface cutting at any angles. The tables can also be used on conventional drilling, milling and boring machines for work dividing.

* The servo motors, drivers vary with the control systems of the CNC milling machines and are supplied separately. Contact us for compatibility.

Order No.			410-0200	410-0201	410-0202	410-0203	410-0204
Table Diameter (mm)			170	250	320	400	500
Table Height (Horizontal) mm			246.5	315	346	420	570
Table Center Hight (mm)			150	225	235	290	390
Bore Diamter (mm)			φ35H7	φ40H7×12	φ100H6×25	φ130H6×20	φ180H620
T slot size (mm)			12	12	14	14	18
Locating Key Size (mm)			18	18	18	18	18
Rotary Worm Gear Ratio			1:80	1:90	1:90	1:120	1:150
Rotary Worm Ratio			1:180	1:180	1:180	1:180	1:180
Tilting Worm Ratio			1:80	1:90	1:90	1:120	1:150
Total Tilting Ratio			1:180	1:180	1:180	1:180	1:180
Max speed (r/min)			11.1	11.1	11.1	11.1	11.1
Servo Motor Power	Rotary	Panasonic MSMA082A1C/G			α6	α12	α12
	Tilting						
Servo Motor Torque	Rotary	2.4	6	6	12	12	
	Tilting	6.36	6	6	12	12	
Min. Increment			0.001°	0.001°	0.001°	0.001°	0.001°
Tilting Range			0-90°	0°-90°	0-90°	0-90°	-20°-120°
Table Clamping Torque			Gas 5×100000Pa 200Nm	Oil 15×100000Pa 180Nm	Oil 15×100000Pa 1500Nm	Oil 15×100000Pa 2000N.m	Oil 15×100000Pa 2800Nm
				Gal 5×100000Pa 350Nm			
Tilting Clamping Torque N.m			Gas 5×100000Pa 260Nm	Oil 15×100000Pa 180Nm	Oil 15×100000Pa 2100NM	Oil 15×100000Pa 3000NM	Oil 15×100000Pa 3800NM
				Gas 5×100000Pa 350NM			
Rotary	Divding Accuracy	≤30"	≤30"	≤25"	≤20"	≤20"	
	Repeatablity	≤6"	≤6"	≤6"	≤6"	≤6"	
Tilting	Divding Accuracy	≤60"	≤60"	≤45"	≤45"	≤45"	
	Repeatablity	≤10"	≤10"	≤10"	≤10"	≤10"	
Max Load (kg)	Horizontal	50	100	150	200	400	
	Tilting	25	75	100	150	200	
Table Weight (kg)			320	450	450	600	

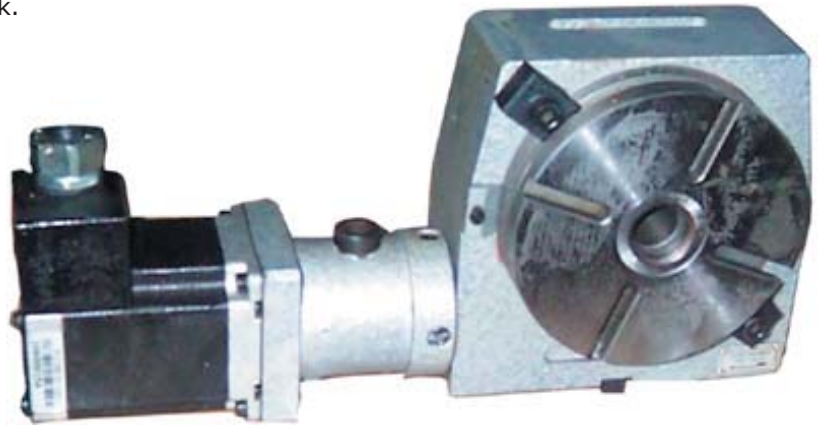
NC HORIZONTAL AND VERTICAL ROTARY TABLE

- * The NC rotary table is run with step motor and serves as the 4th axis of a CNC milling machine.
- * Tailstock is provided to support horizontal work.
- * 4th axis control is not included.

Specifications

Table Dia.: 100mm
Locking Key Width: 10mm
Center Height: 70mm
Overall Size: 125x125x70mm
Table Slot: 6mm (4)
Center Bore: 2MT
Bore Diameter: 20mmx8
Gear Ratio: 1:72
Vernier: 10"
Index Accuracy: 120"

Order No. 410-0257

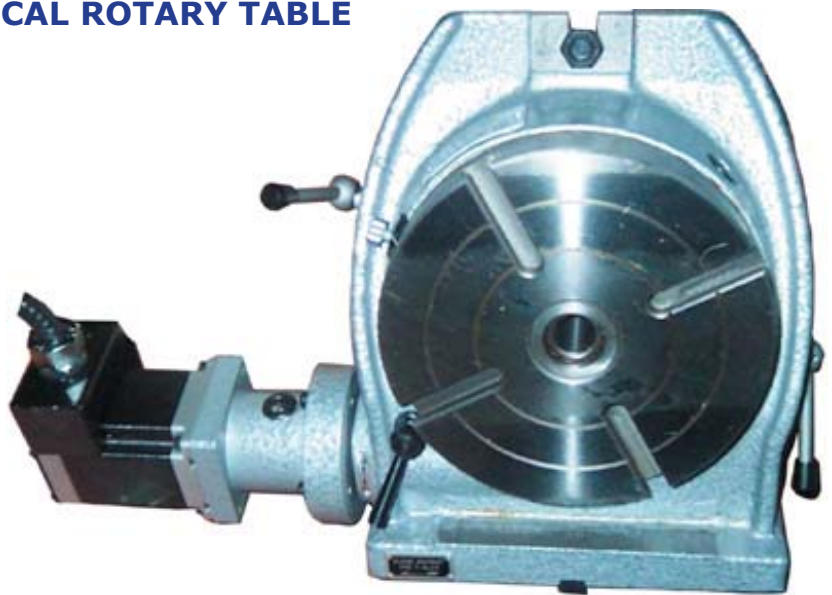


NC HORIZONTAL AND VERTICAL ROTARY TABLE

Specifications:

Table diameter: 160 mm
Taper of center hole: 2MT
Width of T-slot: 10 mm
Adjacent angle of T-slot: 90°
Width of locating key: 14mm
Worm ratio: 90:1
Graduation/vernier: 1° / 10"
Angle per full step: 0.02°
Motor Steps: 200/rev
Motor Winding: 2 phase
Motor Inductance: 5.73 mH
Motor Resistance: 1.34Ω
Motor phase current: 2.8 A
Motor holding torque: 1.9 Nm
Motor Shaft: 1/4"

Order No. 410-0258



NC HORIZONTAL AND VERTICAL ROTARY TABLE

Specifications:

Table diameter: 200 mm
Taper of center hole: 3MT
Width of T-slot: 12 mm
Adjacent angle of T-slot: 90°
Width of locating key: 14mm
Worm ratio: 90:1
Graduation/vernier: 1° / 10"
Angle per full step: 0.02°
Motor Steps: 200/rev
Motor Winding: 2 phase
Motor Inductance: 3.5 mH
Motor Resistance: 0.42Ω
Motor phase current: 5.5 A
Motor holding torque: 4.6 Nm
Motor Shaft: 1/2"

Order No. 410-0259



HORIZONTAL ROTARY TABLE

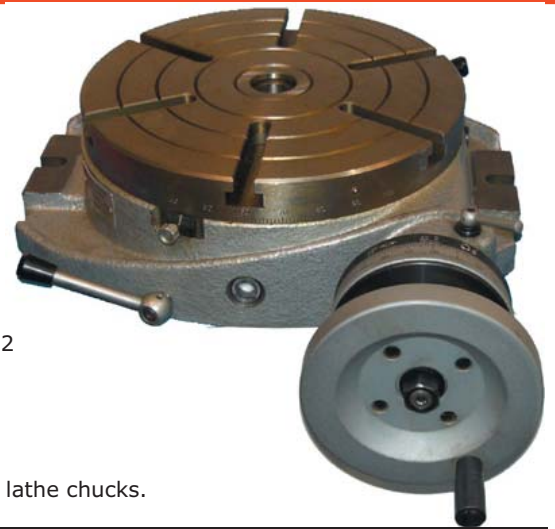
- *10" vernier.
- *90:1 Gear Ratio.
- *Low profile.
- *Hardened and ground worm gear.
- *360° scale graduated rotary table.
- *For indexing, circular milling, angle setting, milling and boring.

The horizontal rotary tables are mostly used on milling machines for indexing, drilling, end milling, angle setting, boring, circular cutting etc.

- * With the optional dividing plate, division from 2 to 66 at 1 increment, 67 to 132 at 2, 3 or 5 increment can be achieved.
- * With the optional 3 jaw self-centering chuck and adaptors, round work pieces can be quickly mounted to the rotary table .

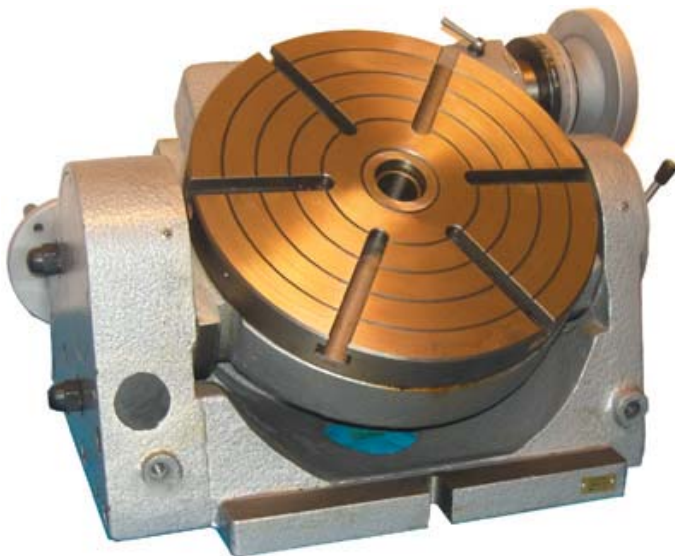
Standard kit: 2 T nuts and bolts set.

Optional Accessories: Dividing plate, adaptors for lathe chuck, 3-jaw or four jaw lathe chucks.



Order No.	410-0106	410-0108	410-0110	410-0112	410-0116	410-0120	410-0125	410-0132	410-0133
Table Dia.	160mm	200mm	250mm	320mm	400mm	500mm	630mm	800mm	1000mm
Overall Length	260mm	290mm	330mm	410mm	530mm	640mm	820mm	1000mm	1170mm
Width	196mm	236mm	286mm	360mm	450mm	560mm	700mm	890mm	1080mm
Locking Key Width	12mm	14mm	14mm	18mm	18mm	22mm	22mm	22mm	
Thickness	75mm	80mm	90mm	110mm	140mm	159mm	160mm	215mm	250mm
T Slot Width	12mm	14mm	14mm	16mm	16mm	20mm	20mm	30mm	
T Slot Nos.	4	4	6	6	6	8	8	8	8
Center Bore	2MT	3MT	3MT	4MT	4MT	5MT	5MT	6MT	6MT
Bore Diameter	25mmx6	30mmx6	30mmx6	40mmx10	40mmx10	50mmx12	50mmx12	75mmx14	75mmx14
Gear Modules	1.5	1.75	2	2.5	3.5	3.5	4.5	5.5	5.5
Gear Ratio	1:90	1:90	1:90	1:90	1:120	1:120	1:120	1:120	1:120
Vernier	10"	10"	10"	10"	10"	10"	10"	10"	10"
Index Accuracy	80"	60"	60"	60"	60"	60"	60"	60"	60"
Max. Load	100kg	150kg	200kg	250kg	300kg	550kg	700kg	1250kg	2000kg
Table Weight	16.5kg	22.5kg	33.5kg	65kg	125kg	215kg	345kg	800kg	1300kg

TILTING ROTARY TABLE



- *10" vernier.
- *90:1 Gear Ratio.
- *Low profile.
- *Hardened and ground worm gear.
- *360° scale graduated rotary table.
- *For indexing, circular milling, angle setting, milling and boring.
- * Tilt to any position from 0 to 90 degree and locked.

Standard kit: 2 T nuts and bolts set.

Optional Accessories: Dividing plate, adaptors for lathe chuck, 3-jaw or four jaw lathe chucks.

- * With the optional dividing plate, division from 2 to 66 at 1 increment, 67 to 132 at 2, 3 or 5 increment can be achieved.
- * With the optional 3 jaw self-centering chuck and adaptors, round work pieces can be quickly mounted to the rotary table .

Order No.	Table Dia.	Base Dimension	Center Height	Table Height	Center Bore
410-0210	250mm	310x252	140mm	205mm	3MT
410-0212	320mm	310x252	140mm	205mm	3MT
410-0216	400mm	500x500	217mm	320mm	4MT

HORIZONTAL AND VERTICAL ROTARY TABLE

The horizontal and vertical rotary tables are mostly used on milling machines for indexing, drilling, end milling, angle setting, boring, circular cutting etc. With the support of a tailstock, workpieces can be held between the centers for periphery dividing, milling and drilling.

With the optional dividing plate, division from 2 to 66 at 1 increment, 67 to 132 at 2, 3 or 5 increment can be achieved.

With the optional 3 jaw self-centering chuck and adaptors, round work pieces can be quickly mounted to the rotary table .

*10" vernier.

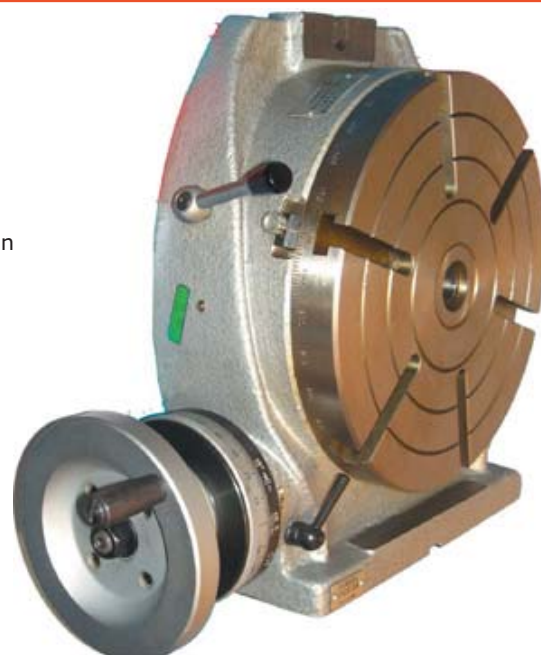
*90:1 Gear Ratio.

*Low profile.

*Hardened and ground worm gear.

*360° scale graduated rotary table.

*For indexing, circular milling, angle setting, milling and boring.



Standard kit: 4 T nuts and bolts set.

Optional Accessories:

Dividing plate

adaptors for lathe chuck

3-jaw or four jaw lathe chucks

Tailstock

Solid Center

Order No.	410-0004	410-0006	410-0008	410-0010	410-0012	410-0016
Table Dia.	100mm	160mm	200mm	250mm	320mm	400mm
Locking Key Width	10mm	12mm	14mm	14mm	18mm	18mm
Center Height	70mm	125mm	150mm	170mm	210mm	260mm
Overall Height	125mm	242mm	285mm	328mm	410mm	525mm
Width	125mm	196mm	236mm	286mm	360mm	450mm
Thickness	70mm	85mm	100mm	110mm	120mm	150mm
Table Slot	6mm	10mm	12mm	12mm	14mm	14mm
Slot Nos.	4	4	4	6	6	6
Center Bore	2MT	2MT	3MT	3MT	4MT	4MT
Bore Diameter	20mmx8	25mmx6	30mmx6	30mmx6	40mmx10	40mmx10
Gear Module	1	1.5	1.75	2	2.5	3.5
Gear Ratio	1:72	1:90	1:90	1:90	1:90	1:90
Vernier	10"	10"	10"	10"	10"	10"
Index Accuracy	120"	80"	60"	60"	60"	60"
Max Horizontal Load	20kg	100kg	150kg	200kg	250kg	300kg
Max Vertical Load	10kg	50kg	75kg	100kg	125kg	150kg
Table Weight	7kg	23kg	32kg	46kg	77kg	150kg

AJUSTABLE TAILSTOCK

The tailstocks work with vertical rotary table, indexers for holding center shafts, cylinders, solid centers, and workpieces for cutting of grooves, splines, flats, keyways etc. The center height and the axis are adjustable. The centers are retracetable for repeated operations. Centers are securely locked with clamps.



Order No.	410-0030	410-0031	410-0032	410-0033
Center Height	80-100mm	100-140mm	140-180mm	180-224mm
Quill Taper			MT2	MT2
Locating key	12mm	14mm	14mm	18mm
Tilting Angle of Center Axis	+/- 11 degrees			
Travel of Center	25mm			
Weight	6kg	8kg	14.5kg	16.5kg
Shipping Size	26x23x19cm	28x23x19cm	35x31x22cm	40x31x22cm
For tables and indexes	410-0405	410-0006	410-0008 410-0010	410-0012

HORIZONTAL AND VERTICAL ROTARY TABLE

The horizontal and vertical rotary tables are mostly used on milling machines for indexing, drilling, end milling, angle setting, boring, circular cutting etc. With the support of a tailstock, workpieces can be held between the centers for periphery dividing, milling and drilling.

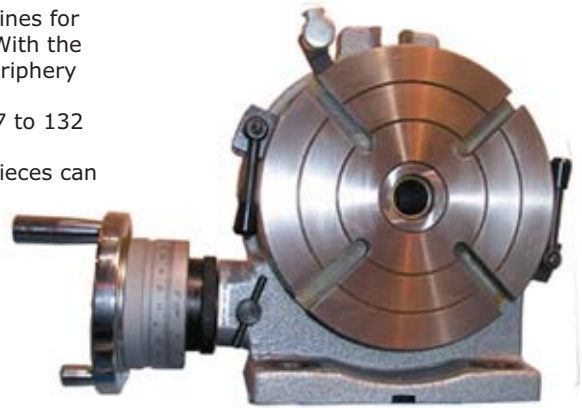
With the optional dividing plate, division from 2 to 66 at 1 increment, 67 to 132 at 2, 3 or 5 increment can be achieved.

With the optional 3 jaw self-centering chuck and adaptors, round work pieces can be quickly mounted to the rotary table .

Standard kit: 4 T nuts and bolts set.

Optional Accessories:

- Dividing plate
- adaptors for lathe chuck
- 3-jaw or four jaw lathe chucks
- Tailstock
- Solid Center



Order No.	410-0308	410-0310	410-0312	410-0316	410-0320
Table Dia.	200mm	250mm	320mm	400mm	500mm
Locking Key Width	16mm	16mm	16mm	18mm	18mm
Center Height	135mm	165mm	195mm	260mm	286mm
Overall Height	265mm	325mm	388mm	525mm	617mm
Width	220mm	280mm	330mm	450mm	586mm
Thickness	100mm	115mm	135mm	150mm	175mm
Table Slot	12mm	12mm	14mm	14mm	20mm
Slot Nos.	4	6	6	6	8mm
Center Bore	3MT	3MT	4MT	4MT	4MT
Bore Diameter	30mmx6	30mmx6	40mmx10	40mmx10	50mmx15
Gear Module	1.5	2	2.5	3.5	3.5
Gear Ratio	1:90	1:90	1:90	1:90	1:90
Vernier	10"	10"	10"	10"	10"
Index Accuracy	80"	60"	60"	60"	60"
Max Horizontal Load	150kg	200kg	250kg	300kg	550kg
Max Vertical Load	75kg	100kg	125kg	150kg	275kg
Table Weight	27kg	43kg	67kg	130kg	225kg

POWER-OPERATED HORIZONTAL ROTARY TABLE

The power-operated rotary tables are one of the main accessories for milling machines, drilling machine, planning machines. They can be power operated and manually operated as well. Drilling, milling, circular cutting, curved surface cutting, straight line cutting etc. can be performed with these rotary tables.

Optional accessories:

- Dividing plate
- Flange for lathe chuck
- Lathe chuck

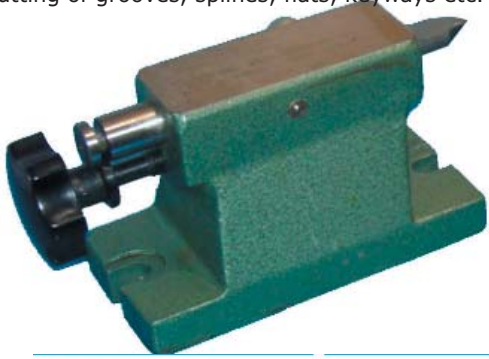


Order No.	410-0018	410-0019
Table Diameter	Φ320	Φ400
Bore Taper	MT4	MT4
Bore Diameter	Φ40	Φ40
Table Slot	14mm	14mm
Locating Key	18mm	18mm
Gear Module	2.5	2.5
Gear Ratio	1:90	1:90
Vernier	10"	10"
Index accuracy	60"	60"
Weight	83kg	145kg
Shipping Weight	100kg	165kg
Shipping Size	69x53x25cm	82x64x28cm

MACHINE ACCESSORIES

TAILSTOCK

The tailstocks work with vertical rotary table, indexers for holding center shafts, cylinders, solid centers, and workpieces for cutting of grooves, splines, flats, keyways etc.



Order No.	410-0027	410-0028	410-0029
Center Height	70mm	125mm	260mm
Quill Taper		MT2	MT3
Locating key	10mm	12mm	18mm
Tilting Angle of Center Axis	+/- 11 degrees		
Travel of Center	12MM	30MM	30MM
Weight	2.5kg	9kg	28kg
Shipping Size	20X12X20CM	32X16X22CM	38X36X26CM
For tables and indexes	410-0004	410-0006	410-0016



DIVIDING PLATES

All divisions of 2 to 66, and all 67-132 divisible by 2, 3 and 5 can be achieved accurately and easily with the help of these dividing plates. ssss is a simple dividing plate for dividing at 30' increment only.

Order No.	Table Size	Hole Numbers
410-0021	For rotary table 160mm to 400mm	A: 34,37,38,39,41,43,44,50,52,56,61 B: 46,47,49,51,53,54,57,58,59,62,64
410-0022	For rotary table 500mm 1000mm	A: 33,34,37,38,39,41,43,44,50,52,56,61 B: 46,47,49,51,53,54,57,58,59,62,63,64
410-0023	For 100MM table size	10 Holes for dividing at 30' increment

COMPOUND SLIDE TABLE WITH 360 SWIVEL BASE



Order No. 410-0020

Table Size: 254x444mm
 Thickness of cross slide table: 153mm
 Table traverse travel: 114mm to both sides
 Table cross travel: 76mm to both sides.
 Table T slot size: 5/8"
 Distance between T slots: 80mm
 Minimum dial reading: 0.001"
 Max working force on the table: 700kg
 Table squareness: 0.03mm
 Squareness of cross table to longitudinal talbe:
 0.03mm/100mm
 Parallelism of table surface to bottom: 0.05mm
 Run-out of the table surface to bottom: 0.08mm
 Linear positioning accuracy: 0.05mm/100mm
 Repetability: 0.02mm
 Weight: 70kg

5C COLLET HORIZONTAL AND VERTICAL INDEX

- *Hardened and ground spindle with 2-1/4"-8TPI thread.
- *Rapid collet opening and closing.
- *Single lever action indexing mechanism.
- *24 position index plate in 15 increments

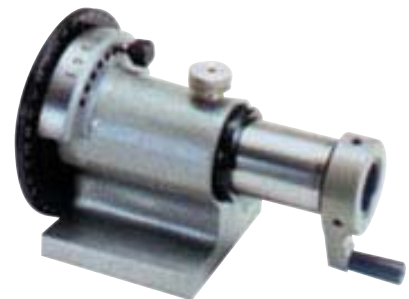
Specification:

Spindle concentricity:0.0004"
 Spindle centerline parallelis:0.0008"
 Surface to base squareness:0.0008"
 Center slot to spindle concentricity:0.0008"
 Lateral offset of center slot to spindle:0.0008"
 Cylindrical center bore concentricity (per 1"):0.0008"



Order No. 410-0405

5C SPIN INDEX FIXTURE



- *Accept 5C collets up to 1-1/8" capacity.
- *Hardened and precision ground spindle.
- *Precision ground 36 position index plate.
- *0.0004" spindle concentricity.

Order No. 410-0406

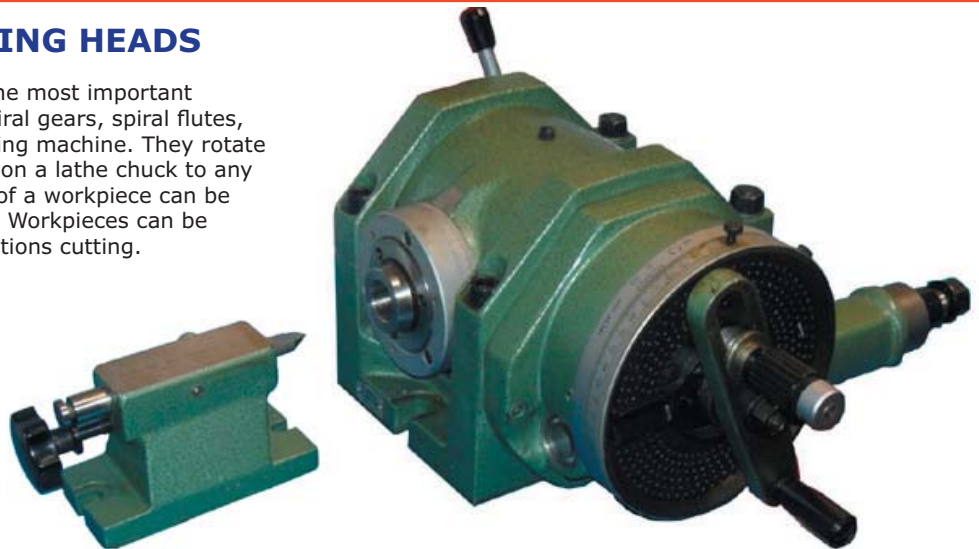
UNIVERSAL DIVIDING HEADS

The universal dividing head are one of the most important accessories to cut flutes, spur gears, spiral gears, spiral flutes, archimedean cams, helical flutes on milling machine. They rotate the workpieces held between centers or on a lathe chuck to any angle as desired and the circumference of a workpiece can be divided into any divisions of equal parts. Workpieces can be mounted on the face plate for multi-positions cutting.

Standard Accessories:

- Tailstock
- Jack
- Solide center
- Carrier
- Dividing Plate
- Adaptor for lathe chuck
- 3-jaw chuck

* Face plate is optional



Order No.	410-0407	410-0408	410-0409	410-0410
Center height (mm)	80	100	125	160
Dia. of spindle nose taper (mm)	36.541	41.275	53.975	53.975
Width of locating key (mm)	14	14	18	18
Upward swivel angle of spindle from its Hor. Position	0~6°	0~5°	0~5°	0~5°
Downward swivel angle of spindle from its Hor. Position	0~90°	0~95°	0~95°	0~95°
Worm gear ratio	1:40	1:40	1:40	1:40
Taper of spindle bore	3MT	3MT	4MT	4MT
Min. readout of vernier	10"	10"	10"	10"
Spindle Rotation Angle per revolution of dividing handle	9 °	9 °	9 °	9 °
Index error for one complete revolution of dividing handle	60"	+/-45"	+/-45"	+/-45"
Accumulative Error at 1/4" any 1/4" periphery of spindle	+/-1 minute	+/-1 minute	+/-1 minute	+/-1 minute
Max. bearing (Kg)	80	100	130	130
Holes of Index Plate	Side I	24,25,28,30,34,37,38,39,41,42,43		
	Side II	46,47,49,51,53,54,57,58,59,62,66		
Change Gears	Module	1.5		2
	Teeth Numbers	25,30,35,40,50,55,70,80,90,100		
Net weight (Kg)	36	67	86	130
Gross weight (Kg)	42	79	126	149
Case dimensions (mm)	542x403x220	616x465x265	635x530x310	710x535x342

HORIZONTAL/VERTICAL SUPER SPACE INDEXER



- *Surface squareness: 0.0006".
- *Radius spindle run-out: 0.0004".
- *Parallelism between the spindle supporting surface and base: 0.0006".
- *24 division index plates hardened and ground.
- *Axial spindle supporting surface run-out: 0.0006".
- *For milling, drilling, boring, slotting and tool grinding.
- *360 graduated satin-chrome ring with 10" adjustable vernier.

Order No.	410-0403	410-0404
Center Height	130mm	150mm
Spindle Bore Dia.	Φ80	Φ119.774
Divisions	2,3,4,6,8,12,24	
Gear Ratio	1:90	1:90
Locating key size	16mm	16mm
Lathe Chuck Size	167mm	210mm
Index Accuracy	25"	25"

MACHINE ACCESSORIES

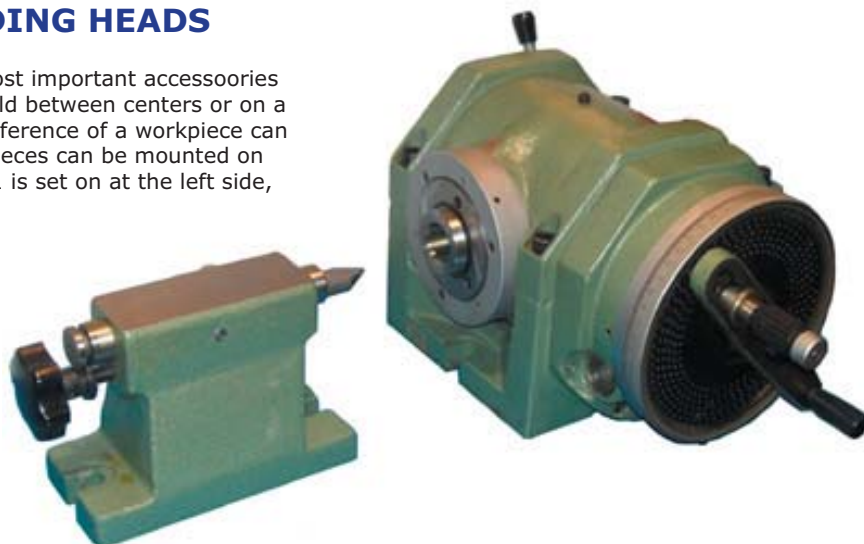
SEMI-UNIVERSAL DIVIDING HEADS

The semi universal dividing head are one of the most important accessories for milling machine. They rotate the workpieces held between centers or on a lathe chuck to any angle as desired and the circumference of a workpiece can be divided into any divisions of equal parts. Workpieces can be mounted on the face plate for multi-positions cutting. 410-0411 is set on at the left side, while the others at the right sides.

Standard Accessories:

Tailstock
Jack
Solide center
Carrier
Dividing Plate
Adaptor for lathe chuck
3-jaw chuck

* Face plate is optional



Order No.	410-0411	410-0412	410-0413	410-0414
Center height (mm)	80	100	125	160
Dia. of spindle nose taper (mm)	36.541	41.275	53.975	53.975
Width of locating key (mm)	14	14	18	18
Upward swivel angle of spindle from its Hor. Position	0~6 °	0~5°		
Downward swivel angle of spindle from its Hor. position e)	0~90°	0~95°		
Worm gear ratio	1:40	1:40	1:40	1:40
Taper of spindle bore	3MT	3MT	4MT	4MT
Min. readout of vernier	10"	10"	10"	10"
Spindle Rotation Angle per revolution of dividing handle	9 °			
Index error for one complete revolution of dividing handle	60"	+/-45"	+/-45"	+/-45"
Accumulative Error at 1/4" any 1/4" periphery of spindle	+/-70"	+/-1 minute	+/-1 minute	+/-1 minute
Max. bearing (Kg)	80	100	130	130
Holes of Index Plate	Side I	24,25,28,30,34,37,38,39,41,42,43		
	Side II	46,47,49,51,53,54,57,58,59,62,66		
Net weight (Kg)	26	57	83.5	100
Gross weight (Kg)	32	69	96	114
Case dimensions (mm)	480x360x219	610x459x255	536x460x310	710x505x342

HORIZONTAL/VERTICAL SUPER SPACE INDEXER



*Horizontal and vertical use.

*Face Parallelism 0.0006".

*360 graduated satin-chrome ring with 5" adjustable vernier.

*Indexing accuracy 25 seconds.

*Base to chuck squareness 0.0008".

*For milling, drilling, jig boring etc.

*Mounting flange concentricity: 0.0008".

*Adjustable chuck concentricity: 0.0005"

*24 division index plates hardened and ground.

Standard Kit:

6 mask plates

3 allen wrenches

1 three jaw lathe chuck

Optional Face Plate

Order No.	410-0401	410-0402
Center Height	130	149.25
Bore Diameter	Φ80	Φ119.80
Divisions	2,3,4,6,8,12,24	
Locating Key	16	16
Lathe Chuck Diametere	167mm	210mm
Index Accuracy	25"	25"
Weight	33	52
Shipping Size	41x37x35cm	37x34x31cm

Tel: 86 532 88960859 Fax: 86 532 88960329 Email: sales@catertools.com

SEMI-UNIVERSAL DIVIDING HEADS

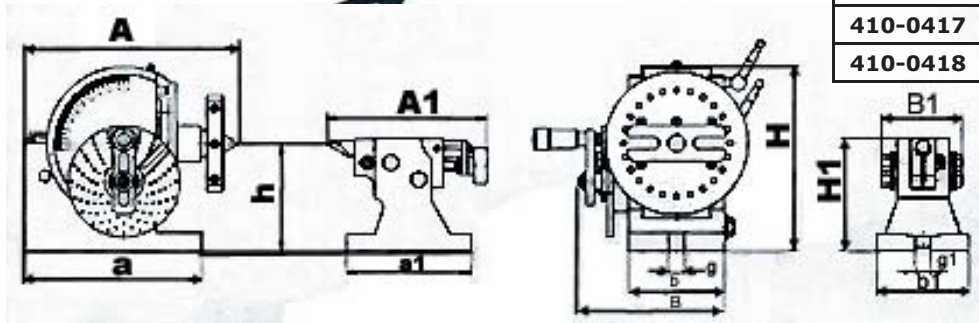
Semi-universal dividing heads are used for direct and indirect dividing. No other accessories are needed for cutting surface, slot, gear and other spiral work. The direct index plate has 24 holes and achieves direct dividing in 2, 3, 4, 6, 8, 12 and 24. With the optional Plates, indirect dividing in any number from 2 to 50, and certain divisions up to 380 can be achieved.



Order No.	A	B	H	h	a	b	g	Spindle
410-0415	193	131	173	100	166	90	16	MT3
410-0416	254	175	200	128	210	114	16	MT4

Tailstock specifications

Order NO.	A1	B1	H1	h	a1	b1	g1
410-0417	193	131	173	100	166	90	16
410-0418	254	175	220	128	210	114	16



Dividing Plates

Order NO.	Numbers of indexing holes
410-0419	15,16,17,18,19,20
410-0420	21,23,27,29,31,33
410-0421	37,39,41,43,47,49

UNIVERSAL DIVIDING HEADS

This universal dividing head divides any angle by direct, indirect or differential methods. It can be easily adjusted to any angle between -10° to +90° from a horizontal position. The dividing head features spiral machining capability. Hardened and ground worm gears comes with a 40:1 ratio. The unit has 12 gears for indexing and spiral cutting. Dividing possible: All numbers from 1 to 50, even numbers from 50 to 100 and many others from 50 to 400.



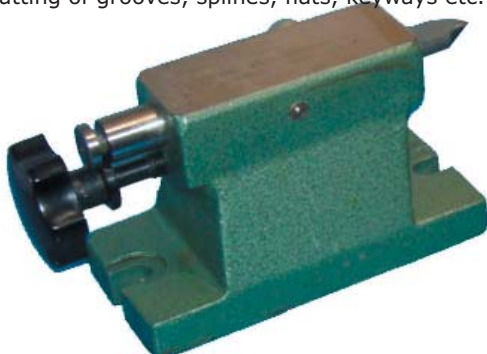
Set includes:

- Dividing head
- 3 dividing plates
- Threaded back plate for mounting chuck
- Tailstock
- Center and driving dog

Order No.	A	B	H	h	a	b	g	Spindle
410-0422	365	272	236	135	213	134	16	MT4

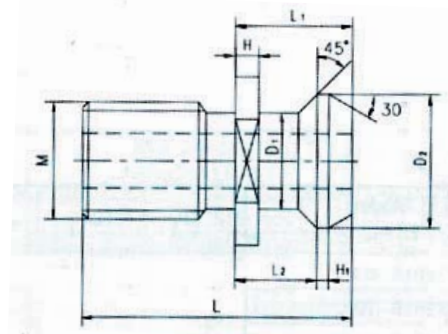
TAILSTOCK

The tailstocks work with vertical rotary table, indexers for holding center shafts, cylinders, solid centers, and workpieces for cutting of grooves, splines, flats, keyways etc.



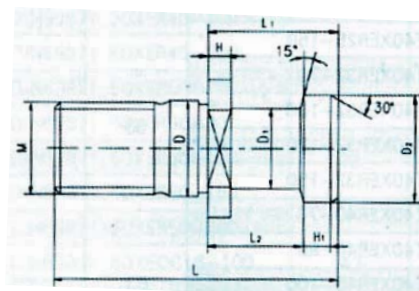
Order No.	410-0027	410-0028	410-0029
Center Height	70mm	125mm	260mm
Quill Taper		MT2	MT3
Locating key	10mm	12mm	18mm
Tilting Angle of Center Axis	+/- 11 degrees		
Travel of Center	12MM	30MM	30MM
Weight	2.5kg	9kg	28kg
Shipping Size	20X12X20CM	32X16X22CM	38X36X26CM
For tables and indexes	410-0004	410-0006	410-0016

ANSI/ASME B5 50-1985 RETENTION KNOB



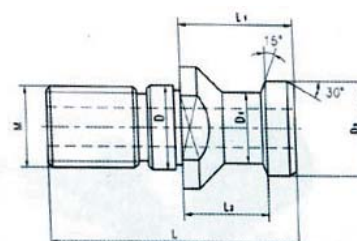
Order No.	Size	D1	D2	L	L1	L2	H	H1
434-0650	1/2"-13TPI	9.78mm	13.21mm	27.94mm	11.68mm	8.13mm	2.54mm	1.01mm
434-0651	5/8"-11TPI	12.45mm	18.8mm	38.1mm	16.26mm	11.18mm	3.05mm	1.52mm
434-0652	3/4"-10TPI	15.37mm	23.88mm	45.72mm	20.83mm	14.73mm	4.06mm	2.03mm
434-0653	1"-8TPI	20.83mm	28.96mm	58.42mm	25.4mm	17.78mm	5.08mm	2.54mm

ISO/DIS7388/2-1984A RETENTION KNOB



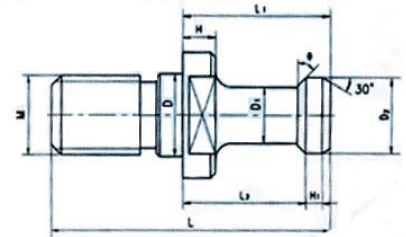
Order No.	Size	D	D1	D2	L	L1	L2	H	H1
434-0654	M12	13mm	8mm	12mm	44mm	24mm	19mm	4mm	3mm
434-0655	M16	17mm	14mm	19mm	54mm	26mm	20mm	4mm	4mm
434-0656	M20	21mm	17mm	23mm	65mm	30mm	23mm	5mm	5mm
434-0657	M24	25mm	21mm	28mm	74mm	34mm	25mm	6mm	7mm

DIN69872-1988 RETENTION KNOB



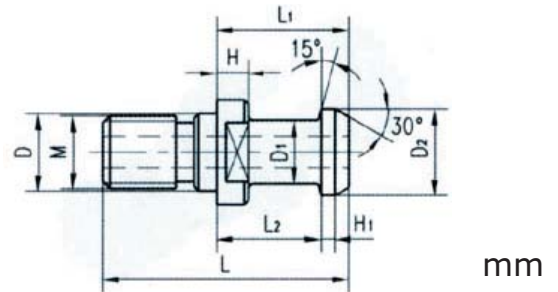
Order No.		Size	D	D1	D2	L	L1	L2
A type	B type							
434-0658	434-0662	M12	13mm	9mm	13mm	44mm	24mm	19mm
434-0659	434-0663	M16	17mm	14mm	19mm	54mm	26mm	20mm
434-0660	434-0664	M20	21mm	17mm	23mm	65mm	30mm	23mm
434-0661	434-0665	M24	25mm	21mm	28mm	74mm	34mm	25mm

MAS403-1982 RETENTION KNOB



Order No.		Size	D	D1	D2	L	L1	L2	H	H1
30°	45°									
434-0666	434-0670	M12	12.5mm	7mm	11mm	43mm	23mm	18mm	5mm	2.5mm
434-0667	434-0671	M16	17mm	10mm	15mm	60mm	35mm	28mm	6mm	3mm
434-0668	434-0672	M20	21mm	14mm	19mm	70mm	40mm	31mm	8mm	4mm
434-0669	434-0673	M24	25mm	17mm	23mm	85mm	45mm	35mm	10mm	5mm

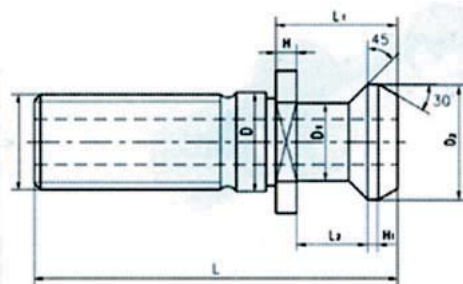
JIS B6339-1986 RETENTION KNOB



mm

Order No.	Size	D	D1	D2	L	L1	L2	H	H1
434-0674	M12	12.5	8	12	43	23.4	18.4	5	3
434-0675	M12	12.5	11	15	44	24	19	5	3
434-0676	M16	17	14	19	54	29	23	7	3
434-0677	M20	21	17	23	60	30	23	7	4
434-0678	M24	25	21	28	74	34	25	7	5
434-0679	M30	31	27	36	98	48	36	11	7

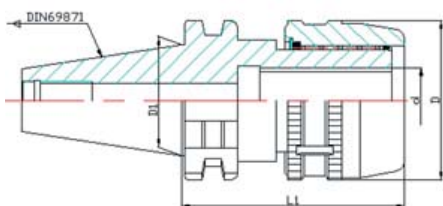
ISO/DIS7388-2 1984B PU



mm

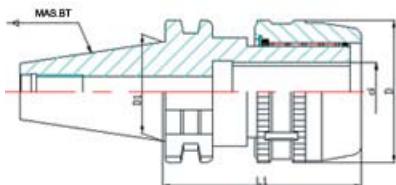
Order No.	Size	D	D1	D2	L	L1	L2	H	H1
434-0680	M12	13	9.3	13.3	27	11.8	8.1	2.7	1.2
434-0681	M16	17	12.95	18.95	44.5	16.4	11.15	3.25	1.75
434-0682	M20	21	16.3	24.05	56	20.95	14.85	4.25	2.25
434-0683	M24	25	19.6	29.1	65.5	25.55	17.95	5.25	2.75

DIN69871 MILLING CHUCK ARBOR



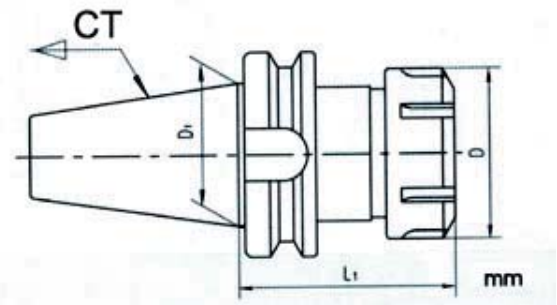
Order No.	Size	d	D	D1
434-0700	16mmx50mmx90mm	16	50	44.45
434-0701	22mmx56mmx100mm	22	56	44.45
434-0702	22mmx56mmx120mm	22	56	44.45
434-0703	25mmx63mmx105mm	25	63	44.45
434-0704	32mmx70mmx100mm	32	70	44.45
434-0705	32mmx70mmx105mm	32	70	44.45
434-0706	32mmx70mmx135mm	32	70	44.45
434-0707	42mmx90mmx135mm	42	90	44.45
434-0708	22mmx56mmx110mm	22	56	69.85
434-0709	22mmx56mmx150mm	22	56	69.85
434-0710	32mmx70mmx150mm	32	70	69.85
434-0711	32mmx70mmx150mm	32	70	69.85
434-0712	42mmx90mmx120mm	42	90	69.85
434-0713	42mmx90mmx150mm	42	90	69.85
434-0714	42mmx90mmx165mm	42	90	69.85

MILLING CHUCK ARBORS



Order No.	Size	d	D	D1
434-0720	16mmx50mmx86mm	16	50	44.45
434-0721	22mmx56mmx90mm	22	56	44.45
434-0722	22mmx56mmx100mm	22	56	44.45
434-0723	22mmx56mmx135mm	22	56	44.45
434-0724	25mmx63mmx100mm	25	63	44.45
434-0725	25mmx63mmx105mm	25	63	44.45
434-0726	32mmx70mmx100mm	32	70	44.45
434-0727	32mmx70mmx105mm	32	70	44.45
434-0728	32mmx70mmx135mm	32	70	44.45
434-0729	42mmx90mmx115mm	42	90	44.45
434-0730	22mmx56mmx100mm	22	56	69.85
434-0731	32mmx70mmx110mm	32	70	69.85
434-0732	32mmx70mmx150mm	32	70	69.85
434-0733	42mmx90mmx120mm	42	90	69.85
434-0734	42mmx90mmx120mm	42	90	69.85
434-0735	42mmx90mmx165mm	42	90	69.85

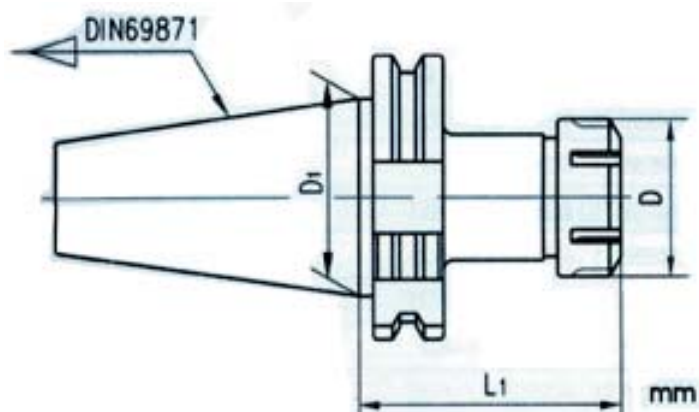
CAT MILLING CHUCK ARBORS



Order No.	Size	D	D1
434-0750	CT40xER16-63	28	44.45
434-0751	CT40xER16-70	28	44.45
434-0752	CT40xER16-100	28	44.45
434-0753	CT40xER16-120	28	44.45
434-0754	CT40xER16-125	28	44.45
434-0755	CT40xER16-150	28	44.45
434-0756	CT40xER20-70	35	44.45
434-0757	CT40xER20-90	35	44.45
434-0758	CT40xER20-100	35	44.45
434-0759	CT40xER20-105	35	44.45
434-0760	CT40xER20-135	35	44.45
434-0761	CT40xER20-150	35	44.45
434-0762	CT40xER25-70	42	44.45
434-0763	CT40xER25-90	42	44.45
434-0764	CT40xER25-100	42	44.45
434-0765	CT40xER25-125	42	44.45
434-0766	CT40xER25-150	42	44.45
434-0767	CT40xER32-70	50	44.45
434-0768	CT40xER32-100	50	44.45
434-0769	CT40xER32-120	50	44.45
434-0770	CT40xER32-150	50	44.45
434-0771	CT40xER40-70	63	44.45
434-0772	CT40xER40-80	63	44.45
434-0773	CT40xER40-100	63	44.45
434-0774	CT40xER40-120	63	44.45
434-0775	CT40xER40-150	63	44.45
434-0776	CT40xER50-80	78	44.45
434-0777	CT40xER50-100	78	44.45
434-0778	CT50xER16-70	28	69.85
434-0779	CT50xER16-90	28	69.85
434-0780	CT50xER16-105	28	69.85

Order No.	Size	D	D1
434-0781	CT50xER16-135	28	69.85
434-0782	CT50xER16-165	28	69.85
434-0783	CT50xER20-70	35	69.85
434-0784	CT50xER20-90	35	69.85
434-0785	CT50xER20-105	35	69.85
434-0786	CT50xER20-135	35	69.85
434-0787	CT50xER20-150	35	69.85
434-0788	CT50xER20-165	35	69.85
434-0789	CT50xER25-70	42	69.85
434-0790	CT50xER25-105	42	69.85
434-0791	CT50xER25-135	42	69.85
434-0792	CT50xER25-165	42	69.85
434-0793	CT50xER32-70	50	69.85
434-0794	CT50xER32-80	50	69.85
434-0795	CT50xER32-100	50	69.85
434-0796	CT50xER32-120	50	69.85
434-0797	CT50xER40-80	63	69.85
434-0798	CT50xER40-100	63	69.85
434-0799	CT50xER40-120	63	69.85
434-0800	CT50xER40-135	63	69.85
434-0801	CT50xER50-90	78	69.85
434-0802	CT50xER50-120	78	69.85
434-0803	CT50xEOC16-100	43	69.85
434-0804	CT50xEOC25-85	60	69.85
434-0805	CT50xEOC25-100	60	69.85
434-0806	CT50xEOC25-125	60	69.85
434-0807	CT50xEOC32-70	72	69.85
434-0808	CT50xEOC32-90	72	69.85
434-0809	CT50xEOC32-105	72	69.85
434-0810	CT50xEOC32-120	72	69.85
434-0811	CT50xEOC32-150	72	69.85

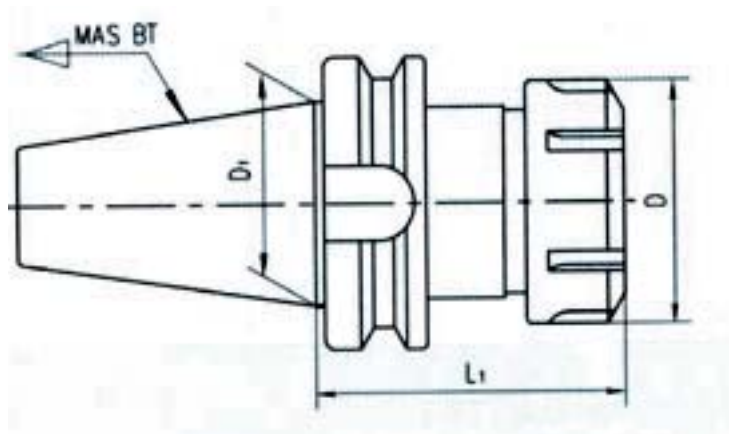
DIN69871 MILLING CHUCK ARBORS



Order No.	Size	D	D1
434-0830	DIN69871.A30xER11-80	19	31.75
434-0831	DIN69871.A30xER16-63	28	31.75
434-0832	DIN69871.A30xER20-63	35	31.75
434-0833	DIN69871.A30xER25-63	42	31.75
434-0834	DIN69871.A40xER11-80	19	44.5
434-0835	DIN69871.A40xER16-63	28	44.5
434-0836	DIN69871.A40xER16-70	28	44.45
434-0837	DIN69871.A40xER16-100	28	44.45
434-0838	DIN69871.A40xER16-120	28	44.45
434-0839	DIN69871.A40xER20-70	35	44.45
434-0840	DIN69871.A40xER20-100	35	44.45
434-0841	DIN69871.A40xER20-160	35	44.45
434-0842	DIN69871.A40xER25-60	42	44.45
434-0843	DIN69871.A40xER25-70	42	44.45
434-0844	DIN69871.A40xER25-100	42	44.45
434-0845	DIN69871.A40xER25-150	42	44.45
434-0846	DIN69871.A40xER32-70	50	44.45
434-0847	DIN69871.A40xER32-80	50	44.45
434-0848	DIN69871.A40xER32-100	50	44.45
434-0849	DIN69871.A40xER32-150	50	44.45
434-0850	DIN69871.A40xER40-80	63	44.45
434-0851	DIN69871.A40xER40-100	63	44.45
434-0852	DIN69871.A40xER40-150	63	44.45
434-0853	DIN69871.A40xER50-100	78	44.45
434-0854	DIN69871.A40xEOC16-70	43	44.45
434-0855	DIN69871.A40xEOC16-100	43	44.45
434-0856	DIN69871.A40xEOC25-70	60	44.45
434-0857	DIN69871.A40xEOC25-100	60	44.45

Order No.	Size	D	D1
434-0858	DIN69871.A40xEOC25-120	60	44.45
434-0859	DIN69871.A40xEOC32-90	72	44.45
434-0860	DIN69871.A40xEOC32-120	72	44.45
434-0861	DIN69871.A40xEOC32-150	72	44.45
434-0862	DIN69871.A50xER16-100	28	69.85
434-0863	DIN69871.A50xER16-160	28	69.85
434-0864	DIN69871.A50xER20-100	35	69.85
434-0865	DIN69871.A50xER20-135	35	69.85
434-0866	DIN69871.A50xER20-160	35	69.85
434-0867	DIN69871.A50xER25-70	42	69.85
434-0868	DIN69871.A50xER25-100	42	69.85
434-0869	DIN69871.A50xER25-150	42	69.85
434-0870	DIN69871.A50xER32-80	50	69.85
434-0871	DIN69871.A50xER32-120	50	69.85
434-0872	DIN69871.A50xER32-160	50	69.85
434-0873	DIN69871.A50xER40-80	63	69.85
434-0874	DIN69871.A50xER40-120	63	69.85
434-0875	DIN69871.A50xER40-160	63	69.85
434-0876	DIN69871.A50xER50-90	78	69.85
434-0877	DIN69871.A50xER50-120	78	69.85
434-0878	DIN69871.A50xER50-160	78	69.85
434-0879	DIN69871.A50xER50-200	78	69.85
434-0880	DIN69871.A50xEOC16-100	43	69.85
434-0881	DIN69871.A50xEOC25-70	60	69.85
434-0882	DIN69871.A50xEOC25-100	60	69.85
434-0883	DIN69871.A50xEOC32-70	72	69.85
434-0884	DIN69871.A50xEOC32-80	72	69.85
434-0885	DIN69871.A50xEOC32-90	85	69.85

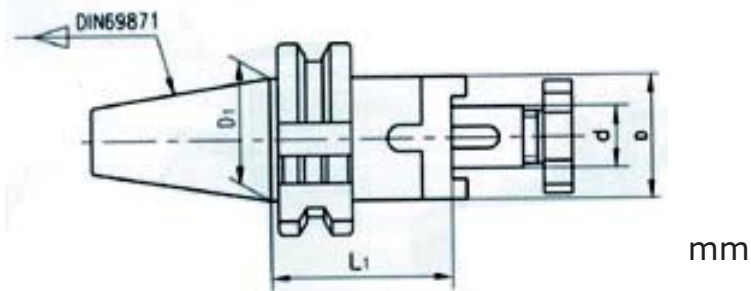
BT MILLING CHUCK ARBORS



Order No.	Size	D	D1
434-0900	BT30xER16-70	28	31.75
434-0901	BT30xER20-70	35	31.75
434-0902	BT30xER25-70	42	31.75
434-0903	BT30xER32-70	50	31.75
434-0904	BT30xER40-80	63	31.75
434-0905	BT40xER16-70	28	44.45
434-0906	BT40xER20-70	35	44.45
434-0907	BT40xER20-90	35	44.45
434-0908	BT40xER20-100	35	44.45
434-0909	BT40xER20-135	35	44.45
434-0910	BT40xER20-150	35	44.45
434-0911	BT40xER25-60	42	44.45
434-0912	BT40xER25-70	42	44.45
434-0913	BT40xER25-90	42	44.45
434-0914	BT40xER25-100	42	44.45
434-0915	BT40xER25-125	42	44.45
434-0916	BT40xER25-150	42	44.45
434-0917	BT40xER32-70	50	44.45
434-0918	BT40xER32-100	50	44.45
434-0919	BT40xER32-150	50	44.45
434-0920	BT40xER40-70	63	44.45
434-0921	BT40xER40-80	63	44.45
434-0922	BT40xER40-120	63	44.45
434-0923	BT40xER40-150	63	44.45
434-0924	BT40xER16-70	28	57.15
434-0925	BT45xER20-70	35	57.15
434-0926	BT45xER20-90	35	57.15
434-0927	BT45xER20-100	35	57.15
434-0928	BT45xER20-135	35	57.15
434-0929	BT45xER25-70	42	57.15
434-0930	BT45xER25-90	42	57.15

Order No.	Size	D	D1
434-0931	BT45xER25-100	42	57.15
434-0932	BT45xER25-125	42	57.15
434-0933	BT45xER32-70	50	57.15
434-0934	BT45xER32-100	50	57.15
434-0935	BT45xER32-120	50	57.15
434-0936	BT45xER32-150	50	57.15
434-0937	BT45xER40-80	63	57.15
434-0938	BT45xER40-100	63	57.15
434-0939	BT45xER40-120	63	57.15
434-0940	BT45xER40-150	63	57.15
434-0941	BT45xER50-80	78	57.15
434-0942	BT45xER50-100	78	57.15
434-0943	BT50xER16-70	28	69.85
434-0944	BT50xER16-90	28	69.85
434-0945	BT50xER16-135	28	69.85
434-0946	BT50xER20-70	35	69.85
434-0947	BT50xER20-90	35	69.85
434-0948	BT50xER20-135	35	69.85
434-0949	BT50xER20-150	35	69.85
434-0950	BT50xER20-165	35	69.85
434-0951	BT50xER25-70	42	69.85
434-0952	BT50xER25-135	42	69.85
434-0953	BT50xER25-165	42	69.85
434-0954	BT50xER32-70	50	69.85
434-0955	BT50xER32-80	50	69.85
434-0956	BT50xER32-100	50	69.85
434-0957	BT50xER32-120	50	69.85
434-0958	BT50xER40-80	63	69.85
434-0959	BT50xER40-100	63	69.85
434-0960	BT50xER40-120	63	69.85
434-0961	BT50xER40-135	63	69.85
434-0962	BT50xER50-90	78	69.85
434-0963	BT50xER50-120	78	69.85

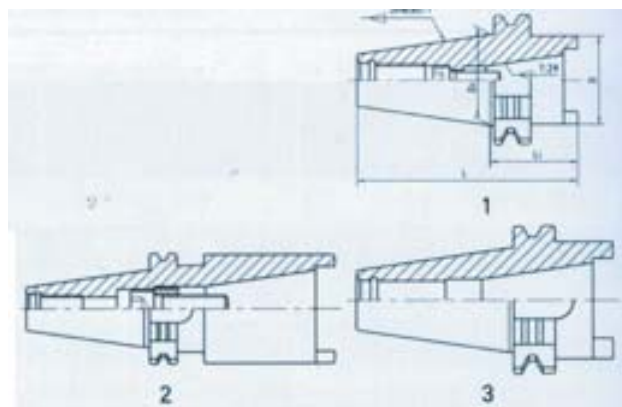
DIN69871 COMBI SHELL END MILL ARBORS



Order No.	Size	D	D1	Wt(kg)
434-1000	A30x13-55	28	31.75	1
434-1001	A30x16-55	32	31.75	1
434-1002	A30x22-55	40	31.75	2
434-1003	A30x27-55	48	31.75	2.1
434-1004	A30x32-60	58	31.75	1.8
434-1005	A30x32-100	58	31.75	2.6
434-1006	A30x40-60	70	31.75	7.3
434-1007	A30x40-100	70	31.75	3.5
434-1008	A40x13-55	28	44.45	1.1
434-1009	A40x16-55	32	44.45	1.2
434-1010	A40x16-100	32	44.45	1.5
434-1011	A40x22-55	40	44.45	1.23
434-1012	A40x22-100	40	44.45	1.83
434-1013	A40x27-55	48	44.45	1.3
434-1014	A40x27-100	48	44.45	2.2
434-1015	A40x32-60	58	44.45	1.5

Order No.	Size	D	D1	Wt(kg)
434-1016	A40x32-100	58	44.45	2.3
434-1017	A40x40-60	70	44.45	1.8
434-1018	A40x40-100	70	44.45	3
434-1019	A50x13-63	28	69.85	3.5
434-1020	A50x16-63	32	69.85	3.5
434-1021	A50x16-100	32	69.85	3.8
434-1022	A50x22-70	40	69.85	3.6
434-1023	A50x22-100	40	69.85	4
434-1024	A50x27-70	48	69.85	3.7
434-1025	A50x27-100	48	69.85	4.4
434-1026	A50x32-70	58	69.85	3.8
434-1027	A50x32-100	58	69.85	4.7
434-1028	A50x40-75	70	69.85	3.9
434-1029	A50x40-100	70	69.85	5.3
434-1030	A50x50-75	90	69.85	4.5
434-1031	A50x50-125	90	69.85	7.2

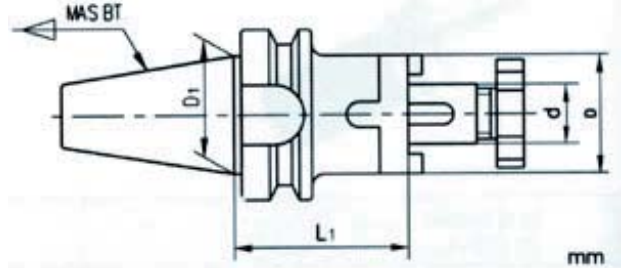
ISO TAPER SLEEVES



Order No.	Size	D	D1	L
434-0985	DIN69871.A40xISO30-50	50	44.45	127.4
434-0986	DIN69871.A40xISO40-100	63	44.45	179.4
434-0987	DIN69871.A50xISO30-50	50	69.85	160.75
434-0988	DIN69871.A50xISO40-70	70	69.85	182.75
434-0989	DIN69871.A50xISO50-120	97	69.85	235.75

Order No.	Size	D	D1	L
434-0990	BT40xISO30-50	50	44.45	124.4
434-0991	BT40xISO40-100	63	44.45	176.4
434-0992	BT50xISO30-50	50	69.85	160.8
434-0993	BT50xISO40-70	70	69.85	182.8
434-0994	BT50xISO50-120	97	69.85	235.8

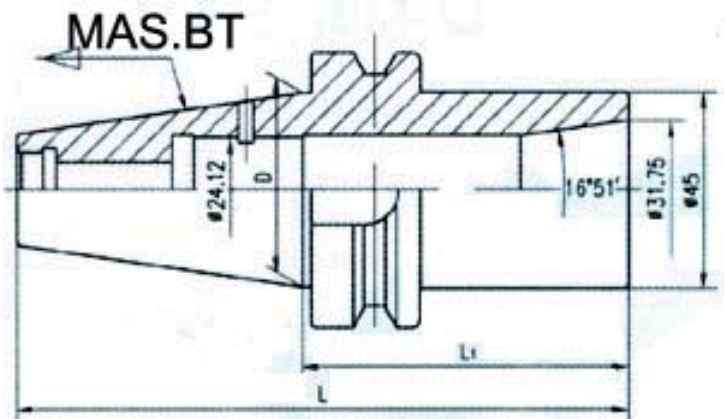
BT COMBI SHELL END MILL ARBORS



Order No.	Size	D	D1	Wt(kg)
434-1050	BT30x13-55	28	31.75	1
434-1051	BT30x16-55	32	31.75	1
434-1052	BT30x22-55	40	31.75	1.2
434-1053	BT30x27-55	48	31.75	1.2
434-1054	BT30x32-60	58	31.75	1.5
434-1055	BT30x32-100	58	31.75	2.6
434-1056	BT30x40-60	70	31.75	2.3
434-1057	BT30x40-100	70	31.75	3.5
434-1058	BT40x13-55	28	44.45	1
434-1059	BT40x16-55	32	44.45	1.2
434-1060	BT40x16-100	32	44.45	1.5
434-1061	BT40x22-55	40	44.45	1.25
434-1062	BT40x22-100	40	44.45	1.85
434-1063	BT40x27-55	48	44.45	1.5
434-1064	BT40x27-100	48	44.45	2
434-1065	BT40x32-60	58	44.45	1.5

Order No.	Size	D	D1	Wt(kg)
434-1066	BT40x32-100	58	44.45	2.3
434-1067	BT40x40-60	70	44.45	2
434-1068	BT40x40-100	70	44.45	3
434-1069	BT50x13-63	28	69.85	3.5
434-1070	BT50x16-63	32	69.85	3.6
434-1071	BT50x16-100	32	69.85	4
434-1072	BT50x22-70	40	69.85	3.7
434-1073	BT50x22-100	40	69.85	4
434-1074	BT50x27-70	48	69.85	4
434-1075	BT50x27-100	48	69.85	4.4
434-1076	BT50x32-70	58	69.85	4.2
434-1077	BT50x32-100	58	69.85	4.7
434-1078	BT50x40-75	70	69.85	4.5
434-1079	BT50x40-100	70	69.85	5.5
434-1080	BT50x50-75	90	69.85	4.6
434-1081	BT50x50-125	90	69.85	7.2

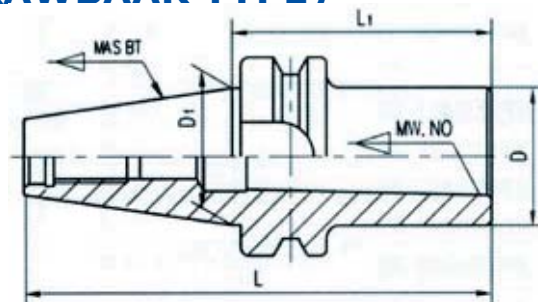
BT TO R8 NC TAPER SLEEVE



Order No.	Size	L	D
434-1090	BT30xR8-115	163.4mm	31.75mm
434-1091	BT30xR8-135	183.4mm	31.75mm
434-1092	BT30xR8-150	198.4mm	31.75mm
434-1093	BT40xR8-75	140.4mm	44.45mm
434-1094	BT40xR8-95	160.4mm	44.45mm
434-1095	BT40xR8-100	165.4mm	44.45mm
434-1096	BT40xR8-130	195.4mm	44.45mm

MACHINE ACCESSORIES

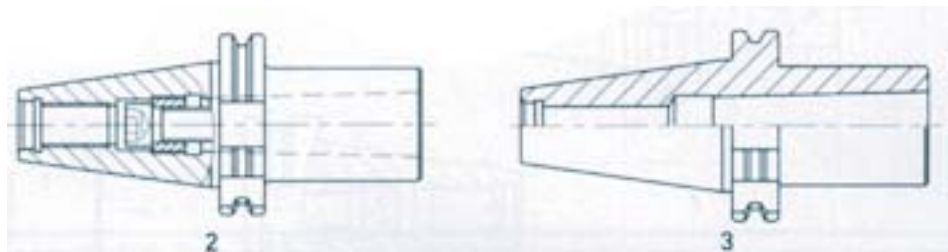
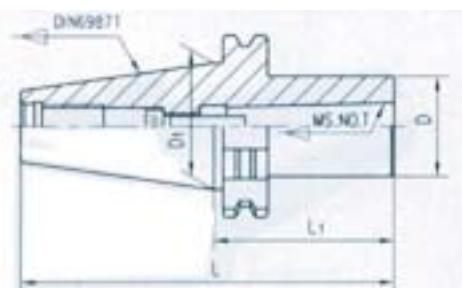
CAT TO MORSE TAPER SLEEVE (DRAWBAR TYPE)



Order No.	Size	D	D1	L
434-0630	CT40 x MT1-45	25	44.45	113.25
434-0631	CT40 x MT2-60	32	44.45	128.25
434-0632	CT40 x MT3-75	40	44.45	143.25
434-0632	CT40 x MT3-90	40	44.45	158.25
434-0633	CT40 x MT4-100	48	44.45	168.25

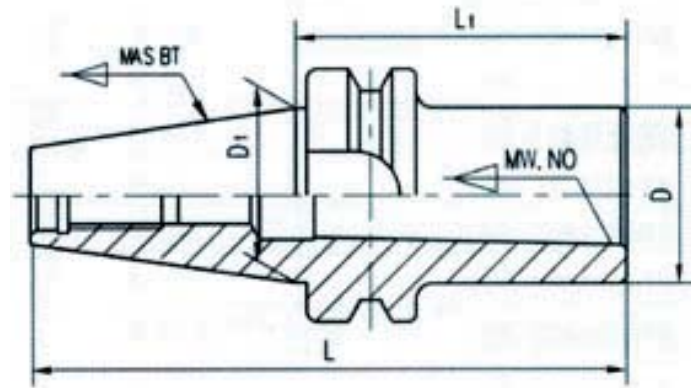
Order No.	Size	D	D1	L
434-0634	CT40 x MT4-120	48	44.45	188.25
434-0635	CT50 x MT2-60	31.75	69.85	161.6
434-0636	CT50 x MT3-60	41.28	69.85	161.6
434-0637	CT50 x MT4-90	50.8	69.85	191.6
434-0638	CT50 x MT5-100	69.85	69.85	201.6

DIN69871 TO MORSE TAPER SLEEVE (DRAWBAR TYPE)



Order No.	Size	L	D	D1	Order No.	Size	L	D	D1
434-1100	A40xMT1x-45	113.4	25	44.5	434-1109	A50xMT2-45	146.8	32	69.85
434-1101	A40xMT2-60	128.4	32	44.5	434-1110	A50xMT2-60	161.8	32	69.85
434-1102	A40xMT3-70	138.4	40	44.5	434-1111	A50xMT3-60	161.8	40	69.85
434-1103	A40xMT3-80	148.4	40	44.5	434-1112	A50xMT3-80	181.8	40	69.85
434-1104	A40xMT3-100	168.4	40	44.5	434-1113	A50xMT4-80	181.8	48	69.85
434-1105	A40xMT4-90	158.4	48	44.5	434-1114	A50xMT4-90	191.8	48	69.85
434-1106	A40xMT4-100	168.4	48	69.85	434-1115	A50xMT4-120	221.8	48	69.85
434-1107	A40xMT4-120	188.4	48	69.85	434-1116	A50xMT5-100	201.8	61	69.85
434-1108	A50xMT1-45	146.8	25	69.85	434-1117	A50xMT5-120	221.8	61	69.85

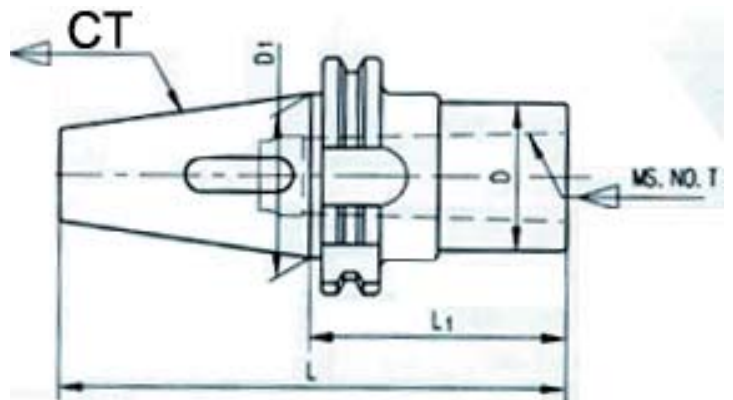
BT TO MORSE TAPER SLEEVE (DRAWBAR TYPE)



Order No.	Size	D	D1	L
434-0601	BT40 x MT1-45	25	44.5	110.4
434-0602	BT40 x MT2-60	32	44.5	125.4
434-0603	BT40 x MT3-75	40	44.5	140.4
434-0604	BT40 x MT3-90	40	44.5	155.4
434-0605	BT40 x MT4-95	48	44.5	160.4
434-0606	BT40 x MT4-100	48	44.5	165.4
434-0607	BT50 x MT1-45	25	69.85	146.8
434-0608	BT50 x MT2-45	32	69.85	146.8

Order No.	Size	D	D1	L
434-0609	BT50 x MT2-60	32	69.85	161.8
434-0610	BT50 x MT3-60	40	69.85	161.8
434-0611	BT50 x MT3-75	40	69.85	176.8
434-0612	BT50 x MT4-80	48	69.85	181.8
434-0613	BT50 x MT4-100	48	69.85	201.8
434-0614	BT50 x MT5-100	63	69.85	201.8
434-0615	BT50 x MT5-120	63	69.85	221.8

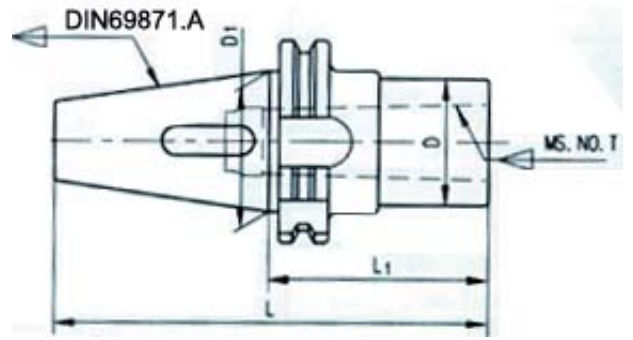
CAT TO MORSE TAPER SLEEVE (With Tang)



Order No.	Size	D	D1	L	Wt(kg)
434-0551	CT40xMT1x 45mm	25	44.45	113.25	1.3
434-0552	CT40xMT2x 63mm	32	44.45	131.25	1.7
434-0553	CT40xMT3x 75mm	40	44.45	143.25	2
434-0554	CT40xMT4x100mm	48	44.45	168.25	2.5
434-0555	CT45xMT1x 40mm	25	57.15	122.55	2.7
434-0556	CT45xMT2x 50mm	32	57.15	132.55	3.8
434-0557	CT45xMT3x 73mm	40	57.15	155.55	4.2
434-0558	CT45xMT4x 95mm	48	57.15	177.55	4.6
434-0559	CT45xMT5x125mm	61	57.15	207.55	5.5

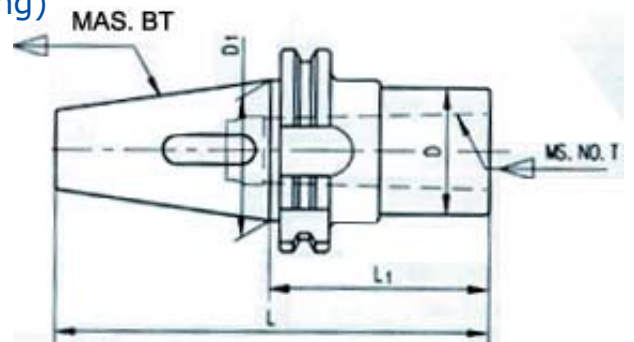
Order No.	Size	D	D1	L	Wt(kg)
434-0560	CT50xMT1x 40mm	25	69.85	141.6	4
434-0561	CT50xMT2x 50mm	32	69.85	151.6	4
434-0562	CT50xMT2x135mm	32	69.85	236.6	5
434-0563	CT50xMT3x 63mm	40	69.85	164.6	4.5
434-0564	CT50xMT3x150mm	40	69.85	251.6	5.5
434-0565	CT50xMT4x 65mm	48	69.85	166.6	4.4
434-0566	CT50xMT4x 85mm	48	69.85	186.6	4.8
434-0567	CT50xMT5x105mm	61	69.85	206.6	5.2

DIN 69871 TO MORSE TAPER SLEEVE



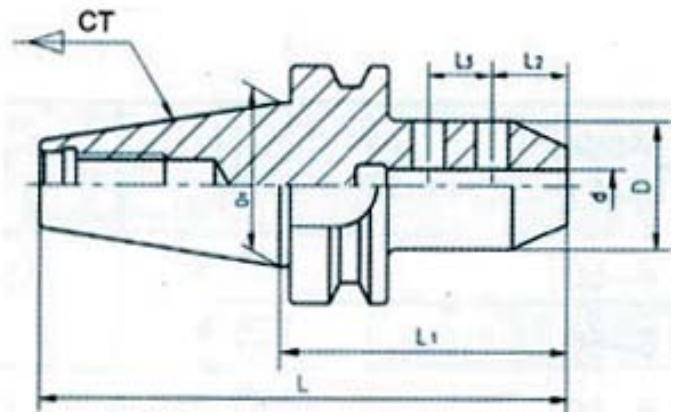
Order No.	Size	D	D1	L	Wt(kg)	Order No.	Size	D	D1	L	Wt(kg)
434-0581	A30xMT1x50mm	25	31.75	97.8	0.55	434-0589	A40xMT4x95mm	48	44.45	163.4	2.4
434-0582	A30xMT2x60mm	32	31.75	107.8	0.8	434-0590	A40xMT5x125mm	63	44.45	193.4	3.8
434-0583	A30xMT3x75mm	40	31.75	122.8	0.85	434-0591	A50xMT1x45mm	25	69.85	146.75	4.05
434-0584	A40xMT1x45mm	25	44.45	113.4	1.2	434-0592	A50xMT2x60mm	32	69.85	161.75	4.4
434-0585	A40xMT1x50mm	25	44.45	118.4	1.3	434-0593	A50xMT3x65mm	40	69.85	166.75	4.5
434-0586	A40xMT2x50mm	32	44.45	118.4	1.5	434-0594	A50xMT4x95mm	48	69.85	196.75	4.9
434-0587	A40xMT2x60mm	32	44.45	128.4	1.56	434-0595	A50xMT5x100mm	61	69.85	201.75	5.1
434-0588	A40xMT3x70mm	40	44.45	138.4	1.8	434-0596	A50xMT5x105mm	61	69.85	206.75	5.15

BT TO MORSE TAPER SLEEVE (With Tang)



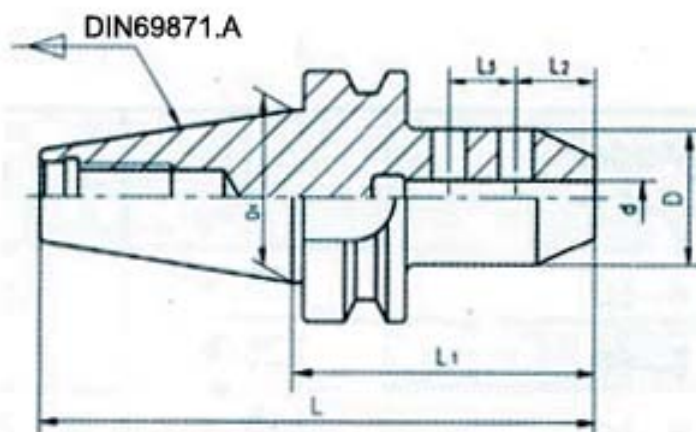
Order No.	Size	D	D1	L	Wt(kg)	Order No.	Size	D	D1	L	Wt(kg)
434-0501	BT30xMT1x 45	25	31.75	93.4	0.55	434-0519	BT45xMT3x120	40	57.15	202.8	2.4
434-0502	BT30xMT1x 50				0.6	434-0520	BT45xMT3x140				2.6
434-0503	BT30xMT2x 60	32	31.75	108.4	0.9	434-0521	BT45xMT4x 98	48	57.15	180.8	2.4
434-0504	BT30xMT3x 80	40	31.75	128.4	0.9	434-0522	BT50xMT1x 45	25	69.85	146.8	4.1
434-0505	BT40xMT1x 45	25	44.45	110.4	1.2	434-0523	BT50xMT2x 50	32	69.85	151.8	4
434-0506	BT40xMT1x 50				1.25	434-0524	BT50xMT2x 60	32	69.85	161.8	4.2
434-0507	BT40xMT1x120				1.5	434-0525	BT50xMT2x120	32	69.85	221.8	4.3
434-0508	BT40xMT2x 50	32	44.45	115.4	1.55	434-0526	BT50xMT2x135				4.35
434-0509	BT40xMT2x 60	32	44.45	125.4	1.65	434-0527	BT50xMT3x 65	40	69.85	166.8	4.2
434-0510	BT40xMT2x120				1.78	434-0528	BT50xMT3x 75	40	69.85	176.8	4.3
434-0511	BT40xMT3x 70	40	44.45	135.4	1.8	434-0529	BT50xMT3x120	40	69.85	221.8	4.4
434-0512	BT40xMT3x 75	40	44.45	140.4	1.9	434-0530	BT50xMT3x135	40	69.85	236.8	4.46
434-0513	BT40xMT4x 90	48	44.45	155.4	2.3	434-0531	BT50xMT3x150	40	69.85	251.8	4.68
434-0514	BT40xMT4x 95	48	44.45	160.4	2.4	434-0532	BT50xMT4x 85	48	69.85	186.8	4.8
434-0515	BT40xMT4x135	48	44.45	200.4	2.5	434-0533	BT50xMT4x 95	48	69.85	196.8	5
434-0516	BT40xMT4x165				2.65	434-0534	BT50xMT4x180				5.8
434-0517	BT45xMT1x120	25	57.15	202.8	1.9	434-0535	BT50xMT5x105	63	69.85	206.8	5
434-0518	BT45xMT2x120	32	57.15	202.8	2.3	434-0536	BT50xMT5x108	63	69.85	209.8	5.06

CAT END MILL ADAPTOR



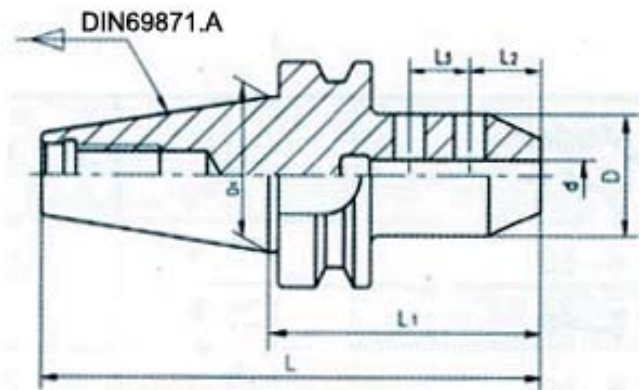
Order No.	Size	D	D1	L	L2	L3
434-0451	CT40x3/16"- 2-1/2"	19.05	44.45	131.8	143.3	
434-0452	CT40x1/4"- 2-1/2"	20.26	44.45	131.8	198.8	
434-0453	CT40x5/16"- 2-1/2"	22.52	44.45	131.8	198.8	
434-0454	CT40x3/8"- 2-1/2"	32	44.45	131.8	198.8	
434-0455	CT40x7/16"- 2-1/2"	31.75	44.45	131.8	22.2	
434-0456	CT40x1/2"- 2-5/8"	44.45	44.45	134.9	22.2	
434-0457	CT40x5/8"- 3-3/4"	44.45	44.45	163.5	23.8	
434-0458	CT40x3/4"- 3-3/4"	44.45	44.45	163.5	25.4	
434-0459	CT40x7/8"- 4"	52	44.45	169.9	27	22.2
434-0460	CT40x1"- 4"	63	44.45	169.9	28.6	25.4
434-0461	CT40x1-1/4"- 4-1/8"	69.85	44.45	173	28.6	25.4
434-0462	CT50x3/8"- 4-1/2"	31.75	69.85	215.9	19.8	
434-0463	CT50x3/8"- 6-1/2"	31.75	69.85	266.7	19.8	
434-0464	CT50x1/2"- 2-5/8"	44.45	69.85	168.3	22.2	
434-0465	CT50x1/2"- 4-5/8"	44.45	69.85	219.2	22.2	
434-0466	CT50x5/8"- 3-3/4"	44.45	69.85	196.85	23.8	
434-0467	CT50x5/8"- 5-3/4"	44.45	69.85	247.7	23.8	
434-0468	CT50x3/4"- 3-3/4"	44.45	69.85	196.85	25.4	
434-0469	CT50x3/4"- 5-3/4"	44.45	69.85	247.7	25.4	
434-0470	CT50x7/8"- 3-3/4"	52	69.85	196.85	27	22.2
434-0471	CT50x7/8"- 5-3/4"	52	69.85	247.7	27	22.2
434-0472	CT50x1"- 4"	63	69.85	203.2	28.6	25.4
434-0473	CT50x1"- 6"	63	69.85	254	28.6	25.4
434-0474	CT50x1"- 8"	63	69.85	304.8	28.6	25.4
434-0475	CT50x1-1/4"- 4"	69.85	69.85	203.2	28.6	25.4
434-0476	CT50x1-1/4"- 6"	69.85	69.85	254	28.6	25.4
434-0477	CT50x1-1/4"- 8"	69.85	69.85	304.8	28.6	25.4
434-0478	CT50x1-1/2"- 4"	69.85	69.85	203.2	28.6	25.4
434-0479	CT50x1-1/2"- 6"	69.85	69.85	254	28.6	25.4
434-0480	CT50x1-1/2"- 8"	69.85	69.85	304.8	28.6	25.4
434-0481	CT50x2"- 5-5/8"	69.85	69.85	244.5	30.2	36.5
434-0482	CT50x2"- 7-5/8"	69.85	69.85	295.3	30.2	36.5
434-0483	CT50x2-1/2"- 6"	69.85	69.85	254	30.2	36.5

DIN69871 END MILL ADAPTOR



Order No.	Size	D	D1	L	L2	L3	Wt(kg)
434-0401	A30x6mmx 50	25	31.75	97.8	18		0.58
434-0402	A30x8mmx 50	28	31.75	97.8	18		0.64
434-0403	A30x10mmx 50	35	31.75	97.8	20		0.72
434-0404	A30x12mmx 50	42	31.75	97.8	22.5		0.8
434-0405	A30x16mmx 50	48	31.75	97.8	24		0.96
434-0406	A40x6mmx 50	25	44.45	118.4	18		0.92
434-0407	A40x6mmx100	25	44.45	168.4	18		2.4
434-0408	A40x8mmx 50	28	44.45	118.4	18		0.96
434-0409	A40x8mmx100	28	44.45	168.4	18		2.4
434-0410	A40x10mmx 50	35	44.45	118.4	20		2
434-0411	A40x10mmx100	35	44.45	168.4	20		2.3
434-0412	A40x12mmx 50	42	44.45	118.4	22.5		1.12
434-0413	A40x14mmx 50	44	44.45	118.4	22.5		1.12
434-0414	A40x16mmx 63	48	44.45	131.4	24		1.2
434-0415	A40x18mmx 63	50	44.45	131.4	24		1.2
434-0416	A40x20mmx 63	52	44.45	131.4	25		1.32
434-0417	A40x25mmx100	65	44.45	168.4	24	25	2.04
434-0418	A40x32mmx100	72	44.45	168.4	24	28	2.24
434-0419	A40x40mmx120	90	44.45	188.4	30	32	2.4
434-0420	A50x6mmx 63	25	69.85	164.75	18		3.3
434-0421	A50x8mmx 63	28	69.85	164.75	18		3.4
434-0422	A50x10mmx 63	35	69.85	164.75	20		3.42
434-0423	A50x12mmx 63	42	69.85	164.75	22.5		3.42
434-0424	A50x14mmx 63	44	69.85	164.75	22.5		3.44
434-0425	A50x16mmx 63	48	69.85	164.75	24		3.46
434-0426	A50x18mmx 63	50	69.85	164.75	24		3.48
434-0427	A50x20mmx 63	52	69.85	164.75	25		4.24
434-0428	A50x25mmx 80	65	69.85	181.75	24	25	4.4
434-0429	A50x32mmx100	72	69.85	201.75	24	28	4.52
434-0430	A50x40mmx100	90	69.85	201.75	30	32	4.54
434-0431	A50x40mmx120	90	69.85	221.75	30	32	4.72
434-0432	A50x40mmx125	100	69.85	226.75	35	35	4.62
434-0433	A50x63mmx150	125	69.85	251.75	40	40	5.6

DIN69871 END MILL ADAPTOR



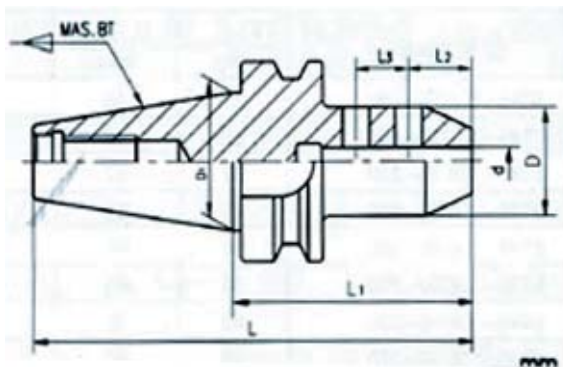
Order No.	ISO NO.-d-L1	L (mm)	D (mm)	D1 (mm)	L2 (mm)
434-0361	ISO 30x1/4"x 50	97.8	27	31.75	12
434-0362	ISO 30x5/16"x 50	97.8	30	31.75	16
434-0363	ISO 30x3/8"x 50	97.8	32	31.75	19
434-0364	ISO 30x1/2"x 50	97.8	35	31.75	23
434-0365	ISO 30x5/8"x 63	110.8	41	31.75	23
434-0366	ISO 40x1/4"x 50	118.4	27	44.45	12
434-0367	ISO 40x5/6"x 50	118.4	30	44.45	16
434-0368	ISO 40x3/8"x 50	118.4	32	44.45	19
434-0369	ISO 40x1/2"x 50	118.4	35	44.45	22
434-0370	ISO 40x5/8"x 63	131.4	41	44.45	23
434-0371	ISO 40x3/4"x 63	431.4	44.5	44.45	25
434-0372	ISO 40x1"x100	168.4	55	44.45	28
434-0373	ISO 40x1-1/4"x100	168.4	62	44.45	28
434-0374	ISO 50x1/4"x 63	164.75	27	69.85	12
434-0375	ISO 50x5/16"x 63	164.75	30	69.85	16
434-0376	ISO 50x3/8"x 63	164.75	32	69.85	19
434-0377	ISO 50x1/2"x 63	164.75	35	69.85	22
434-0378	ISO 50x5/8"x 63	164.75	41	69.85	23
434-0379	ISO 50x3/4"x 63	164.75	44.5	69.85	28
434-0380	ISO 50x1"x 80	181.75	55	69.85	28
434-0381	ISO 50x1-1/4"x100	201.75	62	69.85	28
434-0382	ISO 50x1-1/2"x100	201.75	68	69.85	28
434-0383	ISO 50x2"x125	226.75	97	69.85	30
434-0384	ISO 50x2-1/4"x150	250.75	125	69.85	30

BT BORING SHANK FOR SQUARE BIT, RIGHT ANGLE



Order No.	Size	D	D1	L	W
434-1250	BT45x25x120	25-40mm	20	120	8
434-1251	BT45x38-150	38-60mm	30	150	10
434-1252	BT45x50x165	50-70mm	40	165	13
434-1253	BT45x72x195	72-100mm	60	195	19

BT END MILL ADAPTOR



Order No.	BT No.xdxL1	L (mm)	D (mm)	D1 (mm)	L2 (mm)
434-0261	BT30x1/4"x60	108.4	27	31.75	12
434-0262	BT30x5/16"x60	108.4	30	31.75	16
434-0263	BT30x3/8"x60	108.4	32	31.75	19
434-0264	BT30x1/2"x60	108.4	35	31.75	22
434-0265	BT30x5/8"x75	123.4	41	31.75	23
434-0266	BT30x3/4"x75	123.4	44.5	31.75	25
434-0267	BT30x1"x90	138.4	55	31.75	28
434-0268	BT40x1/4"x50	115.4	27	44.45	12
434-0269	BT40x5/16"x50	115.4	30	44.45	16
434-0270	BT40x3/8"x63	128.4	32	44.45	19
434-0271	BT40x1/2"x63	128.4	35	44.45	22
434-0272	BT40x5/8"x63	128.4	41	44.45	23
434-0273	BT40x3/4"x63	128.4	44.5	44.45	25
434-0274	BT40x1"x100	165.4	55	44.45	28
434-0275	BT40x1-1/4"x100	165.4	62	44.45	28
434-0276	BT50x1/4"x63	164.8	27	69.85	12
434-0277	BT50x5/16"x63	164.8	30	69.85	16
434-0278	BT50x3/8"x63	164.8	32	69.85	19
434-0279	BT50x1/2"x80	181.8	35	69.85	22
434-0280	BT50x5/8"x80	181.8	41	69.85	23
434-0281	BT50x3/4"x80	181.8	44.5	69.85	25
434-0282	BT50x1"x100	201.8	55	69.85	28
434-0283	BT50x1-1/4"x105	206.8	62	69.85	28
434-0284	BT50x1-1/2"x105	216.8	38	69.85	28

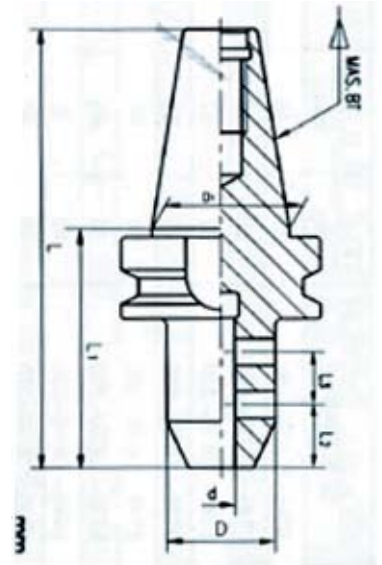
BT BORING SHANK



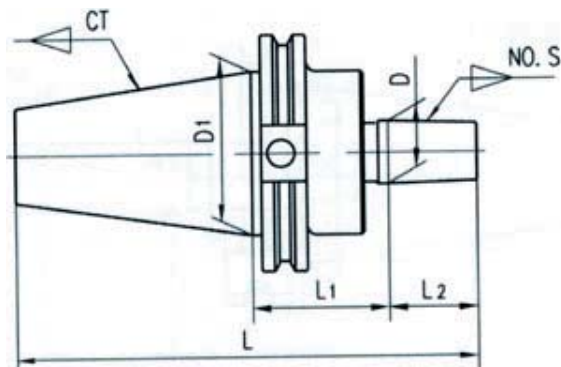
Order No.	Size	L (mm)	Wt(kg)
434-1140	BT40x7/8"-20-45	122.4	1.4
434-1141	BT40x1-1/2"-18-45	122.4	1.4
434-1142	BT50x7/8"-20-75	188.8	4.3
434-1143	BT50x1-1/2"x18-75	188.8	5
434-1144	BT50x7/8"-20-80	193.8	4.7
434-1145	BT50x1-1/2"x18-80	193.8	5.2

BT END MILL ADAPTOR

Order No.	Size	Wt(kg)	D	D1	L	L2	L3
434-0301	BT30x 6mmx 50mm	0.66	25	31.75	98.4	18	
434-0302	BT30x 6mmx 60mm	0.72	25	31.75	108.4	18	
434-0303	BT30x 8mmx 60mm	0.8	28	31.75	108.4	18	
434-0304	BT30x10mmx 60mm	0.83	35	31.75	108.4	20	
434-0305	BT30x10mmx 80mm	0.83	35	31.75	128.4	20	
434-0306	BT30x12mmx 60mm	0.88	42	31.75	108.4	22.5	
434-0307	BT30x14mmx 60mm	1.02	44	31.75	108.4	22.5	
434-0308	BT30x16mmx 75mm	1.04	48	31.75	123.4	24	
434-0309	BT30x18mmx 75mm	1.26	50	31.75	123.4	24	
434-0310	BT30x20mmx 75mm	1.36	52	31.75	123.4	25	
434-0311	BT30x25mmx 90mm	1.5	65	31.75	138.4	24	25
434-0312	BT40x 6mmx 50mm	0.96	25	44.45	115.4	18	
434-0313	BT40x 6mmx 60mm	0.98	25	44.45	125.4	18	
434-0314	BT40x 8mmx 50mm	1	28	44.45	115.4	18	
434-0315	BT40x10mmx 63mm	1.08	35	44.45	128.4	20	
434-0316	BT40x12mmx 63mm	1.2	42	44.45	128.4	22.5	
434-0317	BT40x14mmx 63mm	1.22	44	44.45	128.4	22.5	
434-0318	BT40x16mmx 63mm	1.24	48	44.45	128.4	24	
434-0319	BT40x16mmx 70mm	1.3	48	44.45	135.4	24	
434-0320	BT40x18mmx 63mm	1.36	50	44.45	128.4	24	
434-0321	BT40x20mmx 63mm	1.36	52	44.45	128.4	25	
434-0322	BT40x20mmx 70mm	2.1	52	44.45	135.4	25	
434-0323	BT40x25mmx 90mm	2.07	65	44.45	155.4	24	25
434-0324	BT40x25mmx100mm	2.08	65	44.45	165.4	24	25
434-0325	BT40x32mmx100mm	2.25	72	44.45	165.4	24	28
434-0326	BT40x32mmx110mm	2.3	72	44.45	175.4	24	28
434-0327	BT40x40mmx120mm	2.5	90	44.45	185.4	30	32
434-0328	BT40x40mmx140mm	2.8	90	44.45	205.4	30	32
434-0329	BT50x 6mmx 63mm	3.2	25	69.85	164.8	18	
434-0330	BT50x 8mmx 63mm	3.23	28	69.85	164.8	18	
434-0331	BT50x10mmx 63mm	3.24	35	69.85	164.8	20	
434-0332	BT50x12mmx 80mm	3.36	42	69.85	181.8	22.5	
434-0333	BT50x16mmx 80mm	3.48	48	69.85	181.8	24	
434-0334	BT50x20mmx 80mm	3.52	52	69.85	181.8	25	
434-0335	BT50x25mmx100mm	4.28	65	69.85	201.8	24	25
434-0336	BT50x25mmx105mm	4.3	65	69.85	206.8	24	25
434-0337	BT50x25mmx150mm	4.35	65	69.85	251.8	24	25
434-0338	BT50x25mmx200mm	4.4	65	69.85	301.8	24	25
434-0339	BT50x32mmx100mm	4.44	72	69.85	201.8	24	28
434-0340	BT50x32mmx105mm	4.56	72	69.85	206.8	24	28
434-0341	BT50x40mmx115mm	4.58	90	69.85	216.8	30	32
434-0342	BT50x40mmx120mm	4.58	90	69.85	221.8	30	32
434-0343	BT50x42mmx120mm	4.6	90	69.85	221.8	30	32
434-0344	BT50x50mmx150mm	4.9	100	69.85	251.8	35	32

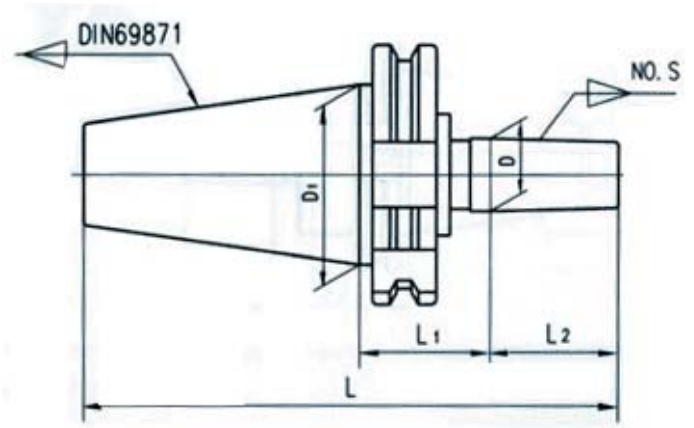


CAT DRILL CHUCK ARBOR



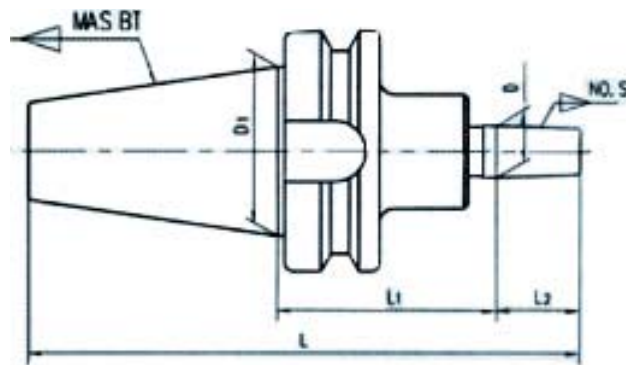
Order No.	Size	L2	L	D	D1	Drawbar thread
434-0221	CT40-JT2-45	22.225	135.5	14.199	44.45	5/8"-11
434-0222	CT40-JT3-45	30.956	144.2	20.599	44.45	5/8"-11
434-0223	CT40-JT4-45	42.069	155.3	28.55	44.45	5/8"-11
434-0224	CT40-JT6-45	25.4	138.65	17.17	44.45	5/8"-11
434-0225	CT40-JT33-45	25.4	137.25	15.85	44.45	5/8"-11
434-0226	CT45-JT1-45	16.669	144.2	9.754	57.15	3/4"-10
434-0227	CT45-JT2-45	22.225	150	14.199	57.15	3/4"-10
434-0228	CT45-JT3-45	30.956	158.5	20.599	57.15	3/4"-10
434-0229	CT45-JT4-45	42.069	169.6	28.55	57.15	3/4"-10
434-0230	CT45-JT5-45	47.625	175.2	35.89	57.15	3/4"-10
434-0231	CT45-JT6-45	25.4	153	17.17	57.15	3/4"-10
434-0232	CT45-JT33-45	25.4	153	15.85	57.15	3/4"-10
434-0233	CT50-JT2-45	22.225	168.85	14.199	69.85	1"-8
434-0234	CT50-JT3-45	30.956	177.56	20.599	69.85	1"-8
434-0235	CT50-JT4-45	42.069	188.67	28.55	69.85	1"-8
434-0236	CT50-JT5-45	47.625	194.23	35.89	69.85	1"-8
434-0237	CT50-JT6-45	25.4	172	17.17	69.85	1"-8
434-0238	CT50-JT33-45	25.4	172	15.85	69.85	1"-8
434-0239	CT45-B10-45	14.5	142	10.094	57.15	3/4"-10
434-0240	CT45-B12-45	18.5	146	12.065	57.15	3/4"-10
434-0241	CT45-B16-32	24	138.6	15.733	57.15	3/4"-10
434-0242	CT45-B16-45	24	151.6	15.733	57.15	3/4"-10
434-0243	CT45-B18-45	32	159.6	17.78	57.15	3/4"-10
434-0244	CT40-B16-45	24	137.25	15.733	44.45	5/8"-11
434-0245	CT40-B18-45	32	145.25	17.78	44.45	5/8"-11
434-0246	CT50-B10-45	14.5	161.1	10.094	69.85	1"-8
434-0247	CT50-B12-45	18.5	165.1	12.065	69.85	1"-8
434-0248	CT50-B16-60	24	185.6	15.773	69.85	1"-8
434-0249	CT50-B18-60	32	193.6	17.78	69.85	1"-8
434-0250	CT50-B22-60	40.5	202.1	21.793	69.85	1"-8
434-0251	CT50-B24-60	50.5	212.1	23.825	69.85	1"-8

DIN69871 DRILL CHUCK ARBOR



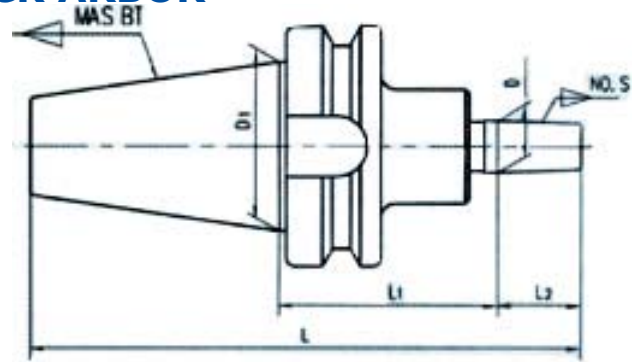
Order No.	Size	L2	L	D	D1	Drawbar thread
434-0171	A40-J0-32	11.112	111.5	6.35	44.45	M16
434-0172	A40-J1-32	16.669	117	9.754	44.45	M16
434-0173	A40-J2-32	22.225	122.6	14.199	44.45	M16
434-0174	A40-J2S-32	19.05	119.5	13.94	44.45	M16
434-0175	A40-J3-32	30.956	131.4	20.599	44.45	M16
434-0176	A40-J4-32	42.069	142.5	28.55	44.45	M16
434-0177	A40-J5-32	47.625	148	35.89	44.45	M16
434-0178	A40-J6-32	25.4	125.8	17.17	44.45	M16
434-0179	A40-J33-32	26.4	126.8	15.85	44.45	M16
434-0180	A50-J3-45	30.965	177.7	20.599	69.85	M16
434-0181	A50-J6-45	25.4	172.1	17.17	69.85	M16
434-0182	A50-J33-45	25.4	172.1	15.85	69.85	M16
434-0183	A40-B6-32	10	110.4	6.35	44.5	M16
434-0184	A40-B10-32	14.5	114.9	10.094	44.45	M16
434-0185	A40-B10-45	14.5	127.9	10.094	44.45	M16
434-0186	A40-B12-32	18.5	118.9	12.065	44.45	M16
434-0187	A40-B12-80	18.5	166.9	12.065	44.45	M16
434-0188	A40-B16-26	24	118.4	15.733	44.45	M16
434-0189	A40-B16-32	24	124.4	15.733	44.45	M16
434-0190	A40-B16-45	24	137.4	15.733	44.45	M16
434-0191	A40-B18-32	32	132.4	17.78	44.45	M16
434-0192	A40-B18-45	32	145.4	17.78	44.5	M16
434-0193	A40-B22-32	40.5	140.9	21.793	45.5	M16
434-0194	A40-B24-32	50.5	150.9	23.825	46.5	M16
434-0195	A50-B16-45	24	170.75	15.733	69.85	M24
434-0196	A50-B16-45	24	170.8	15.733	69.85	M16
434-0197	A50-B18-45	32	178.8	17.78	69.85	M16
434-0198	A50-B22-60	40.5	202.3	21.793	69.85	M24
434-0199	A50-B24-60	50.5	212.3	23.825	69.85	M24

BT DRILL CHUCK ARBOR



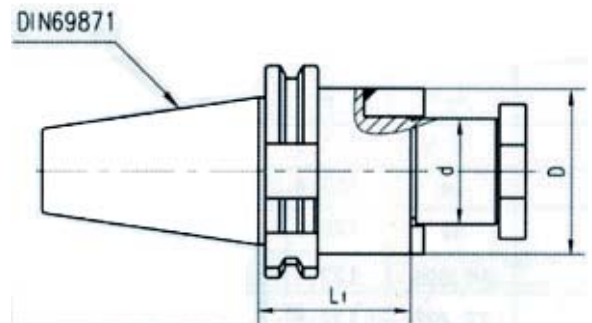
Order No.	Size	L2	L	D	D1	Drawbar thread	Wt(kg)
434-0101	BT30-JT1-45	16.669	110	9.754	31.75	M12	0.6
434-0102	BT30-JT2-45	22.225	115.6	14.199	31.75	M12	0.7
434-0103	BT30-JT2S-45	19.05	112.4	13.94	31.75	M12	0.7
434-0104	BT30-JT3-45	30.956	124.4	20.599	31.75	M12	0.8
434-0105	BT30-JT4-45	42.069	135.4	28.55	31.75	M12	0.85
434-0106	BT30-JT5-45	47.625	141	35.89	31.75	M12	0.9
434-0107	BT30-JT6-45	25.4	118.8	17.17	31.75	M12	0.75
434-0108	BT30-JT33-40	25.4	113.8	15.85	31.75	M12	0.75
434-0109	BT30-JT33-45	25.4	118.8	15.85	31.75	M12	0.75
434-0110	BT30-B10-45	14.5	107.9	10.094	31.75	M12	0.6
434-0111	BT30-B12-45	18.5	111.9	12.065	31.75	M12	0.6
434-0112	BT30-B16-45	24	117.4	15.733	31.75	M12	0.7
434-0113	BT30-B18-45	32	125.4	17.78	31.75	M12	0.82
434-0114	BT40-JT1-45	16.669	127.1	9.754	44.45	M16	1.16
434-0115	BT40-JT2-45	22.225	132.6	14.199	44.45	M16	1.25
434-0116	BT40-JT2S-45	19.05	129.4	13.94	44.45	M16	1.2
434-0117	BT40-JT3-45	30.956	141.4	20.599	44.45	M16	1.45
434-0118	BT40-JT4-45	42.069	152.5	28.55	44.45	M16	1.55
434-0119	BT40-JT5-45	47.625	158	35.89	44.45	M16	1.6
434-0120	BT40-JT6-45	25.4	135.8	17.17	44.45	M16	1.3
434-0121	BT40-JT33-45	25.4	135.8	15.85	44.45	M16	1.3
434-0122	BT40-B10-45	14.5	124.9	10.094	44.45	M16	1.4
434-0123	BT40-B10-120	14.5	199.9	10.094	44.45	M16	1.76
434-0124	BT40-B12-45	18.5	128.9	12.065	44.45	M16	1.34
434-0125	BT40-B16-32	24	121.4	15.733	44.45	M16	1.4
434-0126	BT40-B16-45	24	134.4	15.733	44.45	M16	1.45
434-0127	BT40-B16-75	24	164.4	15.733	44.45	M16	1.55
434-0128	BT40-B16-90	24	179.4	15.733	44.45	M16	1.4
434-0129	BT40-B18-45	32	142.4	17.78	44.45	M16	1.7
434-0130	BT40-B18-75	32	172.4	17.78	44.45	M16	1.76
434-0131	BT45-B16-90	24	196.8	15.733	51.75	M20	2.3
434-0132	BT45-B16-100	24	206.8	15.733	51.75	M20	2.4
434-0133	BT50-JT1-45	16.669	163.5	9.754	69.85	M24	3.6
434-0134	BT50-JT2-45	22.225	169	14.199	69.85	M24	3.95
434-0135	BT50-JT2S-45	19.05	165.9	13.94	69.85	M24	3.9

BT DRILL CHUCK ARBOR



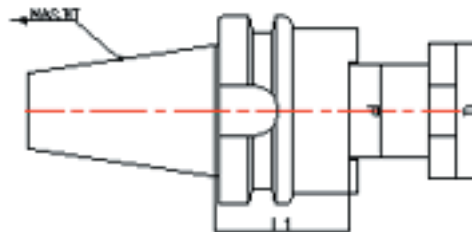
Order No.	Size	L2	L	D	D1	Drawbar thread	Wt(kg)
434-0136	BT50-JT3-45	30.956	177.8	20.599	69.85	M24	3.7
434-0137	BT50-JT4-45	42.069	188.9	28.55	69.85	M24	3.75
434-0138	BT50-JT5-45	47.625	194.4	35.89	69.85	M24	3.8
434-0139	BT50-JT6-45	25.4	172.2	17.17	69.85	M24	4
434-0140	BT50-JT33-45	25.4	172.2	15.85	69.85	M24	4
434-0141	BT50-B10-45	14.5	161.3	10.094	69.85	M24	3.6
434-0142	BT50-B10-100	14.5	216.3	10.094	69.85	M24	3.8
434-0143	BT50-B12-45	18.5	165.3	12.065	69.85	M24	3.6
434-0144	BT50-B16-45	24	170.8	15.733	69.85	M24	3.65
434-0145	BT50-B16-60	24	185.8	15.733	69.85	M24	3.7
434-0146	BT50-B16-75	24	200.8	15.733	69.85	M24	3.74
434-0147	BT50-B16-90	24	215.8	15.733	69.85	M24	3.78
434-0148	BT50-B18-45	32	178.8	17.78	69.85	M24	3.7

DIN69871 SHELL MILL ARBOR



Order No.	Size	D	Wt(kg)	Order No.	Size	D	Wt(kg)
434-0051	A30x16mm-60	32	1	434-0061	A40x32mm-60	58	4.5
434-0052	A30x22mm-60	40	1.3	434-0062	A40x40mm-60	70	4.8
434-0053	A30x27mm-60	48	1.5	434-0063	A40x50mm-70	90	3.7
434-0054	A30x32mm-60	58	1.8	434-0064	A50x16mm-60	32	3.8
434-0055	A30x40mm-60	70	2.2	434-0065	A50x22mm-60	40	4
434-0056	A30x50mm-70	90	3.2	434-0066	A50x27mm-60	48	4.2
434-0057	A40x16mm-60	32	1.2	434-0067	A50x32mm-60	58	4.5
434-0058	A40x22mm-60	40	1.3	434-0068	A50x40mm-60	70	4.8
434-0059	A40x27mm-60	48	1.4	434-0069	A50x50mm-70	90	5
434-0060	A40x27mm-75	48	1.6	434-0070	A50x50mm-80	90	5.1

BT SHELL MILL ARBOR



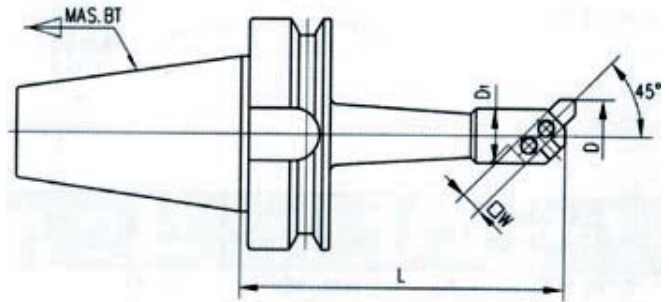
Order No.	Size	D	Wt(kg)	Order No.	Size	D	Wt(kg)
434-0001	BT30x16mm-60	32	1	434-0026	BT45x22mm-60	40	2.6
434-0002	BT30x22mm-60	40	1.3	434-0027	BT45x27mm-60	48	2.8
434-0003	BT30x27mm-60	48	1.5	434-0028	BT45x27mm-100	48	3.1
434-0004	BT30x32mm-60	58	1.8	434-0029	BT45x40mm-100	70	3.4
434-0005	BT30x40mm-60	70	2.2	434-0030	BT45x40mm-105	70	3.5
434-0006	BT30x50mm-60	90	4.5	434-0031	BT50x16mm-60	32	3.6
434-0007	BT40x16mm-45	32	1	434-0032	BT50x16mm-75	32	3.9
434-0008	BT40x16mm-60	32	1.3	434-0033	BT50x16mm-120	32	4.3
434-0009	BT40x16mm-120	32	1.7	434-0034	BT50x22mm-60	40	5
434-0010	BT40x22mm-45	40	1.5	434-0035	BT50x22mm-75	40	4
434-0011	BT40x22mm-60	40	1.7	434-0036	BT50x22mm-100	40	4.5
434-0012	BT40x22mm-100	40	3	434-0037	BT50x22mm-120	40	5.5
434-0013	BT40x22mm-102	40	3.6	434-0038	BT50x27mm-60	48	5.5
434-0014	BT40x27mm-45	48	1.5	434-0039	BT50x27mm-105	48	4
434-0015	BT40x27mm-60	48	1.6	434-0040	BT50x32mm-60	58	4.5
434-0016	BT40x27mm-75	48	1.8	434-0041	BT50x32mm-75	58	1.6
434-0017	BT40x27mm-105	48	2.1	434-0042	BT50x32mm-105	58	1.8
434-0018	BT40x27mm-120	48	2.3	434-0043	BT50x40mm-60	70	2.2
434-0019	BT40x32mm-45	58	1.2	434-0044	BT50x40mm-75	70	3.6
434-0020	BT40x32mm-60	58	1.5	434-0045	BT50x40mm-90	70	3.7
434-0021	BT40x32mm-75	58	1.8	434-0046	BT50x40mm-100	70	3.75
434-0022	BT40x32mm-120	58	2.8	434-0047	BT50x40mm-105	70	3.8
434-0023	BT40x40mm-60	70	2	434-0048	BT50x50mm-60	90	4
434-0024	BT40x40mm-75	70	2.2	434-0049	BT50x50mm-70	90	4.2
434-0025	BT40x50mm-70	90	2.5	434-0050	BT50x50mm-120	90	4.4

BT BORING SHANK



Order No.	Size	L (mm)	Wt(kg)
434-1140	BT40x7/8"-20-45	122.4	1.4
434-1141	BT40x1-1/2"-18-45	122.4	1.4
434-1142	BT50x7/8"-20-75	188.8	4.3
434-1143	BT50x1-1/2"x18-75	188.8	5
434-1144	BT50x7/8"-20-80	193.8	4.7
434-1145	BT50x1-1/2"x18-80	193.8	5.2

BT BORING SHANK FOR SQUARE BIT, ANGLE MOUNTING



Order No.	Size	D	D1	L	W
434-1200	BT40x25x150	25-38mm	20	150	8
434-1201	BT40x30x150	30-42mm	24	150	8
434-1202	BT40x38x150	38-52mm	30	150	10
434-1203	BT40x42x150	42-56mm	34	150	10
434-1204	BT40x50x150	50-65mm	40	150	13
434-1205	BT40x62x150	62-90mm	50	150	16
434-1206	BT40x72x150	72-110mm	60	150	19
434-1207	BT45x25x180	25-28mm	20	180	8
434-1208	BT45x30x180	30-42mm	24	180	8
434-1209	BT45x38x200	38-52mm	30	200	10
434-1210	BT45x42x200	42-56mm	34	200	10
434-1211	BT45x50x200	50-65mm	40	200	13
434-1212	BT45x50x230	50-65mm	40	230	13
434-1213	BT45x62x200	62-90mm	50	200	16

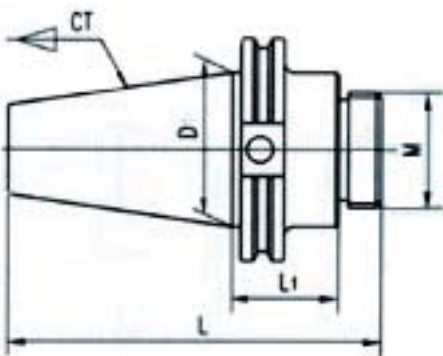
Order No.	Size	D	D1	L	W
434-1214	BT45x62x270	62-90mm	50	270	16
434-1215	BT45x72x200	72-110mm	60	200	19
434-1216	BT45x72x270	72-110mm	60	270	19
434-1217	BT45x72x250	72-110mm	60	250	19
434-1218	BT45x90x200	90-125mm	75	200	19
434-1219	BT45x90x250	90-125mm	75	250	19
434-1220	BT50x25x150	25-38mm	20	150	8
434-1221	BT50x30x170	30-42mm	24	170	8
434-1222	BT50x38x170	38-52mm	30	170	10
434-1223	BT50x42x180	42-56mm	34	180	10
434-1224	BT50x50x200	50-65mm	40	200	13
434-1225	BT50x62x250	62-90mm	50	250	16
434-1226	BT50x72x250	72-110mm	60	250	19
434-1227	BT50x90x250	90-125mm	75	250	19

BT BORING SHANK FOR SQUARE BIT, RIGHT ANGLE



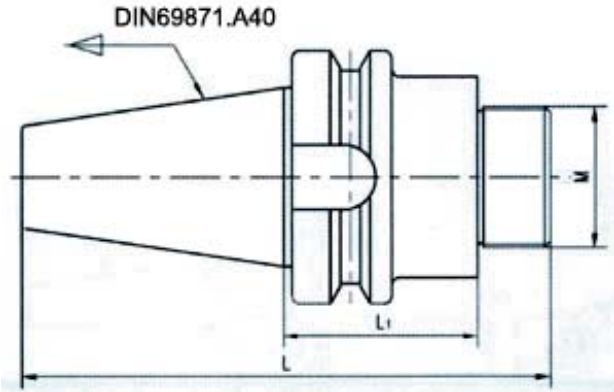
Order No.	Size	D	D1	L	W
434-1250	BT45x25x120	25-40mm	20	120	8
434-1251	BT45x38-150	38-60mm	30	150	10
434-1252	BT45x50x165	50-70mm	40	165	13
434-1253	BT45x72x195	72-100mm	60	195	19

CAT BORING SHANK



Order No.	Size	L (mm)	Wt(kg)
434-1175	CT40-1-1/2"X18-50	130	1.5
434-1176	CT45-1-1/2"X18-50	144.55	3.2
434-1177	CT50-1-1/2"X18-50	163.6	4

DIN69871 BORING SHANK



Order No.	Size	L (mm)	Wt(kg)
434-1160	A40.1-1/2"X18-40	120.4	1.4
434-1161	A40.1-1/2"X18-50	130.4	3.2
434-1162	A40.1-1/2"X18-63	143.4	3.4
434-1163	A45.1-1/2"X18-50	144.45	3
434-1164	A50.1-1/2"X18-35	148.25	3.7
434-1165	A50.1-1/2"X18-50	163.6	4

VERTICAL/HORIZONTAL NC TOOL CLAMPING DEVICE

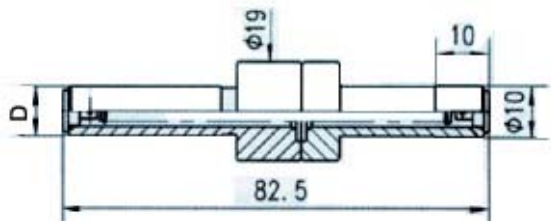


Order No.	For Holders	Overall Size (mm)	Weight (kg)
434-0091	BT30	205x98.5x128	3.7
434-0092	BT40	205x98.5x128	3.8
434-0093	BT50	275x150x198	11.4
434-0094	DIN69871. 30	205x98.5x128	3.7
434-0095	DIN69871. 40	205x98.5x128	3.8
434-0096	DIN69871. 50	275x150x198	11.4
434-0097	CAT30	205x98.5x128	3.7
434-0098	CAT40	205x98.5x128	3.8
434-0099	CAT50	275x150x198	11.4

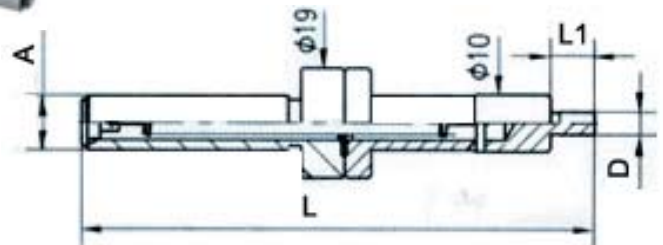
MECHANICAL EDGE FINDER



- * For quick and easy locating round or flat work.
- * Made of high quality alloy steel.
- * Quick and accurate.
- * Concentricity 0.005mm



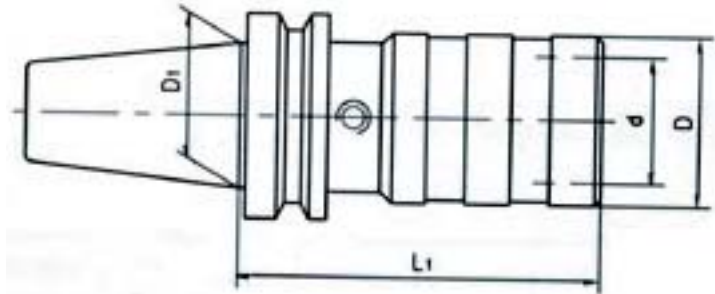
Order No.	D
434-0081	9.5MM
434-0084	10MM



Order No.	L	L1	A	D
434-0080	89.5mm	7.5mm	9.5mm	4mm
434-0082	89mm	8.2mm	10mm	4mm
434-0083	89.5mm	7.5mm	9.5mm	6mm

CNC TAPPING CHUCK

The CNC tapping chucks are made with with thread pitch compensation mechanism. There are two kinds of tapping collects, overload protection and non-overload protection. With the overload protection tapping collets, the release torque can be adjusted by the setting screws. The tap reverses back and out automatically if the tapping torque comes to the release torque, which prevents taps from breaking.



*** Tapping collets are included.**

Order No.	Shank	Tapping range	D(mm)	D1(mm)	d(mm)	L1(mm)
434-1230	DIN69871.30	M3-M12	36	31.75	19	64
434-1231	DIN69871.40	M3-M12	36	44.45	19	64
434-1232	DIN69871.50	M3-M12	36	69.85	19	64
434-1233	BT30	M3-M12	36	31.75	19	64
434-1234	BT40	M3-M12	36	44.45	19	64
434-1235	BT50	M3-M12	36	69.85	19	64
434-1236	DIN60871.30	M7-M20	53	31.75	31	97
434-1237	DIN69871.40	M7-M20	53	44.45	31	97
434-1238	DIN69871.50	M7-M20	53	69.85	31	97
434-1239	BT30	M7-M20	53	31.75	31	97
434-1240	BT40	M7-M20	53	44.45	31	97
434-1241	BT50	M7-M20	53	69.85	31	97
434-1242	DIN69871.30	M14-M36	78	31.75	48	149
434-1243	DIN69871.40	M14-M36	78	44.45	48	149
434-1244	DIN69871.50	M14-M36	78	69.85	48	149
434-1245	BT30	M14-M36	78	31.75	48	149
434-1246	BT40	M14-M36	78	44.45	48	149
434-1247	BT50	M14-M36	78	69.85	48	149

Electronic Edge Finder

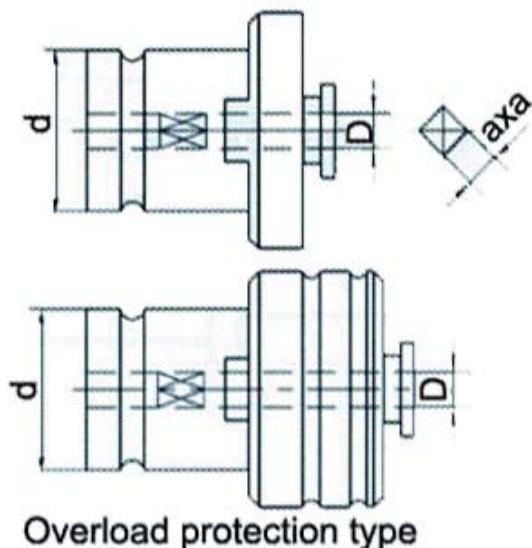


- * Touch point LED indication.
- * Made of high quality alloy steel.
- * Hardened and precision ground.
- * Concentricity 0.01mm

Order No.	Diameter of Holding Bar	Length	Accuracy
434-1300	20mm	176MM	0.01MM
434-1301	32mm		
434-1302	20mm	98MM	
434-1303	32mm		
434-1304	3/4"		
434-1305	1-1/4"		

TAPPING COLLETS

There are kinds of CNC tapping collets, overload protection and non-overload protection. The overload protection tapping collets help reverses back and out the tap automatically, which prevents taps from breaking.

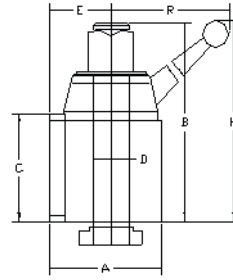


Overload Protection	Non-Protection	Size	Shank Dia.	Tap Size		
Order No.	Order No.	Dxa (mm)	d (mm)	DIN371	DIN374	DIN376
434-1330	434-1370	3.5x2.7	19	M3	M5	M5
434-1331	434-1371	4x3	19	M3.5		
434-1332	434-1372	4.5x3.4	19	M4	M6	
434-1333	434-1373	6x4.9	19	M5	M6	
434-1334	434-1374	6x4.9	19	M6		
434-1335	434-1375	6x4.9	19		M8	M8
434-1336	434-1376	7x5.5	19		M10	M10
434-1337	434-1377	8x6.2	19	M8		
434-1338	434-1378	9x7	19		M12	M12
434-1339	434-1379	10x8	19	M10		
434-1340	434-1380	11x9	48		M14	M14
434-1341	434-1381	12x9	48		M16	M16
434-1342	434-1382	14x11	48		M18	M18
434-1343	434-1383	16x12	48		M20	M20
434-1344	434-1384	18x14.5	48		M22	M22
434-1345	434-1385	18x14.5	48		M24	M24
434-1346	434-1386	20x16	48		M27	M27
434-1347	434-1387	22x18	48		M30	M30
434-1348	434-1388	25x20	48		M33	M33
434-1349	434-1389	28x22	48		M36	M36
434-1350	434-1390	7x5.5	31		M10	M10
434-1351	434-1391	8x6.2	31	M8		
434-1352	434-1392	9x7	31		M12	M12
434-1353	434-1393	10x8	31	M10		
434-1354	434-1394	11x9	31		M14	M14
434-1355	434-1395	12x9	31		M16	M16
434-1356	434-1396	14x11	31		M18	M18
434-1357	434-1397	16x12	31		M20	M20

QUICK CHANGE TOOL POSTS & TOOL HOLDERS



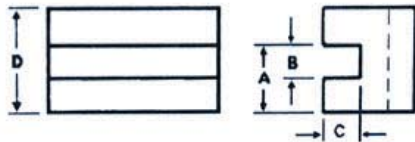
- All working parts hardened & ground.
- Maximum rigidity for chatter-free performance
- No time wasted with shims.
- Increases productivity of all lathe operations.
- Completely sealed for maintenance-free operation.
- Change tools in seconds.



Piston Type		Wedge Type		A	B	C	D	E	H	R	SWING
Tool Post	Set	Tool Post	Set								
400-1000	401-1000	400-1111	401-1111	2-1/2"	3-7/8"	2-1/4"	9/16"	1-3/8"	4-11/16"	5-3/4"	12"
400-2000	401-2000	400-2222	401-2222	3"	4-5/8"	2-3/4"	5/8"	1-5/8"	5-9/16"	7-5/16"	10"~15"
400-3000	401-3000	400-3333	401-3333	3-1/2"	5-1/8"	3"	3/8"	1-7/8"	6-1/8"	7-7/8"	13"~18"
400-4000	401-4000	400-4444	401-4444	4"	6-1/4"	3-5/8"	7/8"	2-1/8"	7"	9"	14"~20"

Turning and Facing Holder #1

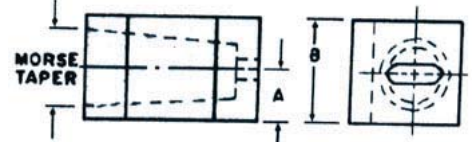
Takes various sizes of tool bits.



Order No.	A	B	C	D	Tool Bit
400-1001	15/16"	1/2"	7/16"	1-1/2"	3/16"-1/2"
400-2001	1-1/8"	5/8"	1/2"	1-3/4"	1/4"-5/8"
400-3001	1-7/16"	3/4"	5/8"	2-1/8"	1/2"-3/4"
400-4001	1-11/16"	1"	3/4"	2-1/2"	1/2"-1"

Morse Taper Holder for Drilling #5

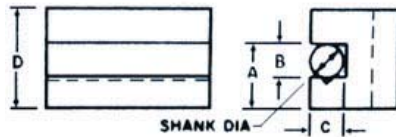
Drills by using power feed with carriage instead of tailstock



Order No.	A	B	Taper Hole Size
400-1005	3/4"	1-1/2"	2MT
400-2005	1"	2"	2MT
400-3005	1"	2"	3MT
400-4005	1-3/8"	2-3/4"	3MT

Boring, Turning & Facing Holder #2

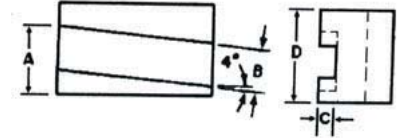
V groove holds round shank boring bars and tools as well as square tool bits.



Order No.	A	B	C	D	Tool Bit	Shank
400-1002	15/16"	1/2"	7/16"	1-1/2"	3/16"-1/2"	7/16"
400-2002	1-1/8"	5/8"	1/2"	1-3/4"	1/4"-5/8"	1/2"
400-3002	1-7/16"	3/4"	5/8"	2-1/8"	1/2"-3/4"	3/4"
400-4002	1-11/16"	1"	3/4"	2-1/2"	1/2"-1"	13/16"

Universal Parting Blade Tool Holder #7

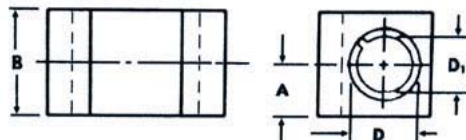
For bevel and T-cut blade. Cuts off close to chuck.



Order No.	A	B	C	D	Blade Height
400-1007	13/16"	1/2"	3/16"	1-1/2"	1/2"
400-2007	1"	11/16"	3/16"	1-3/4"	11/16"
400-3007	1-3/16"	3/4"	3/16"	2"	3/4"
400-4007	1-7/16"	7/8"	1/4"	2-1/2"	7/8"

Heavy Duty Boring Bar Holder #4

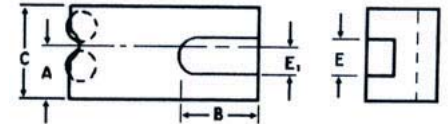
Split bushing accommodate smaller diameter boring bars



Order No.	A	B	D	D1
400-1004	3/4"	1-1/2"	3/4"	5/8"
400-2004	1"	2"	1"	3/4"
400-3004	1"	2"	1"	3/4"
400-4004	1-3/8"	2-3/4"	1-1/4"	1"

Knurling, Turning & Facing Holder #10

Supplied with a set of high speed precision ground and tapped medium diamond knurls.

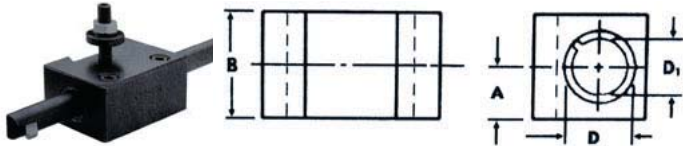


Order No.	A	B	C	E	E1
400-1010	7/8"	2-1/2"	1-9/16"	1/2"	3/8"
400-2010	1"	2-5/8"	1-3/4"	5/8"	1/2"
400-3010	1-3/16"	3-1/8"	2"	3/4"	5/8"
400-4010	1-7/16"	3-3/4"	2-1/2"	1"	3/4"

MACHINE ACCESSORIES

Heavy Duty Boring Bar Holder #41

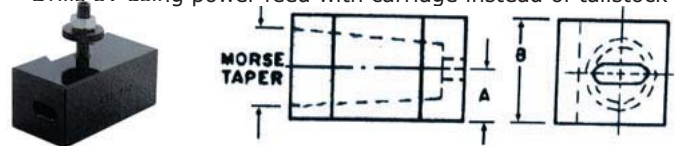
Split bushing accommodate bigger diameter boring bars.



Order No.	A	B	D	D1
400-1041	7/8"	1-3/4"	1"	3/4"
400-2041	1"	2"	1-1/4"	1"
400-3041	1-3/16"	2-1/4"	1-1/4"	1"
400-4041	1-1/2"	2-3/4"	1-1/2"	1-1/4"

Morse Taper Holder for Drilling #53

Drills by using power feed with carriage instead of tailstock

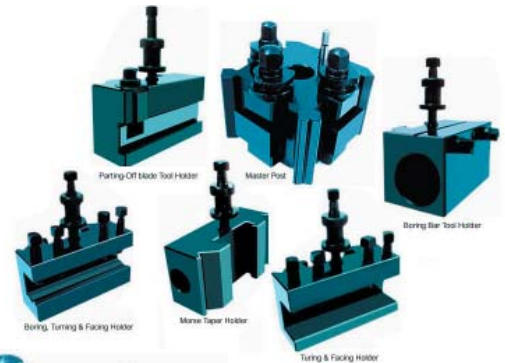


Order No.	A	B	Taper Hole
400-1053	3/4"	1-1/2"	MT3
400-2053	7/8"	1-3/4"	MT3
400-3053	1-1/16"	2-1/8"	MT4
400-4053	1-1/4"	2-1/2"	MT4

QUICK CHANGE TOOL POST SETS

The tool posts feature dovetail-type locking system. Each set comes with one each turning and facing holder, boring and turning/facing holder, parting tool holder, boring bar holder, morse taper holder. Speed up your lathe operations and enjoy the convenience of easy tool setup with this quick-change tool set.

Tool Post	Tool Post Set	Swing Up to	Master Post Dimension
Order No.	Order No.		
402-1000	402-1010	7"	1-7/8"x1-7/8"x1-1/4"
402-1001	402-1011	7"~10"	2-3/4"x2-3/4"x
402-1002	402-1012	10"~14"	3-7/8"x3-7/8"x2-3/8"
402-1003	402-1013	14"~18"	5"x5"x3-3/8"
402-1004	402-1014	18~24"	5-5/8"x5-5/8"x3-3/4"
402-1005	402-1015	Over 24"	6-7/8"x6-7/8"x4-3/4"
402-1006	402-1016	Over 24"	7-7/8"x7-7/8"x5-5/16"
402-1007	402-1017	Over 24"	8-7/8"x8-7/8"x5-7/8"



Turning and Facing Holder #1



Order No.	Swing Up to	Max. Tool Bit Height
402-1020	7"	3/8"
402-1021	7"~10"	5/8"
402-1022	10"~14"	3/4"
402-1023	14"~18"	1-1/8"
402-1024	18~24"	1-1/4"
402-1025	Over 24"	1-1/2"
402-1026	Over 24"	2"
402-1027	Over 24"	2"



TOOLPOST

Boring, Turning and Facing Holder #2



Boring, Turning & Facing Holder
V groove seat

Order No.	Max. Tool Bit Height	Max. Tool Dia.
402-1030	3/8"	3/8"
402-1031	5/8"	1/2"
402-1032	3/4"	5/8"
402-1033	1-1/8"	13/16"
402-1034	1-1/4"	15/16"
402-1035	1-1/2"	1-1/4"
402-1036	2"	1-3/8"
402-1037	2"	1-3/8"

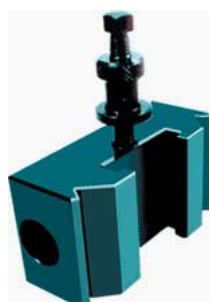
Part-Off Blade Tool Holder 4#



Parting-Off blade Tool Holder

Order No.	Swing Up to
402-1050	7"
402-1051	7"~10"
402-1052	10"~14"
402-1053	14"~18"
402-1054	18~24"
402-1055	Over 24"
402-1056	Over 24"
402-1057	Over 24"

Morse Taper Tool Holder 3#



Order No.	Swing Up to	Taper
402-1040	7"	
402-1041	7"~10"	MT1
402-1042	10"~14"	MT2
402-1043	14"~18"	MT3
402-1044	18~24"	MT4
402-1045	Over 24"	MT4
402-1046	Over 24"	MT5
402-1047	Over 24"	MT5

Boring Bar Tool Holder 5#



Boring Bar Tool Holder

Order No.	Swing Up to	Taper
402-1060	7"	
402-1061	7"~10"	MT1
402-1062	10"~14"	MT2
402-1063	14"~18"	MT3
402-1064	18~24"	MT4
402-1065	Over 24"	MT4
402-1066	Over 24"	MT5
402-1067	Over 24"	MT5

40 POSITION QUICK CHANGE TOOL POSTS



- *40 position at 9° increment.
- *Rigid and quick cam-lock locking and releasing holders.
- * Easy tool center height adjustment.
- * Tool holders are interchangeable with those from other brands.

Model		400-1100	400-1101		400-1102			400-1103		400-1104			400-1105			400-1106	
Turning holder size		12	16	20	16	20	25	25	32	32	40	45	40	50	63	50	63
Facing & boring holder size		15	30		30	30	40	40	40	40	50	45	63	63	63	63	63
Driving power(KW)		1	2		4.5	4.5	4.5	7	7	13	13	13	20	20	20	28	28
Lathe swing		120-220	150-300		200-400			300-500		400-700			600-1000			800-1500	
Cross slide width	L	80	100		120			150		180			200			250	
Cut edge height min	s	18	24.5	28.5	24.5	28.5	37	37	45.5	47	55	63	60	70	83	70	88
Cut edge height max	S	26	35.5	39.5	40.5	39.5	43	57	56.5	87	90	93	95	100	103	90	118
Height adjustment	hv	8	11		16	11	6	20	11	40	35	30	35	30	20	20	30
Tool repose	hv	6	8.5		8.5	8.5	12	12	13.5	15	15	18	20	20	25	20	25
Max tool height	a	12	16		16	20	25	25	32	32	40	45	40	50	63	50	65
Total width	B	70	100		125	125	125	150	150	192	202	202	230	234	242	275	282
Total height	H	37	56		68	68	68	79	79	110	110	110	122	122	122	135	135
Max distance	A	30	48		60	60	60	71	71	90	102	102	112	116	124	140	147
Normal bore	t	12	20		20	20	20	32	32	40	40	40	40	40	40	80	80
Max bore	T	12	31		31	31	31	51	51	70	70	70	80	80	80	110	110
Machine bore	r	as per customer's requirements															

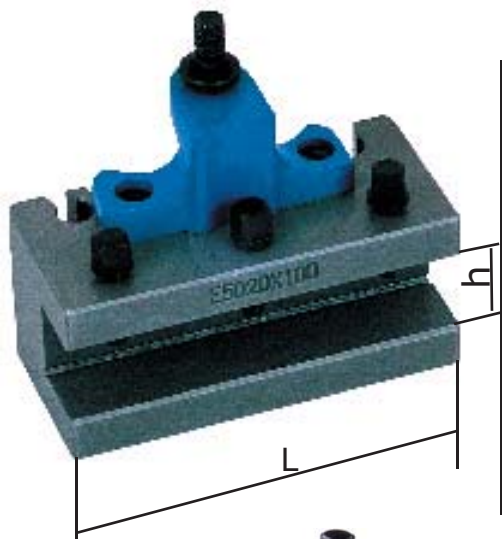
40 POSITION QUICK CHANGE TOOL POST & TOOL HOLDER SET



- * The most popular sizes.
- * Each set includes: one tool post, three turning tool holders and one turning, facing and boring tool holders.

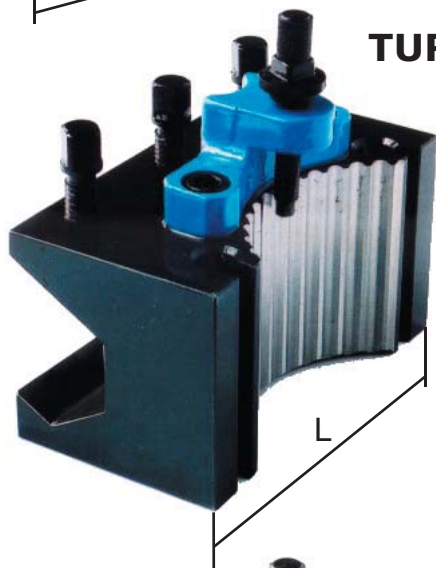
Order No.	Lathe swing	Each Set Includes:
400-1240	120-220mm	400-1100 (1),400-1120 (3),400-1150 (1)
400-1241	150-300mm	400-1101 (1),400-1124 (3),400-1151 (1)
400-1242	200-400mm	400-1102 (1),400-1126 (3),400-1152 (1)
400-1243	300-500mm	400-1103 (1),400-1128 (3),400-1154 (1)
400-1244	400-700mm	400-1104 (1),400-1132 (3),400-1155 (1)

TURNING AND FACING TOOL HOLDER



Order No.	Size (Lxh)	For Toolpost	Order No.	Size (Lxh)	For Toolpost
400-1120	12x50mm	400-1100	400-1131	32x140mm	400-1103
400-1121	16x75mm	400-1101	400-1132	32x150mm	400-1104
400-1122	16x90mm	400-1101	400-1133	32x170mm	400-1104
400-1123	20x75mm	400-1101	400-1134	40x150mm	400-1104
400-1124	20x90mm	400-1101	400-1135	40x170mm	400-1104
400-1125	16x100mm	400-1102	400-1136	45x170mm	400-1104
400-1126	20x100mm	400-1102	400-1137	40x180mm	400-1105
400-1127	25x100mm	400-1102	400-1138	50x180mm	400-1105
400-1128	25x120mm	400-1103	400-1139	63x180mm	400-1105
400-1129	25x140mm	400-1103	400-1140	50x220mm	400-1106
400-1130	32x120mm	400-1103	400-1141	63x220mm	400-1106

TURNING, FACING AND BORING TOOL HOLDER



Order No.	Size (HxL)	For Tool Post
400-1150	12x50mm	400-1100
400-1151	20x85mm	400-1101
400-1152	30x100mm	400-1102
400-1153	18x120mm	400-1103
400-1154	32x130mm	400-1103
400-1155	40x160mm	400-1104
400-1156	50x160mm	400-1104
400-1157	63x180mm	400-1105
400-1158	70x220mm	400-1106

DRILLING AND BORING TOOL HOLDER

Bushings are not included



Order No.	Size (Dia. x L)	For Tool Post
400-1170	15x50mm	400-1100
400-1171	30x80mm	400-1101
400-1172	30x100mm	400-1102
400-1173	40x100mm	400-1102
400-1174	40x120mm	400-1103
400-1175	40x160mm	400-1104
400-1176	50x160mm	400-1104
400-1177	63x180mm	400-1105
400-1178	63x220mm	400-1106

BUSHINGS FOR BORING TOOL HOLDER



Order No.	Size (dxMorse Taper)	Order No.	Size (dxMorse Taper)
400-1210	30mmxMT1	400-1215	40mmxMT4
400-1211	30mmxMT2	400-1216	50mmxMT3
400-1212	40mmxMT1	400-1217	50mmxMT4
400-1213	40mmxMT2	400-1218	50mmxMT5
400-1214	40mmxMT3	400-1219	63MMxMT5

Precision Modular Vises

Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground to a mirror finish.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Interchangeable stationary and movable jaws
- * For CNC machine center, CNC milling machine and other precision machines for milling, grinding, drilling, tapping etc.



Order No.	Jaw Width	Jaw Height	Jaw Opening	Vise Length	Clamping Force (kg)
440-1000	100mm	30mm	100mm	270mm	3000
440-1005	125mm	40mm	150mm	345mm	3000
440-1010	150mm	50mm	200mm	420mm	5000
440-1015	150mm	50mm	200mm	520mm	5000
440-1020	175mm	60mm	200mm	455mm	6000
440-1025	175mm	60mm	300mm	555mm	6000
440-1030	175mm	60mm	400mm	655mm	6000
400-1031	175mm	60mm	500mm	755mm	6000
400-1032	175mm	60mm	600mm	855mm	6000
440-1035	200mm	65mm	200mm	495mm	10000
440-1040	200mm	65mm	300mm	595mm	10000
440-1045	200mm	65mm	400mm	695mm	10000
440-1046	200mm	65mm	500mm	795mm	10000
440-1047	200mm	65mm	600mm	895mm	10000
440-1050	300mm	80mm	200mm	535mm	12000
440-1051	300mm	80mm	300mm	635mm	12000
440-1052	300mm	80mm	400mm	735mm	12000
440-1053	300mm	80mm	500mm	835mm	12000
440-1554	300mm	80mm	600mm	935mm	12000
440-1055	300mm	80mm	700mm	1035mm	12000
440-1056	300mm	80mm	800mm	1135mm	12000

Precision Modular Vises With Swivel Base

Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground to a mirror finish.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Interchangeable swivel base, stationary and movable jaws
- * For CNC machine center, CNC milling machine and other precision machines for milling, grinding, drilling, tapping etc.

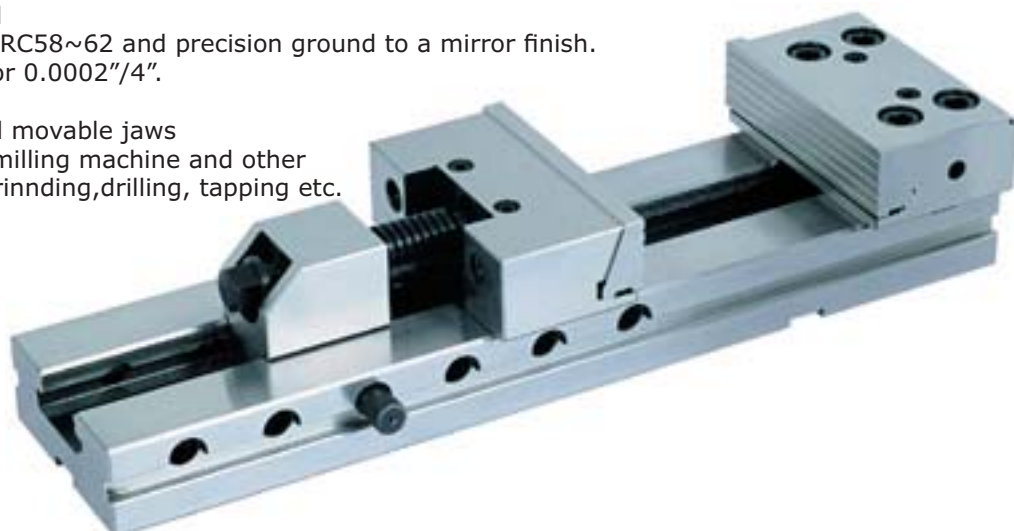


Order No.	Jaw Width	Jaw Height	Jaw Opening	Vise Length	Clamping Force (kg)
441-1000	100mm	30mm	100mm	270mm	3000
441-1005	125mm	40mm	150mm	345mm	3000
441-1010	150mm	50mm	200mm	420mm	5000
441-1015	150mm	50mm	200mm	520mm	5000
441-1020	175mm	60mm	200mm	455mm	6000
441-1025	175mm	60mm	300mm	555mm	6000
441-1030	175mm	60mm	400mm	655mm	6000
441-1031	175mm	60mm	500mm	755mm	6000
441-1032	175mm	60mm	600mm	855mm	6000
441-1035	200mm	65mm	200mm	495mm	10000
441-1040	200mm	65mm	300mm	595mm	10000
441-1045	200mm	65mm	400mm	695mm	10000
441-1046	200mm	65mm	500mm	795mm	10000
441-1047	200mm	65mm	600mm	895mm	10000
441-1050	300mm	80mm	200mm	535mm	12000
441-1051	300mm	80mm	300mm	635mm	12000
441-1052	300mm	80mm	400mm	735mm	12000
441-1053	300mm	80mm	500mm	835mm	12000
441-1554	300mm	80mm	600mm	935mm	12000
441-1055	300mm	80mm	700mm	1035mm	12000
441-1056	300mm	80mm	800mm	1135mm	12000

Quick Action Precision Modular Vises

Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground to a mirror finish.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Interchangeable stationary and movable jaws
- * For CNC machine center, CNC milling machine and other precision machines for milling, grinding, drilling, tapping etc.



Order No.	Jaw Width	Jaw Height	Jaw Opening	Vise Length	Clamping Force (kg)
440-1070	100mm	40mm	150mm	345mm	3000
440-1071	150mm	50mm	200mm	420mm	5000
440-1072	150mm	50mm	300mm	520mm	5000
440-1073	175mm	60mm	400mm	655mm	6000

Quick Action Precision Modular Vises With Swivel Base

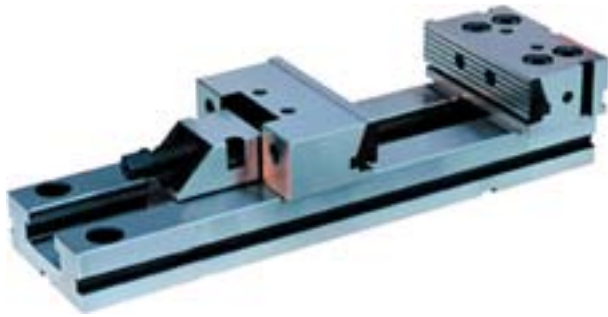
Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground to a mirror finish.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Interchangeable swivel base, stationary and movable jaws
- * For CNC machine center, CNC milling machine and other precision machines for milling, grinding, drilling, tapping etc.
- * Swivel 360° horizontally.



Order No.	Jaw Width	Jaw Height	Jaw Opening	Vise Length	Clamping Force (kg)
440-1074	100mm	40mm	150mm	345mm	3000
440-1075	150mm	50mm	200mm	420mm	5000
440-1076	150mm	50mm	300mm	520mm	5000
440-1077	175mm	60mm	400mm	655mm	6000

Precision Horizontal/Vertical Vise



Can be used vertically and horizontally

Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground to a mirror finish.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Interchangeable stationary and movable jaws
- * For CNC machine center, CNC milling machine and other precision machines for milling, grinding, drilling, tapping etc.

Order No.	Jaw Width	Jaw Height	Jaw Opening	Vise Length	Clamping Force (kg)
440-1080	100mm	30mm	100mm	270mm	3000
440-1081	125mm	40mm	150mm	345mm	3000
440-1082	150mm	50mm	200mm	420mm	5000
440-1083	150mm	50mm	300mm	520mm	5000
440-1084	175mm	60mm	200mm	455mm	6000
440-1085	175mm	60mm	300mm	555mm	6000
440-1086	175mm	60mm	400mm	655mm	6000
440-1087	175mm	60mm	500mm	755mm	6000
440-1088	200mm	65mm	200mm	495mm	10000
440-1089	200mm	65mm	300mm	595mm	10000
440-1090	200mm	65mm	400mm	695mm	10000
440-1091	200mm	65mm	500mm	795mm	10000
440-1092	200mm	65mm	600mm	895mm	10000

Large Opening NC Vise



Order No.	S1 (MM)	Jaw Width	Jaw Height	Vise Length
441-1060	290	100mm	30mm	460mm
441-1061	320	125mm	40mm	520mm
441-1062	360	150mm	50mm	580mm
441-1063	460	150mm	50mm	680mm
441-1064	400	175mm	60mm	666mm
441-1065	500	175mm	60mm	766mm
441-1066	600	175mm	60mm	866mm
441-1067	700	175mm	60mm	966mm
441-1068	500	200mm	65mm	805mm
441-1069	600	200mm	65mm	905mm
441-1070	700	200mm	65mm	1005mm
441-1071	800	200mm	65mm	1105mm
441-1072	900	200mm	65mm	1205mm

Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Interchangeable stationary and movable jaws
- * For CNC machines and other precision machines for milling, grinding, drilling, tapping etc.

Double Action NC Vise

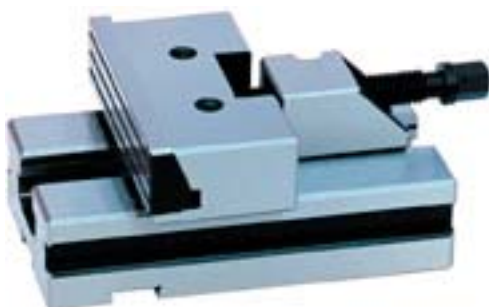
Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Interchangeable stationary and movable jaws
- * For CNC machines and other precision machines for milling, grinding, drilling, tapping etc.



Order No.	Jaw Opening (MM)	Jaw Width	Jaw Height	Vise Length
441-1080	2x90	100mm	30mm	460mm
441-1081	2x100	125mm	40mm	520mm
441-1082	2x110	150mm	50mm	580mm
441-1083	2x160	150mm	50mm	680mm
441-1084	2x120	175mm	60mm	666mm
441-1085	2x170	175mm	60mm	766mm
441-1086	2x220	175mm	60mm	866mm
441-1087	2x270	175mm	60mm	966mm
441-1088	2x150	200mm	65mm	805mm
441-1089	2x200	200mm	65mm	905mm
441-1090	2x250	200mm	65mm	1005mm
441-1091	2x300	200mm	65mm	1105mm
441-1092	2x350	200mm	65mm	1205mm

Movable Jaws



Features:

- * Made of high-quality alloy steel
- * Working surface hardened to HRC58~62 and precision ground.
- * Parallelism 0.005mm/100mm or 0.0002"/4".
- * Squareness 0.005mm.
- * Applied for unlimited length work.
- * For CNC machines and other precision machines for milling, grinding, drilling, tapping etc.

Stationary Jaws



Order No.	Jaw Width	Jaw Height	Overall Length
441-1100	100mm	30mm	140mm
441-1101	125mm	40mm	160mm
441-1102	150mm	50mm	230mm
441-1103	175mm	60mm	240mm
441-1104	200mm	65mm	300mm

Order No.	Jaw Width	Jaw Height	Overall Length
441-1110	100mm	30mm	140mm
441-1111	125mm	40mm	160mm
441-1112	150mm	50mm	230mm
441-1113	175mm	60mm	240mm
441-1114	200mm	65mm	300mm

PRECISION MACHINE VISE WITH 2 CLAMPING STATIONS

- * High grade ductile body.
- * Bed hardened to HRC 50 to 60.
- * Precision ground on all sides.
- * Can be mounted vertically or horizontally on CNC machine centers, CNC milling machines etc..
- * Eliminates clamping deflection by transmitting equal and opposing forces to the stationary jaw.
- * Single handle operates both clamping stations simultaneously.



Order No.	450-1604	450-1605
Width of jaw	100	160
Height of jaw	35	50
Max.opening	76	100
G.W./N.W	22/20kg	45/43kg
Shipping Size	58x18x17cm	71x23x21cm

HYDRAULIC MACHINE VISE

Order No. 450-1508



- * Made of high grade ductile iron.
- * HRC50-60 hardness of working surface.
- * Paralleism and squareness: 0.025mm/100mm.
- * Unique and reliable hydraulic system.
- * Maximum clamping force.
- * 4 adjustable openings set by the screw nut.

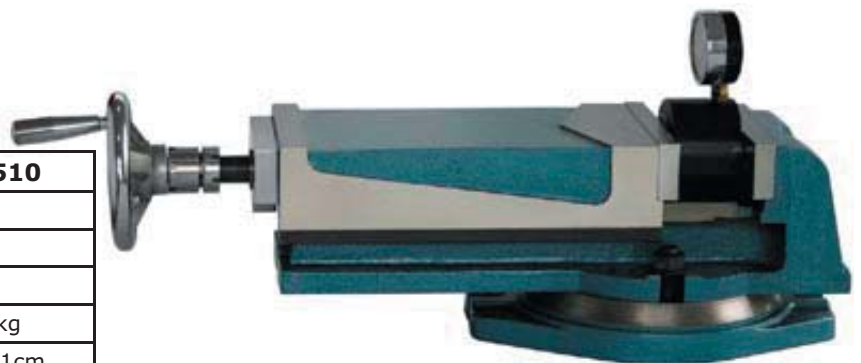
Specifications:

Width of jaw:	125mm
Height of jaw:	46mm
Max.opening:	140mm
G.W./N.W:	29/27kg
Shipping Size:	46x26x22cm

- * Made of high grade ductile iron.
- * HRC50-60 hardness of working surface.
- * Paralleism and squareness: 0.025mm/100mm.
- * Unique and reliable hydraulic system.
- * Maximum clamping force.
- * 360° graduated swivel base.

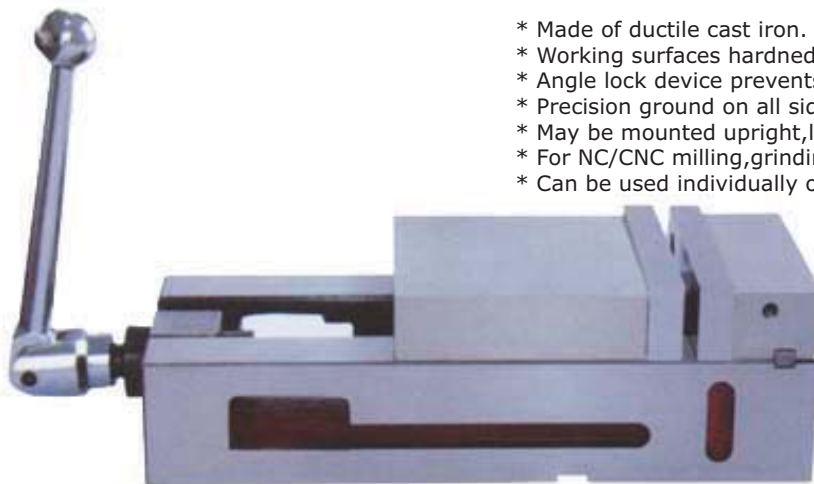
HYDRAULIC MACHINE VISE

Order No.	450-1509	450-1510
Width of jaw	100	160
Height of jaw	35	50
Max.opening	76	100
G.W./N.W	22/20kg	45/43kg
Shipping Size	58x18x17cm	71x23x21cm



ACCU-LOCK NC MACHINE VISE

- * Made of ductile cast iron.
- * Working surfaces hardened to minimum HRC50.
- * Angle lock device prevents workpiece from rising during operation.
- * Precision ground on all sides to 0.025mm/100mm paralleism and squareness.
- * May be mounted upright, left and on right side.
- * For NC/CNC milling, grinding, drilling, tapping operations.
- * Can be used individually or in multiple vise setup.



Order No.	450-1705	450-1706
Width of jaw	100	160
Height of jaw	32	45
Max.opening	100	140
G.W./N.W	12/11kg	29/27kg
Shipping Size	37x17x15cm	48x20x21cm

Universal Power Vise



Features:

- * Made of high-grade ductile iron castings.
- * Parallelism 0.025mm/100mm
- * Squareness 0.025mm.
- * Special mechanical system generates high steady clamping force.
- * Used on CNC machines, precision equipment.

Jaw width: 160mm
 Jaw depth: 63mm
 Max. Opening: 280mm
 Overall length: 550mm

Order No. 440-1060

Precision Quick Action Vise

Features:

The vises are made of high-quality alloy steel, case hardened to HRC56-60, precision ground to parallelism 0.015mm/100mm and squareness 0.03mm. They feature quick clamping and easy operation and can be used on CNC machines, precision equipment.



Order No.	Jaw Width	Jaw Height	Jaw Opening	Vise Length
440-1061	124mm	40mm	140mm	323mm
440-1062	149mm	52mm	210mm	423mm
440-1063	174mm	58mm	240mm	470mm
440-1064	199mm	66mm	270mm	520mm
440-1065	249mm	74mm	340mm	600mm

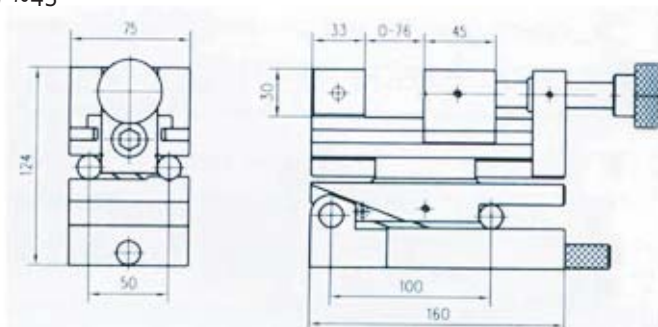
Precision Compound Sine Vise



- * Made of high quality alloy steel.
- * Parallelism 0.005mm/100mm.
- * Adjustable angle range 0°~45°

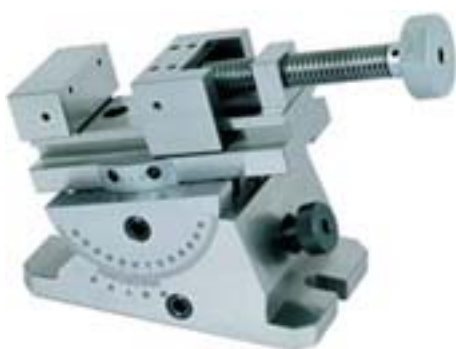
- * Hardened surface to HRC58-62
- * Squareness 0.005mm

- *Jaw Width: 75mm
- *Jaw height: 30mm
- * Overall height: 124mm
- * Length: 160mm
- * Max. opening: 76mm



Order No. 460-1000

Precision Universal Vise



The vise is comprised of two parts, vise body and the swivel base. It swivels 360° horizontally and tilts 45° vertically. The accurate graduations and three-way swivel feature makes it the most versatile tool for precision drilling, milling, grinding, and machining of flat surfaces, curved surfaces and angular surfaces.

- * Made of high quality alloy steel.
- * Hardened surface to HRC58-62
- * Parallelism 0.005mm/100mm.
- * Squareness 0.005mm
- * Adjustable angle range 0°~45° vertical and 360° horizontally.
- * Max. Jaw opening: 80mm
- * Jaw Width: 70mm
- * Jaw height: 30mm
- * Overall dimension: 195x100x137mm

Order No. 460-1001

Precision Toolmakers Vice

- Ground V way.
- Square and parallel to +/-0.0002””.
- Base and front jaw are of one piece steel.
- All surface hardened and precision ground square
- Clamping slots are provided and jaws are easily replaced
- Hardened and ground dovetail slide eliminates “lift” and insures consistent accuracy



High Precision Screwless Vice

- * Hardened and stablized
- * Parallel to 0.005mm/100mm, squre to 0.005mm.
- * “No-Rise” jaw construction exerts a continual downward pressure on the jaw, thus avoiding “Rise” common to most vises.



Order NO.	Jaw Width (mm)	Jaw Height	Jaw Opening	Length (mm)	Weight (kg)
460-1005	50	25	65	155	3
460-1006	60	25	55	110	2.4
460-1010	63	32	85	190	3.8
460-1015	73	35	100	210	5
460-1020	80	40	100	220	6.5
460-1025	88	40	125	250	11
460-1030	100	45	125	260	13
460-1035	125	50	160	300	19.5
460-1040	125	50	210	350	23
460-1045	150	50	175	315	23.8

Order NO.	Jaw Width (mm)	Jaw Height	Jaw Opening	Length (mm)	Weight (kg)
461-1000	25	9.15	22	65.4	0.5
461-1001	36	20	40	100	1.2
461-1002	38	20	44	105	1.3
461-1005	50	25	65	140	2
461-1010	63	32	85	175	3
461-1015	73	35	100	190	4.1
461-1020	80	40	100	200	5.5
461-1025	88	40	125	235	7.3
461-1030	100	45	125	245	10
461-1035	125	50	160	285	18
461-1040	150	50	200	330	21.5
461-1045	150	50	250	380	23
461-1050	150	50	300	430	24

Precision Sine Toolmaker’s Vice



* Besides all the features of toolmakers’ vise, the vises come with 0-45° adjustable angle.

Precision Sine Screwless Vice



* Besides all the features of screwless vises, the vises come with 0-45° adjustable angle.

Order NO.	Jaw Width (mm)	Jaw Height (mm)	Jaw Opening (mm)	Length (mm)	Overall Height (mm)
460-1050	50	25	65	155	86.6
460-1055	63	32	85	190	94.6
460-1060	73	35	100	210	111
460-1065	80	40	100	220	121
460-1070	88	40	125	250	125
460-1075	100	45	125	260	139.2
460-1080	125	50	160	300	154.2
460-1085	150	50	175	315	160.9

Order NO.	Jaw Width (mm)	Jaw Height	Jaw Opening	Length (mm)	Overall Hight (mm)
461-1055	50	25	65	140	79.36
461-1060	63	32	85	175	92.36
461-1065	73	35	100	190	104
461-1070	80	40	100	200	117
461-1075	88	40	125	235	112
461-1080	100	45	125	245	134.08
461-1085	125	50	160	285	144.08
461-1090	150	50	200	330	150.9

UNIVERSAL 3-WAY MACHINE VISE



Features:

- * made of high-quality cast iron
- * 3 separate angle movement.
- * Parallelism and squareness: 0.025mm/100mm
- * Used on machining and EDM complex parts.
- * Top cradle- 90 degree from horizontal to vertical.
- * Bottom cradle -45 degree each side (90 range)
- * 360 swivel base.
- * Hardened and ground steel jaws.
- * Accurately machined and ground base parallel and square to the vertical axis.

Order No.	Width of jaw	Height of jaw	Jaw Opening	G.W./N.W	Shipping Size
450-1504	105mm	40mm	105mm	28/26kg	49x32x28cm
450-1505	125mm	43mm	120mm	30/28kg	52x32x26cm

2-WAY ANGLE MACHINE VISE



Features:

- * Used for milling, shaping, grinding, drilling and jig boring.
- * Made of high grade cast iron.
- * 90 degree vertical movement and 360 degree swivel base.
- * Fully covered aceme screw.
- * Parallelism and squareness less than 0.025mm/100mm

Order No.	Jaw Width	Jaw Height	Jaw Opening	G.W./N.W	Shipping Size
450-1304	100mm	41mm	80mm	19/18kg	36x22x21cm
450-1305	125mm	46mm	100mm	29/27kg	46x26x22cm
450-1306	160mm	50mm	125mm	43/41kg	47x29x25cm

2-WAY ANGLE MACHINE VISE



Specifications:

Width of jaw: 125mm
 Height of jaw: 46mm
 Max.opening: 140mm
 G.W./N.W: 29/27kg
 Shipping Size: 46x26x22cm

Features:

- * Used for milling, shaping, grinding, drilling and jig boring.
- * Made of high grade cast iron.
- * 90 degree vertical movement and 360 degree swivel base.
- * Fully covered aceme screw.
- * Parallelism and squareness less than 0.025mm/100mm

Order No. 450-1315

WISE FOR HOLDING ROUND WORK AND SHAFTS

- * Jaw Width: 100mm
- * Capacity: 10mm to 80mm round work.
- * Approximate weight: 21kg.
- * Used on milling machine and drill presses.
- * Hardened Tool steel V block.
- * Work horizontally or vertically.
- * For clamping round parts.
- * Double V grooves.



Order No. 450-1404

Features:

- Prevent movement or tilt of the moveable jaw while clamped.
- Hardened and ground moveable jaw plates
- Totally enclosed heat treated screw.
- Ground steel handle



Precision Superlock Vise

Order No.	450-1003	450-1004	450-1005	450-1006	450-1008
Jaw Width	3-9/64"	4"	5"	6"	8"
Jaw Opening	3-9/64"	4"	4-1/4"	5-1/2"	7-1/2"
Jaw Depth	1"	1-1/8"	1-5/16"	1-1/2"	2"
Length	10-5/8"	12-9/16"	14"	16-3/4"	21-3/8"
Width	5"	5-3/4"	7"	8-1/4"	11"
Vise Height	3"	3-3/8"	3-11/16"	4-3/8"	5-3/16"

Features:

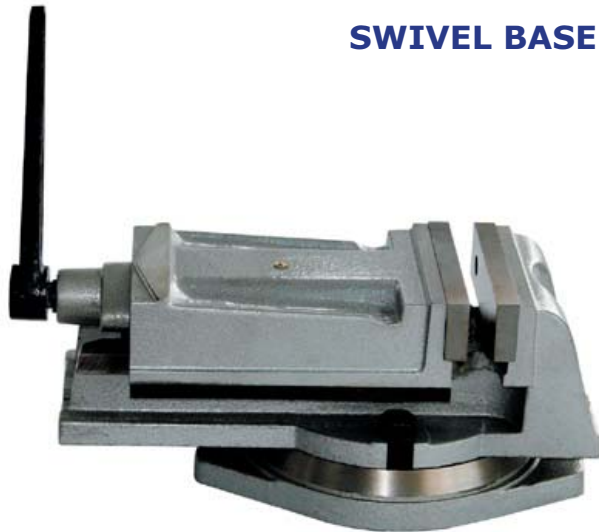
- Prevent movement or tilt of the moveable jaw while clamped.
- Hardened and ground moveable jaw plates
- Totally enclosed heat treated screw.
- Ground steel handle



Precision Superlock Vise Without Base

Order No.	450-1013	450-1014	450-1015	450-1016	450-1018
Jaw Width	3-9/64"	4"	5"	6"	8"
Jaw Opening	3-9/64"	4"	4-1/4"	5-1/2"	7-1/2"
Jaw Depth	1"	1-1/8"	1-5/16"	1-1/2"	2"
Length	10-5/8"	12-9/16"	14"	16-3/4"	21-3/8"
Width	5"	5-3/4"	7"	8-1/4"	11"
Vise Height	3"	3-3/8"	3-11/16"	4-3/8"	5-3/16"

SWIVEL BASE MILLING MACHINE VISE



- * Used in milling, shaping and drilling machines.
- * Made of high quality cast iron.
- * Parallelism and squareness 0.025mm/100mm.
- * 360 degree graduated swivel base.
- * Either used as a stationery or swivel vise.

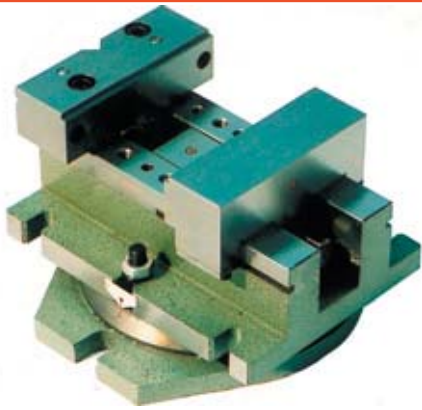
Order No.	Jaw Width	Jaw Height	Jaw Opening	Weight
450-1103	80mm	30mm	65mm	7kg
450-1104	100mm	35mm	80mm	9.5kg
450-1105	125mm	40mm	100mm	16kg
450-1106	160mm	52mm	125mm	36kg
450-1108	200mm	63mm	160mm	52kg

SWIVEL BASE MACHINE VISE



- * Used on milling, shaping and drilling machines.
- * Made of high quality cast iron.
- * Parallelism and squareness 0.025mm/100mm.
- * 360 degree swivel base.
- * Either used as a stationery or swivel vise.
- * Extraordinary clamping range.

Order No.	Jaw Width	Jaw Height	Jaw Opening	Weight
450-1205	136mm	36mm	170mm	17kg
450-1206	160mm	51mm	180mm	23kg
450-1208	200mm	64mm	280mm	41kg
450-1210	250mm	64mm	280mm	67kg
450-1212	320mm	81mm	360mm	88kg



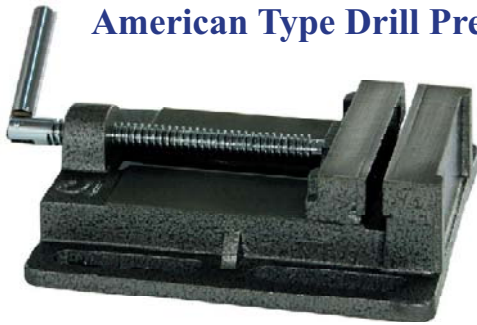
PRECISION VISE

- * Made of high quality alloy steel.
- * Hardened surface to HRC58-62.
- * Ground to parallelism and squareness 0.01mm.
- * Quick clamping and easy operation.
- * For milling machines, grinding machines etc.

Order No.	Jaw Width	Jaw Height	Max. opening	Height
461-1098	100mm	25mm	100mm	118mm
461-1099	140mm	40mm	135mm	154mm

German Type Drill Press Vise

American Type Drill Press Vise



Order No.	Jaw Width	Jaw Height	Max. opening	Net Weight
450-1085	67mm	24mm	70mm	1.8kg
450-1086	78mm	19mm	78mm	2kg
450-1087	100mm	26mm	110mm	3kg
450-1088	125mm	26mm	110mm	5.25kg
450-1089	150mm	26mm	150mm	6.8kg

Order No.	Jaw Width	Jaw Height	Max. opening	Net Weight
450-1069	65mm	16mm	45mm	1kg
450-1070	75mm	20mm	50mm	2kg
450-1071	100mm	23mm	75mm	3.1kg
450-1072	125mm	26mm	100mm	4.6kg
450-1073	150mm	30mm	125mm	7kg
450-1074	200mm	35mm	175mm	11.5kg



0-90° ADJUSTABLE ANGLE VISE

- * 0-90° degree adjustable angle.
- * Can be used as ordinary vise at horizontal position.
- * Accurately graduated for all angles.

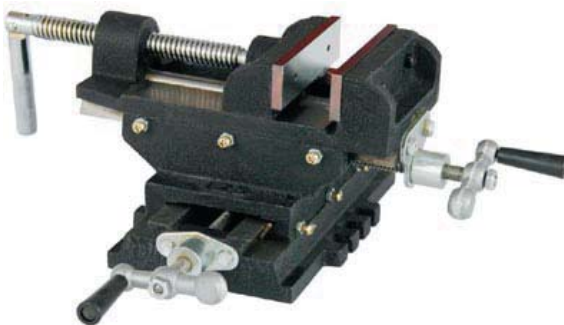
Order No.	Jaw Width	Jaw Height	Jaw Opening	Weight
450-1053	85mm	32mm	80mm	4.5kg
450-1054	115mm	39mm	90mm	6.3kg
450-1055	106mm	46mm	95mm	8kg

450-1053

450-1055

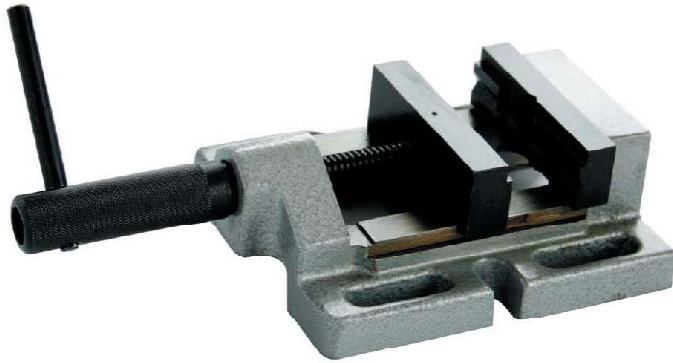
- * Hardened and ground top jaws.
- * Adjustable gibs.
- * Independent feed and travel.
- * Used for end milling, drilling etc.

CROSS VISE



Order No.	Jaw Width	Jaw Height	Max. Opening	Base Travel	Vise Travel	Weight
450-1033	80mm	30mm	65mm	70mm	65mm	6kg
450-1034	102mm	35mm	90mm	80mm	80mm	9.5kg
450-1035	125mm	41mm	115mm	95mm	95mm	13.5kg
450-1036	152mm	42mm	135mm	100mm	100mm	16.7kg
450-1038	203mm	47mm	165mm	130mm	130mm	26.3kg

DRILL PRESS VISE



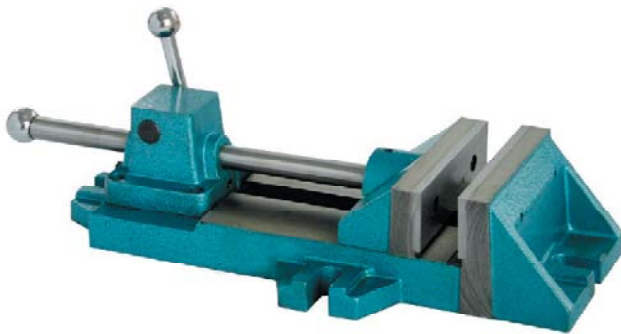
Order No.	Jaw Width	Jaw Height	Max. opening	Net Weight
450-1065	85mm	30mm	60mm	3kg
450-1066	100mm	30mm	75mm	4.5kg
450-1067	120mm	30mm	100mm	6.3kg
450-1068	150mm	30mm	125mm	8.5kg

DRILL PRESS VISE



Order No.	Jaw Width	Jaw Height	Max. opening	Net Weight
450-1075	80mm	34mm	75mm	3.5kg
450-1076	106mm	46mm	95mm	6.5kg
450-1077	155mm	48mm	150mm	12.5kg

QUICK RELEASE VISE



Order No.	Jaw Width	Jaw Height	Max. opening	Net Weight
450-1078	100mm	40mm	90mm	6.75kg
450-1079	125mm	45mm	110mm	8.9kg
450-1080	150mm	50mm	135mm	12kg

QUICK RELEASE VISE



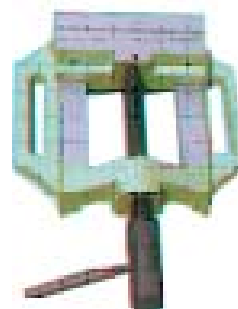
Order No.	Jaw Width	Jaw Height	Net Weight
450-1065	62mm	59mm	4.3kg
450-1066	75mm	75mm	7.5kg
450-1067	100mm	78mm	11.5kg
450-1068	125mm	95mm	19kg

American Type Drill Press Vise



Order No.	Jaw Width	Jaw Height	Max. opening	Net Weight
450-1060	65mm	18mm	55mm	1.6kg
450-1061	75mm	18mm	75mm	2kg
450-1062	100mm	18mm	95mm	3kg
450-1063	122mm	20mm	120mm	4.5kg
450-1064	146mm	20mm	140mm	6kg

German Type Drill Press Vise

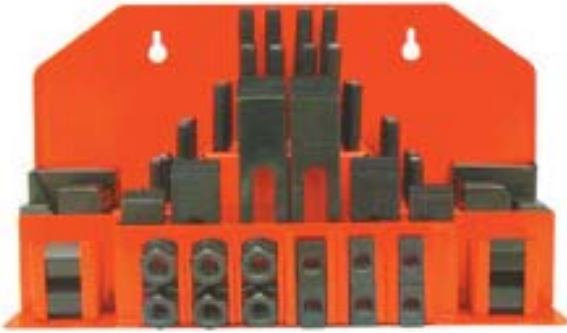


Order No.	Jaw Width	Jaw Height	Max. opening	Net Weight
450-1081	75mm	20mm	50mm	1.6kg
450-1082	100mm	20mm	80mm	2.8kg
450-1083	125mm	25mm	100mm	4.3kg
450-1084	150mm	25mm	135mm	5.5kg

58PCS CLAMPING KITS, US THREADS

Each sets contains:

- * 6 T-slot nuts
- * 6 flange nuts.
- * 4 coupling nuts.
- * 6 pair step blocks
- * 6 serrated end clamps
- * 24 studs, 4 each of 3", 4", 5", 6", 7", 8"
- * 1 Delux holder



Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0020	5/16"-18	3/8"	439-0139	5/16"-18	3/8"
439-0024	3/8"-16	7/16"	439-0140	3/8"-16	7/16"
439-0026		1/2"	439-0141		1/2"
439-0028		9/16"	439-0142		9/16"
439-0032	1/2"-13	9/16"	439-0143	1/2"-13	9/16"
439-0034		5/8"	439-0144		5/8"
439-0036		11/16"	439-0145		11/16"
439-0040	5/8"-11	11/16"	439-0146	5/8"-11	11/16"
439-0042		3/4"	439-0147		3/4"
439-0044		13/16"	439-0148		13/16"
439-0048	3/4"-10	7/8"	439-0149	3/4"-10	7/8"
439-0050		1"	439-0150		1"

58PCS CLAMPING KITS, US THREADS

Each sets contains:

- * 6 T-slot nuts
- * 6 flange nuts.
- * 4 coupling nuts.
- * 6 pair step blocks
- * 6 serrated end clamps
- * 24 studs, 4 each of 3", 4", 5", 6", 7", 8"
- * 1 Delux holder



Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0070	5/16"-18	3/8"	439-0151	5/16"-18	3/8"
439-0072	3/8"-16	7/16"	439-0152	3/8"-16	7/16"
439-0074		1/2"	439-0153		1/2"
439-0076		9/16"	439-0154		9/16"
439-0078	1/2"-12	9/16"	439-0155	1/2"-12	9/16"
439-0080		5/8"	439-0156		5/8"
439-0082		11/16"	439-0157		11/16"
439-0084	5/8"-11	11/16"	439-0158	5/8"-11	11/16"
439-0086		3/4"	439-0159		3/4"
439-0088		13/16"	439-0160		13/16"
439-0090	3/4"-10	7/8"	439-0161	3/4"-10	7/8"
439-0092		1"	439-0162		1"

58PCS CLAMPING KITS, METRIC THREADS

Each sets contains:

- * 6 T-slot nuts
- * 6 flange nuts.
- * 4 coupling nuts.
- * 6 pair step blocks
- * 6 serrated end clamps
- * 24 studs, 4 each of 75mm, 100mm, 125mm, 150mm, 175mm, 200mm
- * 1 Delux holder



Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0106	M6	8mm	439-0128	M6	8mm
439-0108	M8	10mm	439-0130	M8	10mm
439-0110	M10	12mm	439-0131	M10	12mm
439-0112	M12	14mm	439-0132	M12	14mm
439-0114	M14	16mm	439-0133	M14	16mm
439-0116	M16	18mm	439-0134	M16	18mm
439-0118	M18	20mm	439-0136	M18	20mm
439-0120	M20	22mm	439-0138	M20	22mm

42PCS CLAMPING KITS, US THREADS

Each sets contains:

- * 4 T-slot nuts
- * 4 flange nuts.
- * 4 coupling nuts.
- * 6 pair step blocks
- * 6 serrated end clamps
- * 12 studs, 2 each of 3", 4", 5", 6", 7", 8"
- * 1 Delux holder

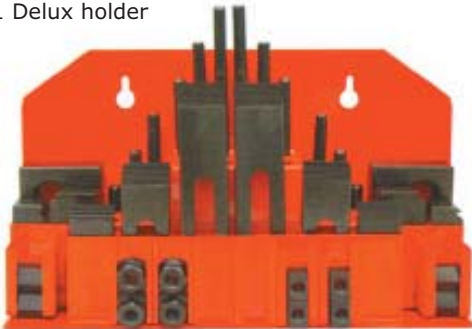


Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0301	5/16"-18	3/8"	439-0341	5/16"-18	3/8"
439-0302	3/8"-16	7/16"	439-0342	3/8"-16	7/16"
439-0303		1/2"	439-0343		1/2"
439-0304		9/16"	439-0344		9/16"
439-0305	1/2"-13	9/16"	439-0345	1/2"-13	9/16"
439-0306		5/8"	439-0346		5/8"
439-0307		11/16"	439-0347		11/16"
439-0308	5/8"-11	11/16"	439-0348	5/8"-11	11/16"
439-0309		3/4"	439-0349		3/4"
439-0310		13/16"	439-0350		13/16"
439-0311	3/4"-10	7/8"	439-0351	3/4"-10	7/8"
439-0312		1"	439-0352		1"

42PCS CLAMPING KITS, US THREADS

Each sets contains:

- * 4 T-slot nuts
- * 4 flange nuts.
- * 4 coupling nuts.
- * 6 pair step blocks
- * 6 serrated end clamps
- * 12 studs, 2 each of 3", 4", 5", 6", 7", 8"
- * 1 Delux holder



Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0313	5/16"-18	3/8"	439-0353	5/16"-18	3/8"
439-0314	3/8"-16	7/16"	439-0354	3/8"-16	7/16"
439-0315		1/2"	439-0355		1/2"
439-0316		9/16"	439-0356		9/16"
439-0317	1/2"-12	9/16"	439-0357	1/2"-12	9/16"
439-0318		5/8"	439-0358		5/8"
439-0319		11/16"	439-0359		11/16"
439-0320	5/8"-11	11/16"	439-0360	5/8"-11	11/16"
439-0321		3/4"	439-0361		3/4"
439-0322		13/16"	439-0362		13/16"
439-0323	3/4"-10	7/8"	439-0363	3/4"-10	7/8"
439-0324		1"	439-0364		1"

42PCS CLAMPING KITS, METRIC THREADS

Each sets contains:

- * 4 T-slot nuts
- * 4 flange nuts.
- * 4 coupling nuts.
- * 6 pair step blocks
- * 6 serrated end clamps
- * 12 studs, 2 each of 75mm, 100mm, 125mm, 150mm, 175mm, 200mm
- * 1 Delux holder



Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0325	M6	8mm	439-0333	M6	8mm
439-0326	M8	10mm	439-0334	M8	10mm
439-0327	M10	12mm	439-0335	M10	12mm
439-0328	M12	14mm	439-0336	M12	14mm
439-0329	M14	16mm	439-0337	M14	16mm
439-0330	M16	18mm	439-0338	M16	18mm
439-0331	M18	20mm	439-0339	M18	20mm
439-0332	M20	22mm	439-0340	M20	22mm

36PCS CLAMPING KITS, US THREADS

Each sets contains:

- * 4 T-slot nuts
- * 4 flange nuts.
- * 4 coupling nuts.
- * 4 pair step blocks
- * 4 serrated end clamps
- * 12 studs, 4 each of 3", 4", 5", 6", 7", 8"
- * 1 Delux holder



Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0380	5/16"-18	3/8"	439-0420	5/16"-18	3/8"
439-0381	3/8"-16	7/16"	439-0421	3/8"-16	7/16"
439-0382		1/2"	439-0422		1/2"
439-0383		9/16"	439-0423		9/16"
439-0384	1/2"-13	9/16"	439-0424	1/2"-13	9/16"
439-0385		5/8"	439-0425		5/8"
439-0386		11/16"	439-0426		11/16"
439-0387	5/8"-11	11/16"	439-0427	5/8"-11	11/16"
439-0388		3/4"	439-0428		3/4"
439-0389		13/16"	439-0429		13/16"
439-0390	3/4"-10	7/8"	439-0430	3/4"-10	7/8"
439-0391		1"	439-0431		1"

36PCS CLAMPING KITS, US THREADS

Each sets contains:

- * 4 T-slot nuts
- * 4 flange nuts.
- * 4 coupling nuts.
- * 4 pair step blocks
- * 4 serrated end clamps
- * 12 studs, 4 each of 3", 4", 5", 6", 7", 8"
- * 1 Delux holder



Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0392	5/16"-18	3/8"	439-0432	5/16"-18	3/8"
439-0393	3/8"-16	7/16"	439-0433	3/8"-16	7/16"
439-0394		1/2"	439-0434		1/2"
439-0395		9/16"	439-0435		9/16"
439-0396	1/2"-12	9/16"	439-0436	1/2"-12	9/16"
439-0397		5/8"	439-0437		5/8"
439-0398		11/16"	439-0438		11/16"
439-0399	5/8"-11	11/16"	439-0439	5/8"-11	11/16"
439-0400		3/4"	439-0440		3/4"
439-0401		13/16"	439-0441		13/16"
439-0402	3/4"-10	7/8"	439-0442	3/4"-10	7/8"
439-0403		1"	439-0443		1"

Each sets contains:

- * 4 T-slot nuts
- * 4 flange nuts.
- * 4 coupling nuts.
- * 4 pair step blocks

36PCS CLAMPING KITS, METRIC THREADS

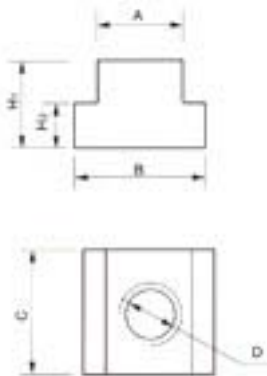
- * 4 serrated end clamps
- * 12 studs, 4 each of 75mm, 100mm, 125mm, 150mm, 175mm, 200mm
- * 1 Delux holder

Non Hardened			Hardened		
Order No.	Stud Size	Table Slot	Order No.	Stud Size	Table Slot
439-0404	M6	8mm	439-0412	M6	8mm
439-0405	M8	10mm	439-0413	M8	10mm
439-0406	M10	12mm	439-0414	M10	12mm
439-0407	M12	14mm	439-0415	M12	14mm
439-0408	M14	16mm	439-0416	M14	16mm
439-0409	M16	18mm	439-0417	M16	18mm
439-0410	M18	20mm	439-0418	M18	20mm
439-0411	M20	22mm	439-0419	M20	22mm



T-SLOT NUTS

An incomplete thread is left in the T-nut base to eliminate any danger of screwing the studs through the T-nuts and damaging the table slots.



* Black oxide finish.
* Heated treated.

Order No.	Description	Thread Size	Table Slot	B	Length	H1	H2	
439-0200	T-NUT, Metric	M6	8mm	13	13	10	6	
439-0201		M8	10mm	15	15	12	6	
439-0202		M10	12mm	18	20	14	7	
439-0203		M12	14mm	22	25	16	8	
439-0204		M14	16mm	25	25	16	10	
439-0205		M16	18mm	29	30	19	10.5	
439-0206		M18	20mm	34	34	28	14	
439-0207		M20	22mm	34	34	28	14	
439-0208	T-NUT, British	5/16"-18	3/8"	5/8"	7/8"	1/2"	3/16"	
439-0209		3/8"-16	7/16"	11/16"	7/8"	1/2"	7/32"	
439-0210			1/2"	7/8"	7/8"	1/2"	9/32"	
439-0211			9/16"	7/8"	1"	5/8"	11/32"	
439-0212		1/2"-12	9/16"	7/8"	1"	5/8"	11/32"	
439-0213			5/8"	1"	1"	5/8"	11/32"	
439-0214			11/16"	1-1/8"	1-1/4"	3/4"	7/16"	
439-0215		5/8"-11	11/16"	1-1/8"	1-1/4"	3/4"	7/16"	
439-0216			3/4"	1-1/4"	1-1/4"	3/4"	15/32"	
439-0217			13/16"	1-1/4"	1-1/2"	7/8"	9/16"	
439-0218		3/4"-10	7/8"	1-1/2"	1-1/2"	7/8"	9/16"	
439-0219			1"	1-5/8"	1-1/2"	7/8"	9/16"	
439-0220		T-nut, US	5/16"-18	3/8"	5/8"	7/8"	1/2"	3/16"
439-0221			3/8"-16	7/16"	11/16"	7/8"	1/2"	7/32"
439-0222				1/2"	7/8"	7/8"	1/2"	9/32"
439-0223				9/16"	7/8"	1"	5/8"	11/32"
439-0224			1/2"-13	9/16"	7/8"	1"	5/8"	11/32"
439-0225				5/8"	1"	1"	5/8"	11/32"
439-0226				11/16"	1-1/8"	1-1/4"	3/4"	7/16"
439-0227	5/8"-11		11/16"	1-1/8"	1-1/4"	3/4"	7/16"	
439-0228			3/4"	1-1/4"	1-1/4"	3/4"	15/32"	
439-0229			13/16"	1-1/4"	1-1/2"	7/8"	9/16"	
439-0230	3/4"-10		7/8"	1-1/2"	1-1/2"	7/8"	9/16"	
439-0231			1"	1-5/8"	1-1/2"	7/8"	9/16"	

STEEL STEP BLOCKS

* Heat treated.
* Black oxide finish.
* Machined teeth.



Order No.	Description	For Stud Sizes	Length (mm)	Height (mm)	Block Width (mm)
439-0250	Small	3/8", M10	22	30	25
439-0251		5/16", M8	22	30	25
439-0252		1/2", M12, M14	22	30	25
439-0253		5/8", M16	27	40	27
439-0254		3/4", M18, M20	27	40	32
439-0255	Medium	3/8", M10	27	40	25
439-0256		5/16", M8	27	40	25
439-0257		1/2", M12, M14	27	40	25
439-0258		5/8", M16	45	74	27
439-0259	3/4", M18, M20	45	74	32	
439-0260	Large	3/8", M10	45	74	25
439-0261		5/16", M8	45	74	25
439-0262		1/2", M12, M14	55	92	25
439-0263		5/8", M16	67	113	27
439-0264		3/4", M18, M20	67	113	32

3 Axis Digital Readout (DRO)

For use on multi-function milling machines, universal milling machines, EDM, lathes.



Features:

- * Metric system/British system conversion
- * 200 subsidiary zero position function
- * Smooth R Arc Calculation function (ARC Function)
- * Circular arc equally Dividing Function(PCD Function)
- * The function of hole drilling along an oblique line
- * The Calculation function
- * Angular Surface Processing
- * The progressive progressing of rectangular inner chamber
- * The Tool Diameter Compensation Function
- * Zero position automatic tracking.
- * Power Interruption Memory
- * Linear Error Compensation

Specifications:

- * Power: AC 80V~260V $\pm 15\%$, 50 Hz~60 Hz
- * Power consumption: 25VA
- * Working temperature: 0°C~45°C
- * Storage temperature: -30°C~70°C
- * Relative humidity: <90%(20 \pm 5°)
- * Weight: ≈ 3.2 kg
- * Number of coordinates: 3 axis
- * Display: 7 digit with plus and minus symbol display
- * Frequency multiplication: 4X
- * Allowable input signal: TTL square wave
- * Allowable input signal frequency: ≤ 5 M Hz
- * Length resolution: 5 μ m, 1 μ m, 10 μ m, 0.1 μ m, 0.2 μ m, 0.5 μ m
- * Operation keyboard: Sealed diaphragm touch keys

Order No. 905-8015

2 Axis Digital Readout

For use on multi-function milling machines, universal milling machines, lathes.



Features:

- * Metric system/British system conversion
- * 200 groups zero position memory
- * Zero position automatic digital follow-up
- * Easy "R" function
- * Linear error compensation function
- * Rounding "R" function
- * Power down memory
- * PCD hole positioning on circumference
- * Hole Drilling Along An Oblique Line
- * Angular Surface Processing
- * Calculator Function
- * 200 Tool Storeroom

Specifications:

- * Power: AC 80V~260V $\pm 15\%$, 50 Hz~60 Hz
- * Power consumption: 25VA
- * Working temperature: 0°C~45°C
- * Storage temperature: -30°C~70°C
- * Relative humidity: <90%(20 \pm 5°)
- * Weight: ≈ 3.2 kg
- * Number of coordinates: 3 axis
- * Display: 7 digit with plus and minus symbol display
- * Frequency multiplication: 4X
- * Allowable input signal: TTL square wave
- * Allowable input signal frequency: ≤ 5 M Hz
- * Length resolution: 5 μ m, 1 μ m, 10 μ m, 0.1 μ m, 0.2 μ m, 0.5 μ m
- * Operation keyboard: Sealed diaphragm touch keys

Order No. 905-8010

Digital Scales, 5 um Resolution

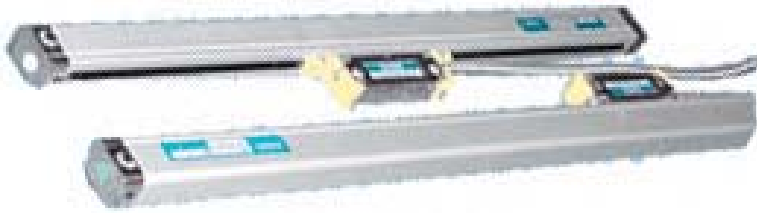


Specifications:

- * Cross Section Size: 25x34mm
- * Accuracy: $\pm 3/\pm 5/\pm 10\mu$ m at 20°C or 68°F
- * Max. Transversing Speed: 1m/s
- * Repeatability: ± 1 counting impulse
- * Protection: IP55
- * Resolution: 5um
- * Output: TTL

Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length
905-8801	70mm	905-8806	320mm	905-8811	570mm	905-8816	820mm
905-8802	120mm	905-8807	370mm	905-8812	620mm	905-8817	870mm
905-8803	170mm	905-8808	420mm	905-8813	670mm	905-8818	920mm
905-8804	220mm	905-8809	470mm	905-8814	720mm	905-8819	970mm
905-8805	270mm	905-8810	520mm	905-8815	770mm	905-8820	1020mm

Digital Scales, 5 um Resolution

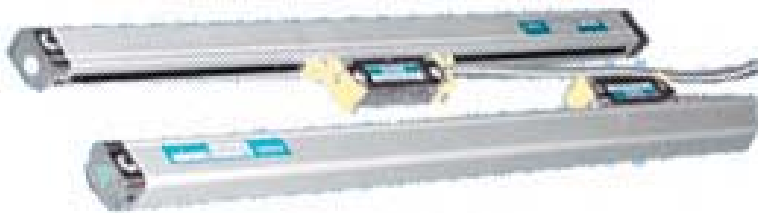


Specifications:

- * Cross Section Size: 28x20mm
- * Accuracy: $\pm 3/\pm 5/\pm 10\mu\text{m}$ at 20°C or 68°F
- * Max. Transversing Speed: 1m/s
- * Repeatability: ± 1 counting impulse
- * Protection: IP55
- * Resolution: 5um
- * Output: TTL

Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length
905-8821	120mm	905-8823	220mm	905-8825	320mm	905-8827	420mm
905-8822	170mm	905-8824	270mm	905-8826	370mm	905-8828	470mm

Digital Scales, 5 um Resolution

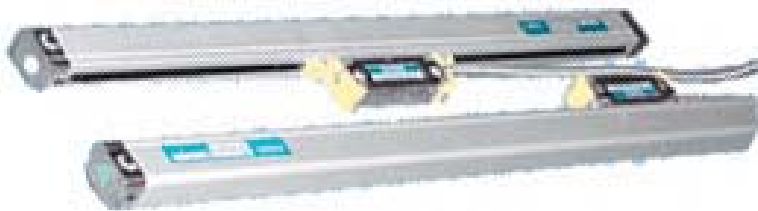


Specifications:

- * Cross Section Size: 30x43mm
- * Accuracy: $\pm 3/\pm 5/\pm 10\mu\text{m}$ at 20°C or 68°F
- * Max. Transversing Speed: 1m/s
- * Repeatability: ± 1 counting impulse
- * Protection: IP55
- * Resolution: 5um
- * Output: TTL

Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length
905-8829	1000mm	905-8840	1550mm	905-8851	2100mm	905-8862	2650mm
905-8830	1050mm	905-8841	1600mm	905-8852	2150mm	905-8863	2700mm
905-8831	1100mm	905-8842	1650mm	905-8853	2200mm	905-8864	2750mm
905-8832	1150mm	905-8843	1700mm	905-8854	2250mm	905-8865	2800mm
905-8833	1200mm	905-8844	1750mm	905-8855	2300mm	905-8866	2850mm
905-8834	1250mm	905-8845	1800mm	905-8856	2350mm	905-8867	2900mm
905-8835	1300mm	905-8846	1850mm	905-8857	2400mm	905-8868	2950mm
905-8836	1350mm	905-8847	1900mm	905-8858	2450mm	905-8869	3000mm
905-8837	1400mm	905-8848	1950mm	905-8859	2500mm		
905-8838	1450mm	905-8849	2000mm	905-8860	2550mm		
905-8839	1500mm	905-8850	2050mm	905-8861	2600mm		

Digital Scales, 5 um Resolution



Specifications:

- * Cross Section Size: 40x42mm
- * Accuracy: $\pm 3/\pm 5/\pm 10\mu\text{m}$ at 20°C or 68°F
- * Max. Transversing Speed: 1m/s
- * Repeatability: ± 1 counting impulse
- * Protection: IP55
- * Resolution: 5um
- * Output: TTL

Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length	Order No.	Measuring Length
905-8870	170mm	905-8876	470mm	905-8882	770mm	905-8888	1070mm
905-8871	220mm	905-8877	520mm	905-8883	820mm	905-8889	1120mm
905-8872	270mm	905-8878	570mm	905-8884	870mm	905-8890	1170mm
905-8873	320mm	905-8879	620mm	905-8885	920mm	905-8891	1220mm
905-8874	370mm	905-8880	670mm	905-8886	970mm		
905-8875	420mm	905-8881	720mm	905-8887	1020mm		

Universal Gutter and Tool Grdiner

* This machine sharpens HSS and hard metal cutters and can be used to cylindrical grinding, plane groove processing, 3D profiling. With optional accessories, it can grinder gears, worm-wheel hobs, form tools, ball-end milling cutters, fluted twist drills, taper taps, shaped cutting tools, end mills, face mills, R mills, side mill cutters, angle mills, reamers, turning tools, R turning tools, hobbing cutters, twist drills, tapes, encarving tools, chamfering tools, round paper knife, circular and planer grooves, and profiled faces.

- * Imported high precision linear ball slide rail.
- * 360° swivel motor with two mouting sides for grinding wheels.
- * Max. linear speed 40m/s.
- * Soubdke taoer can be made to customer's size.
- * Optional stand, universal grinding attachment, turning tools sharpners, end mill sharpeners, R shape end mills, universal tool grinder.

Specifications:

- * Horizontal traver of the table: 300mm
- * Longitudinal travel of the table: 150mm
- * Table size: 550mmx130mm
- * Wheelhead vertical travel: 120mm
- * Swivel angle of the wheelhead: 360°
- * Grinding wheel size: 150x50x32mm
- * Grinding wheel speed: 2800RPM or 3600RPM
- * Motor: 3/4HP, 110V/220V/380V
- * Weight: 168/160kg
- * Shipping size: 70x63x63cm

Order No. 439-1044



Universal Gutter and Tool Grdiner

* This machine sharpens HSS and hard metal cutters and can be used to cylindrical grinding, plane groove processing, 3D profiling. With optional accessories, it can grinder gears, worm-wheel hobs, form tools, ball-end milling cutters, fluted twist drills, taper taps, shaped cutting tools, end mills, face mills, R mills, side mill cutters, angle mills, reamers, turning tools, R turning tools, hobbing cutters, twist drills, tapes, encarving tools, chamfering tools, round paper knife, circular and planer grooves, and profiled faces.

- * Imported high precision linear ball slide rail.
- * 360° swivel motor with two mouting sides for grinding wheels.
- * Max. linear speed 40m/s.
- * Soubdke taoer can be made to customer's size.
- * Optional stand, universal grinding attachment, turning tools sharpners, end mill sharpeners, R shape end mills, universal tool grinder.

Specifications:

- * Max. Grinding diameter: 250mm
- * Horizontal traver of the table: 400mm
- * Longitudinal travel of the table: 150mm
- * Table size: 680mmx130mm
- * Wheelhead vertical travel: 120mm
- * Swivel angle of the wheelhead: 360°
- * Grinding wheel size: 150x50x32mm
- * Grinding wheel speed: 5000RPM
- * Motor: wheelhead, 3/4HP, 110V/220V/380V
- * Height of the head holder: 135mm
- * Spindle taper: MT4
- * Weight: 168/160kg
- * Shipping size: 73x71x72cm

Order No. 439-1043



UNIVERSAL TOOL GRINDING MACHINE

Specifications:

Max.Diameter of Wheel: 125mm
 Max.Grinding Length: 100mm
 Table Travel Right and Left: 175mm
 Table Travel Forward and Return: 100mm
 Head Height Travel: 120mm
 Pivoting Grinding Head: ±50°
 Packing Size: 109×72×93cm
 G.W./N.W: 266/208kg

Order No. 439-1050

Standard Equipment:

Right and left tailstock
 Spring stop
 Variable table stops
 Standard center 60°
 Half center 60°
 1 cupwheel and 1 diamond top wheel (optional)
 1 grinding wheel and 1 poppet (5x0.6x1.26")
 3-jaw lathe chuck with flange
 Turning tool holder
 Cutter mandrels
 Base frame
 Operating tools
 Operator manual



TWIST DRILL SHARPENER

- * Grinding capacity: 3-19mm.
- * Grinding angle: 118-140°.
- * For any length 2 flute twist drills made of HSS, Tin coated, cobalt coated, parabola drills, taper shank drills, carbide drills (with optional diamond grinding wheels).
- * Grinding tolerance to ISO 10899.
- * No coolant is required.
- * Electroplated grinding wheel with super wearing resistance. No need to calibrate or repair.
- * Grinding process completes in 15 second for a 3mm drill, 60seconds for a 19mm drill.
- * Motor: 230V, 3A 50Hz, 2850RPM
- * Overall size: 305mmx280mmx230mm
- * Weight: 11kg

Order No. 439-1046



LATHE TOOL GRINDER

Equipped with reversible diamond grinding wheel, it can grind HSS, carbide, ceramic tools etc.. The wheel is balanced before assembling. Outstanding constructure features optimized performance with minimum maintenance. It is easy to operate.

- * Grinding wheel size: 125x16x25mm
- * Work table adjustable vertical angle: +/-20°
- * Lockation block ajustable angle: +/-70°.
- * Motor: 250W
- * Speed: 2800rpm
- * Grinding tools: square lathe tools.

Order No. 439-1021

SAW BLADE SHARPENER

- * Elaborately designed levers make adjusting cutting angles, rear angles, tooth depths, tooth pitches very easy, quick and precise.
- * Tungsten carbide tipped feeding jaws.
- * Saw blade capacity: $\Phi 50$ to 480mm.
- * Pitch capacity: 25mm
- * Cutting angle: -5° to 30° .
- * Feeding speed: 45-200teeth/minute
- * Max. thickness of blade: 8mm
- * Grinding wheel size: Dia. 70mm, 150mm Thick
- * Grinding wheel speed: 4500rpm
- * Motor: 1/2HP 220V, 3/4HP 380V
- * Weight: 105kg
- * Shipping size: 135x80x80mm

Order NO. 439-1048



MULTI-PURPOSE TOOL GRINDING MACHINE

Features:

- * $\Phi 3$ mm to $\Phi 32$ mm cutters of straight shanks and taper shanks.
- * 360° swivel motor with twin grinding wheels.
- * For twist drills, scalar drill bits, taps, end mills, round bars.
- * 4" clamps with 6 jaws.
- * Grinding two flutes with single clamp.
- * Simple to use, accurate grinding.
- * Optional stand

Specifications:

- * Horizontal table travel: 90mm
- * Longitudinal table travel: 150mm
- * Swivel angle of wheelhead: 360° .
- * Front angle of drill bits: 90° to 180° .
- * Grinding wheel size: 125x50x32mm
- * Grinding wheel speed: 2800rpm
- * Motor: 3/4HP, 110V/220V/380V
- * Weight: 118kg/105kg
- * Shipping size: 81x52x47cm

Order NO. 439-1045



GRAVER GRINDER

- * Easy setting of pushing angle and clearance angle.
- * 180° or 360° swivel dividing head.
- * Moveable pushers make grinding of negative pushing angle easier than ever.
- * Division at 15° increment.
- * For grinding circular, semi-circular, positive angle of taper, back draught shaped cutters with single edge, or cutter punches of right, triangle, four, multi-angles or diamond shapes.

Specifications:

- * Max. holding capacity: 18mm
- * Max. grinding capacity: 25mm
- * Pushing angle: 0° to 180° .
- * Clearance angle: 0° to 45° .
- * Negative pushing angle: 0° to 45° .
- * Main axis speed: 5000rpm
- * Grinding wheel size: 100x50x20mm.
- * Motor: 1/2HP, 220V, 50HZ
- * Weight: 60kg/46kg
- * Shipping size: 55x45x47cm

Order NO. 439-1042



CUTTER SHARPENER

It is applicable to grind milling cutters of various kinds of sizes, shapes and angles, moulding pins for die sinkers. It can be used to sharpen turning tools, end mills, drills etc.

***Optional sharpener collets from 3 to 16mm.**

Specifications:

- Grinding Wheel Diameter: 100mm or 4"
- Wheel Thickness: 50mm/2"
- Hole size: 20mm or 3/4"
- Spindle speed: 5200rpm
- Collet clamping diameter rang: 3~16mm
- Tool post longitudinal travel: 140mm or 5-1/2"
- Tool post longitudinal micro adjustment: 18mm or 3/4"
- Spindle longitudinal micro adjustment: 8mm or 5/16"
- Grinding taper range: 0°~180°
- Grinding negative angle range: 0°~52°
- Grinding relief range: 0°~44°

Order No. 439-1012



CUTTER SHARPENER

It is applicable to grind milling cutters of various kinds of sizes, shapes and angles, moulding pins for die sinkers. It can be used to sharpen turning tools, end mills, drills etc.

***Optional sharpener 5C collets from 3 to 28mm.**

Specifications:

- Grinding Wheel Diameter: 100mm or 4"
- Wheel Thickness: 50mm/2"
- Hole size: 20mm or 3/4"
- Spindle speed: 5200rpm
- Collet clamping diameter rang: 3~28mm or 1/8~5/8"
- Tool post longitudinal travel: 140mm or 5-1/2"
- Tool post longitudinal micro adjustment: 18mm or 3/4"
- Spindle longitudinal micro adjustment: 8mm or 5/16"
- Grinding taper range: 0°~180°
- Grinding negative angle range: 0°~52°
- Grinding relief range: 0°~44°

Order No. 439-1049



CUTTER SHARPENER

It is applicable to grind milling cutters of various kinds of sizes, shapes and angles, moulding pins for die sinkers. It can be used to sharpen turning tools, end mills, drills etc.

***Optional sharpener R8 collets from 3 to 22mm.**

Specifications:

- Grinding Wheel Diameter: 100mm or 4"
- Wheel Thickness: 50mm/2"
- Hole size: 20mm or 3/4"
- Spindle speed: 5200rpm
- Collet clamping diameter rang: 3~22mm
- Tool post longitudinal travel: 140mm or 5-1/2"
- Tool post longitudinal micro adjustment: 18mm or 3/4"
- Spindle longitudinal micro adjustment: 8mm or 5/16"
- Grinding taper range: 0°~180°
- Grinding negative angle range: 0°~52°
- Grinding relief range: 0°~44°

Order No. 439-1051



CUTTER SHARPNER

It features opening structure, spacious operation area, max grinding capacity. It can sharpen helical edge, rear angle of the end flute, relief angles of taps, drills, reamers, bull nose end mills with operational accessories. Its main body is made from high quality aluminum alloy. It takes advance air floating technique. the spindle rotates flexibly after being pressed which reduces friction to the lowest.

Specifications:

- * End mill capacity (dia of shank x dia of edge x length):
2"x9"x10" or 50x225x250mm
- * Swing over table: 9-3/4" or 245mm
- * Longitudinal table travel (X axis): 6" or 150mm
- Cross travel of table (Y axis): 3" or 75mm
- * Maximum wheel: 5"x2"x1-1/4" or 125x50x32mm
- * Tilt adjustment for wheelhead: +35° -10°
- * Air bearing swivel: 360°
- * Air bearing stroke: 10" or 250mm
- * Table infeed graduation: 0.001"/0.02mm
- * Air bearing graduation: 6.3MPa
- * Pipe joint diameter: Z1/4"
- * Collet fit for spindle:
- * Parallelism between two tables: 0.01mm/100mm
- * Parallelism of sleeve center line to worktable:
0.01mm/100mm
- * Speed: 3450/2580rpm (110v) or 2800rpm (230V)
- * power: 1/3HP or 0.25KW
- * **Optional 5C collets**



Order No. 439-1013

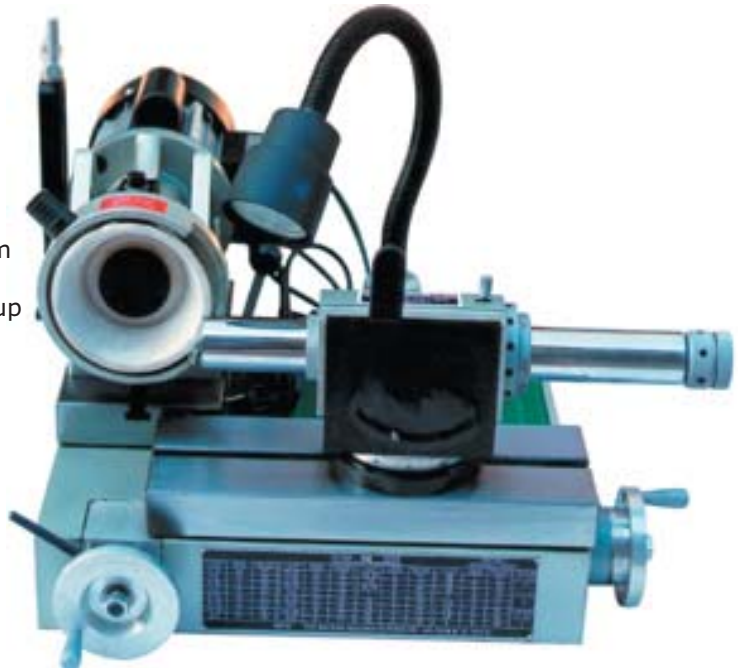
CUTTER SHARPNER

Features:

- * Easy to operate, grinding smoothly and steady.
- * Air Bearing construction keeps high accuracy and life long.
- * Applicable to 2,3,4,6 flutes HSS end mill, carbide end mill, reamer.

Technical Data:

- * Capacity: (shank dia. x blade dia. x length)
50mm x 175mm x 200mm
- * Table cross travel (X axis): 115mm
- * Table longitudinal travel (Y axis): 60mm
- * Table in-feed graduation: 0.02mm
- * Adjustment for wheel head: plus 35°
to minus 5°.
- * Air bearing swivel: 360 degree
- * Maximum wheel faring cup: 125mm x 52mm x 32mm
- * Air consumption: =0.63MP
- * Operation time: Complete in 2 minutes including setup
time for 13mm 2 flutes end mill generally.
- * Motor: 220V/0.25KW/50Hz/2800Rpm
- * Optional accessory available to grind ball
end mills and taps.
- * **Optional 5C collets**



Order No. 439-1016

PRECISION DRILL SHARPNER



The precision drill sharpener is easy to operate. With one mouting, it can grinde the cutting edge and cross edge of the drill one time. With operational diamond grinding wheel, it can sharpen HSS, carbide drills etc.

- * Grinding capacity: drills from 2 to 13mm
- * Range of grinding angle: 118° to 135°
- * Collets: ER20 (**Optional**)
- * Motor: 120w, 220V
- * Speed: 5000rpm

Order No. 439-1016

PRECISION DRILL SHARPNER



The precision drill sharpener is easy to operate. With one mouting, it can grinde the cutting edge and cross edge of the drill one time. With operational diamond grinding wheel, it can sharpen HSS, carbide drills etc.

- * Grinding capacity: drills from 13 to 26mm
- * Range of grinding angle: 110° to 140°
- * Collets: ER40 (**Optional**)
- * Grinding wheel adjustable range: ≤1mm
- * Motor: 200w, 220V
- * Speed: 5000rpm

Order No. 439-1041

SAW BLADE SHARPNER



Features:

- * The X employs high precision linear motion guide and motor, providing high accuracy operation, maximum stability and maximum wear resistance.
- * Cutting angle, back relief angle, tooth depth and pitch are conveniently adjusted. Extremely accurate tooth form.
- * Variable speeds can be adjusted for tooth pitch variation.
- * Suitable for new tooth forming or broken tooth brimming.
- * The tungsten carbide tipped pusher provides maximum wear resistance.
- * The rotary spring on pusher arm minimizes spring fatigue and gives added accuracy of feed.
- * Sharpening range: Saw blade diameter from 65 to 450mm.
- * Tooth pitch: ≤25
- * Tooth depth: ≤8mm
- * Thickness of sawblade: ≤8mm
- * Cutting angles: 0 to 30°

Order No. 439-1022

LATHE TOOL GRINDER



This is an ideal tool for grind lathe tools. With CBN wheel, it is applicable to grind cutting tools made of HSS, carbide steel, ceramic. It features easy operation, high accuracy.

Specifications:

- Wheel diameter: 150mm
- Back angle of wheel: 30°
- Table size: 133x280mm
- Table travel: 80mm
- Up and down adjustment of table: -10° to 25°
- Locking block swivel: +/-70°
- Motor: 250W
- Speed: 1400rpm 220V
- Grinding capacity: Square shank lathe tools or maximum diameter 28mm for round tools.

Order No. 439-1017

LATHE TOOL GRINDER



This drill grinder features simple structure, easy operation. With one setup, it accomplishes grinding drill cutting edge and cross edge at the point end.

Specifications:

- * Grinding capacity: 2 to 19mm
- * Spindle speed: 10000rpm
- * Motor: 250W,

Order No. 439-1018

PRECISION DRILL GRINDER



Features:

- * One setup completes cutting edge and cross edge grinding.
- * Can grind twist drills with two flutes.
- * Diamond wheel. Coolant unnecessary.
- * A 3mm drill takes 15 second while a 19mm takes about 60 seconds.

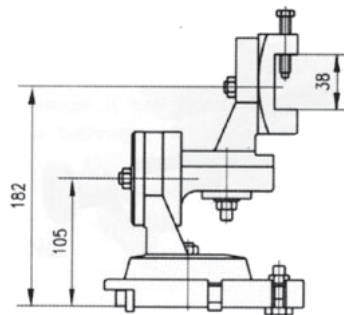
Grinding diameter range: 3-21mm
Grinding angle range: 118° to 150°
Motor: 230V, 50HZ
Speed: 10000RPM.

Order No. 439-1019

UNIVERSAL SHARPENER

This sharpener is used for sharpening square tools at any direction. It is very easy to use. Weight is 8kg.

Order No. 439-1021



END MILL SHARPENER



This unit is used to sharpen end mills.

- * Diameter of end mill shank: 3/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4".
- * Overall Length: 330mm
- * Center Height: 150mm
- * Weight: 11.6kg

Order No. 439-1005

END MILL SHARPENER



- * Uses 5C collets.
- * Clamping cutters with shank of 1/16" to 1-1/8" in diameter.
- * For grinding 2, 3, 4, 6, 8, 12 flute end mills and shell mills.
- * Unique angle base ensures great grinding capacity.
- * Ground base bottom for secured contact with magnetic chuck.

Order No. 439-1024

END MILL SHARPENER



This sharpener is for grinding mill cutters, reamers, drill bits etc.

- * Comes with 1/2, 5/8 and 3/4 tool sleeves.

Order No. 439-1014

WHEEL WIDTH DRESSER

- * Dresses both sides of the grinding wheels.



- * Maximum width of wheel: 40mm
- * Maximum dressing depth: 40mm
- * Mini dressing width: 0.5mm
- * Graduation: 0.02mm

Order No. 439-1028

MOTOR PUNCH GRINDER

- * Motorized centerless grinding for long pins or punches.
- * Combined with the optional magnetic sine plate, it can grind various angles.
- * Grind pins or punches to various profile with optional grinding wheels.
- * Length of pins and punches: 20 to 120mm.
- * Outside grinding length: 5-35mm
- * Grinding diameter: 1.5 to 25mm
- * Accuracy: 0.005mm
- * Motor: 110V/60Hz 129rpm or 220V/50Hz 108rpm

Order No. 439-1033



UNIVERSAL DRESSER

This universal dresser is a versatile tool for manual surface grinders, universal tool grinders, carve grinders etc. for dressing wheels in various forms, flat or curved surfaces.

Specifications:

- Center height: 165mm
- Diameter of calibration pin: 10mm
- Max. diamond cutteer swing: +/-20mm
- Max. grinding capacity: Dia. 200mm
- Max. dressing arc: Radius 40mm to both sides.
- Dial graduation: 5"
- Max. manual feed: 20mm
- Feed per revolution of handle: 0.02mm.
- Overall size: 165x106x180mm
- Weight: 5kg

Order No. 439-1029



RADIUS AND ANGLE DRESSER

The accurate and versatile radius and angle dresser is used on all grinding operations. Knob A controls radii and knob B controls angle movement. Hand pins determine the inside or outside radius. Easy radius setting is done with the optional gage blocks.

- * Max dressing diameter of grinding wheel: 300mm
- * Hole size to accommodate diamond tool shank: 3/8" or 9.525mm.
- * Overall length: 387mm
- * Base size: 134mmx105mm
- * Center height: 3.4" or 86.36mm
- * Weight: 13kg

Order No. 439-1000



OPTICAL UNIVERSAL DRESSER

This unit is for wheel dressing on surface grinders, universal tool grinders. Fixed 3X focus lens observes the status of the diamond point and the dress surface. Radius and angle can be set perfectly tangent with the help of optional gage blocks.

- * Center height: 65mm
- * Convex radii: 205mm
- * Concave radii: 13mm
- * Dressing angle 95°-0°-95°
- * Tangent travel: 22.5mm (either side of center)
- * Overall length: 230mm
- * Overall height: 97mm
- * Overall width: 75mm

Order No. 439-1027



SINE WHEEL DRESSER

This dresser features simple structure, easy operation. It can be used at both horizontal and vertical position for any angle surface dressing.

- * Adjustable angle range: 0-60°.
- * Travel of slide top: 50mm
- * Parallelism between slide top to base: 0.01mm
- * Overall size (LxWxH): 87mmx50mmx75mm

Order No. 439-1026

POUNCH FORMER & RADIUS TANGENT WHEEL DRESSER

Features:

- * For concave and convex radius dressing.
- * Grinding round, radius and multi-angle points of standard punch dies, EMD electrodes.
- * Rack gear design.
- * Stand radius dresser arm and V block.

Technical Data:

- * Center height: 80mm
- * Clamping diameter in V slot: 4-30mm
- * V block travel: 25mm
- * Index division: 24 (every 15°)
- * Convex radius: 50mm
- * Concave radius: 100mm
- * Overall size: 203mmx107mmx133mm

Order No. 439-1011



**POUNCH FORMER & RADIUS TANGENT WHEEL DRESSER
WITH OSCILLATING V BLOCK**

Features:

- * For concave and convex radius dressing.
- * Grinding round, radius and multi-angle points of standard punch dies, EMD electrodes.
- * Rack gear design.
- * Stand radius dresser arm and V block.
- * More punch forming applications than 439-1011

Technical Data:

- * Center height: 80mm
- * Clamping diameter in V slot: 4-30mm
- * V block travel: 25mm
- * Transversal travel of slide: 12.5mm both sides.
- * Index division: 24 (every 15°)
- * Convex radius: 50mm
- * Concave radius: 100mm

Order No. 439-1010



POUNCH FORMER

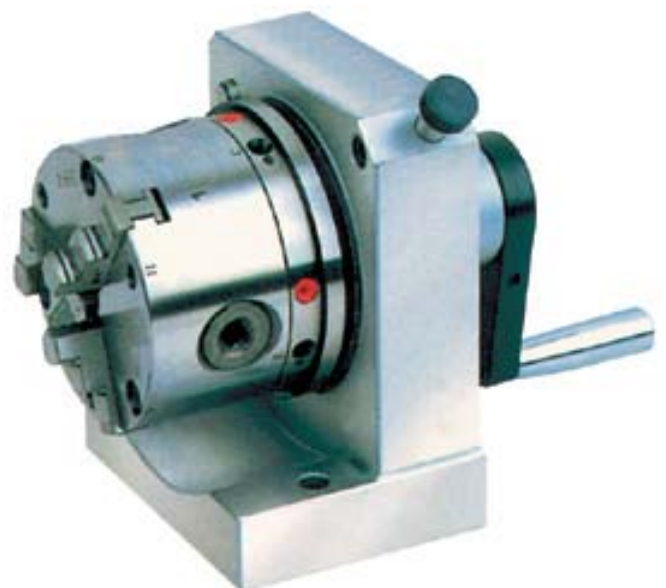
- * Accurate and quick clamping.
- * Clamping range: 2 to 20mm.
- * ER32 collets: 4,6,8,10,12,16,20mm.
- * For sizes smaller than 4mm, optional ER16 collet have to be ordered.



Order No. 439-1039

POUNCH FORMER

With the 3-jaw chuck, the punch former can hold workpieces quickly and accurately. It's a useful tool for batch production.



- * Clamping range: 2 to 70mm.
 - * Chuck Bore diameter: 16mm.
- Order No. 439-1038**

R8 COLLETS



- Made of highest grade steel
- Hardened & Ground to 0.0005" TIR
- Fits all R8 spindle- 7/16"-20TPI thread.



R8 Round Collet Sets

Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
466-0003	1/32"	466-0024	3/8"	466-0046	23/32"	466-0106	3.5mm	466-0123	12mm
466-0004	1/16"	466-0026	13/32"	466-0048	3/4"	466-0107	4mm	466-0125	13mm
466-0006	3/32"	466-0028	7/16"	466-0050	25/32"	466-0108	4.5mm	466-0127	14mm
466-0008	1/8"	466-0030	15/32"	466-0052	13/16"	466-0109	5mm	466-0129	15mm
466-0010	5/32"	466-0032	1/2"	466-0054	27/32"	466-0110	5.5mm	466-0131	16mm
466-0012	3/16"	466-0034	17/32"	466-0056	7/8"	466-0111	6mm	466-0133	17mm
466-0014	7/32"	466-0036	9/16"	466-0101	1mm	466-0113	7mm	466-0135	18mm
466-0016	1/4"	466-0038	19/32"	466-0102	1.5mm	466-0115	8mm	466-0137	19mm
466-0018	9/32"	466-0040	5/8"	466-0103	2mm	466-0117	9mm	466-0139	20mm
466-0020	5/16"	466-0042	21/32"	466-0104	2.5mm	466-0119	10mm	466-0140	21mm
466-0022	11/32"	466-0044	11/16"	466-0105	3mm	466-0121	11mm	466-0141	22mm

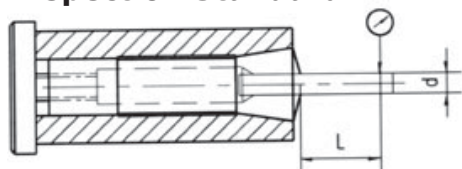
R8 Square Collet Sets

Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
466-0175	3MM	466-0181	6MM	466-0193	12MM	466-1012	3/16"	466-1024	3/8"
466-0176	3.5MM	466-0183	7MM	466-0195	13MM	466-1014	7/32"	466-1026	13/32"
466-0177	4MM	466-0185	8MM	Inch Size		466-1016	1/4"	466-1028	7/16"
466-0178	4.5MM	466-0187	9MM	466-1007	3/32"	466-1018	9/32"	466-1030	15/32"
466-0179	5MM	466-0189	10MM	466-1008	1/8"	466-1020	5/16"	466-1032	1/2"
466-0180	5.5MM	466-0191	11MM	466-1010	5/32"	466-1022	11/32"		

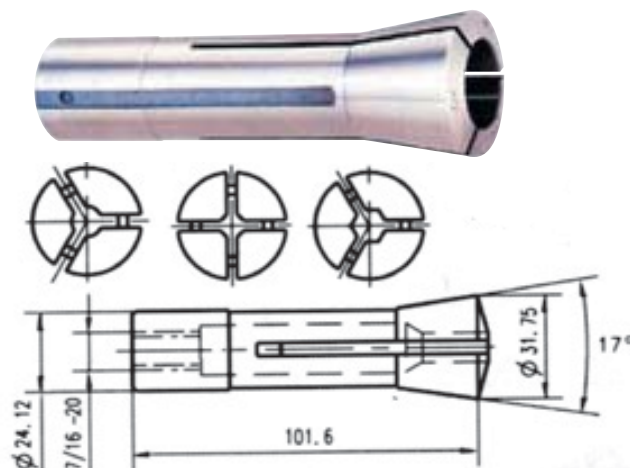
R8 HEX Collet Sets

Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
466-0145	3MM	466-0152	6.5MM	466-0165	13MM	466-2014	7/32"	466-2028	7/16"
466-0146	3.5MM	466-0153	7MM			466-2016	1/4"	466-2030	15/32"
466-0147	4MM	466-0155	8MM	Inch Size		466-2018	9/32"	466-2032	1/2"
466-0148	4.5MM	466-0157	9MM	466-2007	3/32"	466-2020	5/16"	466-2034	17/32"
466-0149	5MM	466-0159	10MM	466-2008	1/8"	466-2022	11/32"	466-2036	9/16"
466-0150	5.5MM	466-0161	11MM	466-2010	5/32"	466-2024	3/8"	466-2038	19/32"
466-0151	6MM	466-0163	12MM	466-2012	3/16"	466-2026	13/32"	466-2040	5/8"

Inspection Standard



Collet Hole Size (d)		L	Run out	
mm	in		in	mm
1~1.6	1/32 ~1/16	6.35	0.0005	0.013
>1.6~3	>1/16 ~1/8	12.7		
>3~10	>1/8 ~3/8	25.4		
>10~16	>3/8 ~5/8	38.1		
>16~20	>5/8 ~25/32	50.8		



PRECISION 5C ROUND COLLETS



- Made of highest grade steel
- Hardened & Ground to 0.0005" TIR
- External thread 1.245x20RH, Internal thread: 1.047x24RH

Order No.	Size
465-1001	3/64"
465-1002	1/16"
465-1003	5/64"
465-1004	3/32"
465-1005	7/64"
465-1006	1/8"
465-1007	9/64"
465-1008	5/32"
465-1009	11/64"
465-1010	3/16"
465-1011	13/64"
465-1012	7/32"
465-1013	15/64"
465-1014	1/4"

Order No.	Size
465-1015	17/64"
465-1016	9/32"
465-1017	19/64"
465-1018	5/16"
465-1019	21/64"
465-1020	11/32"
465-1021	23/64"
465-1022	3/8"
465-1023	25/64"
465-1024	13/32"
465-1025	27/64"
465-1026	7/16"
465-1027	29/64"
465-1028	15/32"

Order No.	Size
465-1029	31/64"
465-1030	1/2"
465-1031	33/64"
465-1032	17/32"
465-1033	35/64"
465-1034	9/16"
465-1035	37/64"
465-1036	19/32"
465-1037	39/64"
465-1038	5/8"
465-1039	41/64"
465-1040	21/32"
465-1041	43/64"
465-1042	11/16"

Order No.	Size
465-1043	45/64"
465-1044	23/32"
465-1045	47/64"
465-1046	3/4"
465-1047	49/64"
465-1048	25/32"
465-1049	51/64"
465-1050	13/16"
465-1051	53/64"
465-1052	27/32"
465-1053	55/64"
465-1054	7/8"
465-10255	57/64"
465-1056	29/32"

Order No.	Size
465-1057	59/64"
465-1058	15/16"
465-1059	61/62"
465-1060	31/32"
465-1061	63/64"
465-1062	1"
465-1063	1-1/64"
465-1064	1-1/32"
465-1065	1-3/64"
465-1066	1-1/16"
465-1067	1-5/64"
465-1068	1-3/32"
465-1069	1-7/64"
465-1070	1-1/8"

5C ROUND ROUND COLLET SET

Order No.	Size Range	No. of Pcs
465-1081	1/8"~1"by 8th	8pcs
465-1082	1/8"~1"by 16th	15pcs
465-1083	1/8"~1-1/16"by 16th	16pcs
465-1084	1/16"~1-1/16"by 16th	17pcs
465-1085	1/16"~1-1/8"by 16th	18pcs
465-1086	1/8"~1"by 32nd	29pcs
465-1087	1/8"~1-1/32"by 32nd	30pcs
465-1088	1/8"~1-1/16"by 32nd	31pcs
465-1089	1/16"~1-1/16"by 32nd	33pcs
465-1090	1/16"~1-1/8"by 32nd	35pcs
465-1091	1/8"~1"by 64th	57pcs
465-1092	1/16"~1-3/64"by 64th	64pcs
465-1093	1/16"~1-1/16"by 64th	65pcs
465-1094	1/16"~1-1/8"by 64th	69pcs

5C HEX COLLET

Order No.	Size
465-1208	1/8"
465-1212	3/16"
465-1216	1/4"
465-1220	5/16"
465-1224	3/8"
465-1228	7/16"
465-1232	1/2"
465-1236	9/16"
465-1240	5/8"
465-1244	11/16"
465-1248	3/4"
465-1252	13/16"
465-1256	7/8"



5C SQUARE COLLET

Order No.	Size
465-1308	1/8"
465-1312	3/16"
465-1316	1/4"
465-1320	5/16"
465-1324	3/8"
465-1328	7/16"
465-1332	1/2"
465-1336	9/16"
465-1340	5/8"
465-1344	11/16"
465-1348	3/4"
465-1352	13/16"
465-1356	7/8"

5C EMERGENCY COLLETS

Features:

Face & Pilot Hole are soft. Can be drilled, bored or machine with a H.S.S Tool Bit to your requirements.



Order No.	Made of:
465-1401	Steel
465-1402	Brass
465-1403	Nylon

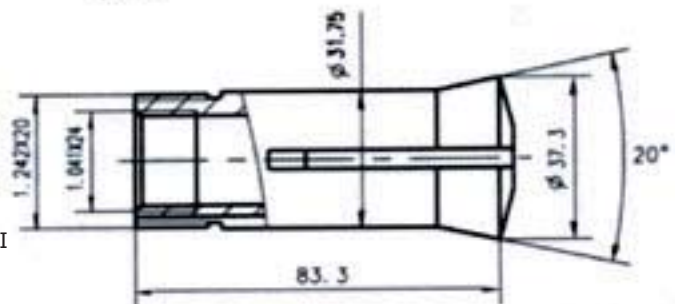


5C COLLET STOP



- Fits any 5C ID threaded collets, uses any standard 3/8"-16TPI threaded rod or screw for stops.
- Has full hex milled for use of box wrench and/or open end.
- Black Oxide and hardened for long life.

Order No. 465-1501



5C COLLETS SIZES

5C EXPANDING COLLET SET

Features:

- * Holds concentricity within .0005"
- * Fits any standard 5c spindle
- * The taper will not draw back into spindle once seated, shoulder widths, can be held within +/- .001"
- * Can be made to specs for holding on pitch diameters, hex or square broached holes, rectangular for micro bores, etc.
- * Set consists of 4 expanding collets in wooden rack, providing i.d. chucking from .250" to 1.937".
- * Collets are machineable through their entire range.

Order No.	Description
465-1600	Set of 4 collets in Rack from .250-1.937"
Individual Sizes	
465-1601	Collet .250-.468
465-1602	Collet .437-.800
465-1603	Collet .750-1.437
465-1604	Collet .750-1.937



5C COLLET RACK

- Collet rack holds up to 30 collets
- Baked enamel paint surface
- Hangs on wall or machine or sets on a shelf or workbench



Order No. 465-1502

5C COLLET BLOCK SET

Features:

- For simple set-ups on lathes, milling machines, surface grinders and drill presses.
- Precision hardened & ground, square and parallel to within .00005".
- 1/16" - to 1-1/16" capacity
- Overall dimensions: 2" x 2" x 3.5"
- Simple indexing at 60, 90 or 120 degrees.



Order No. 465-1530

5C STEP COLLETS

- Up to 6" diameter holding capacity
- Precision ground body and heat treated threads
- Soft face can be machined to your requirements

Order No.	Head Dia.	Thickness
465-1702	2"	1"
465-1703	3"	
465-1704	4"	
465-1705	5"	
465-1706	6"	
465-1712	2"	
465-1713	3"	
465-1714	4"	
465-1715	5"	
465-1716	6"	
465-1722	2"	1-3/16"
465-1723	3"	
465-1724	4"	
465-1725	5"	
465-1726	6"	



5C COLLET FIXTURE

- * For collets up to 1-1/8" capacity.
- * Hold work for milling, drilling, tapping, reaming, grinding, slotting.
- * Cam lever opens and closes collets easily and quickly.
- * Center height (horizontal) 64mm or 2.52"
- * Height at horizontal position: 73.74
- * Height at vertical position: 4.13"
- * Base size (Horizontal): 5"x3.96"
- * Base size (Vertical): 5"x3.74"
- * Parallelism of spindle to base: 0.020mm or 0.0008"
- * Squareness of spindle axis to base surface: 0.020mm or 0.0008"
- * Weight: 4.822kg



Order No. 465-1504

5C COLLET FIXFIXTURE

- * Center hight (horizontal) 60mm or 2.36"
- * Height at horizontal position: 7.16"
- * Height at vertical postion: 4.13"
- * Base size (Horizontal): 6.10x4.03"
- * Base size (Vertical): 6.10x4.72"
- * Parallelism of spindle to base: 0.020mm or 0.0008"
- * Sqareness of spindle axis to base surface: 0.020mm or 0.0008"
- * Weight: 8.2kg

Order No. 465-1530



5C COLLET FIXFIXTURE



- Height: 4-1/2"
- Base size: 4"x7-7/8"
- Sqareness of centerline to base: 0.02mm or 0.0008"
- Weight: 4.62kg

Order No. 465-1530

5C COLLET FIXFIXTURE



- Height: 4-1/2"
- Base size: 4"x7-7/8"
- Sqareness of centerline to base: 0.02mm or 0.0008"
- Center height at horizontal position: 64mm or 2.52"
- Weight: 5.5kg

Order No. 465-1530

POWER FEED

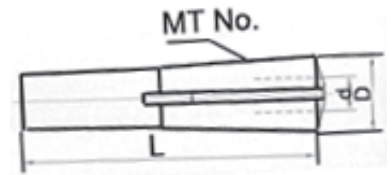
For Milling Machines

- * Special electrical relay protects damage caused by power failure.
- * Easy electrical and mechanical maintenance
- * 110V, or 220V electrical with manual reset switch and pilot light
- * Voltage: 110V 50/60HZ or 220V 60HZ



Order No.	Description	Power
920-1000	Table feed "X"	130W
920-1001	Table feed "Y" axis	130W
920-1002	Knee feed "Z" axis	130W
920-1003	Table feed "X" Axis	90W
920-1004	Table feed "Y" axis	90W
920-1005	Knee feed "Z" axis	90W

MORSE TAPER ROUND COLLET



MT1		MT2		MT3		MT3		MT4	
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
467-1004	1/16"	467-2028	7/16"	467-3028	7/16"	467-3078	18mm	467-4073	3mm
467-1008	1/8"	467-2032	1/2"	467-3032	1/2"	MT4		467-4074	4mm
467-1012	3/16"	467-2042	2mm	467-3036	9/16"	Order No.	Size	467-4075	5mm
467-1016	1/4"	467-2043	3mm	467-3040	5/8"	467-4008	1/8"	467-4076	6mm
467-1020	5/16"	467-2044	4mm	467-3044	11/16"	467-4012	3/16"	467-4078	8mm
467-1032	2mm	467-2045	5mm	467-3048	3/4"	467-4016	1/4"	467-4080	10mm
467-1033	3mm	467-2046	6mm	467-3063	3mm	467-4020	5/16"	467-4081	11mm
467-1034	4mm	467-2048	8mm	467-3064	4mm	467-4024	3/8"	467-4082	12mm
467-1035	5mm	467-2050	10mm	467-3065	5mm	467-4028	7/16"	467-4083	13mm
467-1036	6mm	467-2051	11mm	467-3066	6mm	467-4032	1/2"	467-4084	14mm
467-1038	8mm	467-2052	12mm	467-3068	8mm	467-4036	9/16"	467-4086	16mm
MT2		MT3		467-3070	10mm	467-4040	5/8"	467-4087	17mm
Order No.	Size	Order No.	Size	467-3071	11mm	467-4044	11/16"	467-4088	18mm
467-2008	1/8"	467-3008	1/8"	467-3072	12mm	467-4048	3/4"	467-4090	20mm
467-2012	3/16"	467-3012	3/16"	467-3073	13mm	467-4052	13/16"	467-4092	22mm
467-2016	1/4"	467-3016	1/4"	467-3074	14mm	467-4056	7/8"	467-4094	24mm
467-2020	5/16"	467-3020	5/16"	467-3076	16mm	467-4060	15/16"	467-4095	25mm
467-2024	3/8"	467-3024	3/8"	467-3077	17mm	467-4064	1"		

MORSE TAPER 4# COLLET with Buttress thread



- * Morse taper 4 collets
- * S20x2 thread.
- * Greater clamping force than regular thread.
- * Made from elastic alloy steel.
- * Hardened to HRC55-60 clamping part and HRC40-45 elastic part

Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
467-5052	1/8"	467-5059	9/16"	467-5066	1"	467-5072	10mm	467-5078	17mm
467-5053	3/16"	467-5060	5/8"	Metric		467-5073	11mm	467-5079	18mm
467-5054	1/4"	467-5061	11/16"	467-5067	3mm	467-5074	12mm	467-5080	20mm
467-5055	5/16"	467-5062	3/4"	467-5068	4mm	467-5075	13mm	467-5081	22mm
467-5056	3/8"	467-5063	13/16"	467-5069	5mm	467-5076	14mm	467-5082	24mm
467-5057	7/16"	467-5064	7/8"	467-5070	6mm	467-5077	16mm	467-5083	25mm
467-5058	1/2"	467-5065	15/16"	467-5071	8mm				

COLLET CHUCK Morse Taper

Cat. No.	Shank Dia.	Collet Type	Capacity
468-8123	MT2	ER-20	.04-.511"
468-8124	MT2	ER-25	.04-.629"
468-8135	MT3	ER-32	.06-.787"
468-8136	MT3	ER-40	.12-1.02"
468-8146	MT4	ER-40	.12-1.02"
468-8147	MT4	ER-50	.393-1.33"
468-8156	MT5	ER-40	.12-1.02"
468-8157	MT5	ER-50	.393-1.33"
468-8167	MT6	ER-50	.393-1.33"



COLLET CHUCK 30, 40 and 50

Cat. No.	Shank Dia.	Collet Type	Capacity
468-8212	30	ER-16	.02-.393"
468-8215	30	ER-32	.08-.787"
468-8216	30	ER-40	.12-1.02"
468-8222	40	ER-16	.02-.393"
468-8223	40	ER-20	.04-.511"
468-8225	40	ER-32	.08-.787"
468-8226	40	ER-40	.12-1.02"
468-8227	40	ER-50	.393-1.33"
468-8232	50	ER-16	.02-.393"
468-8233	50	ER-20	.04-.511"
468-8236	50	ER-40	.12-1.02"
468-8237	50	ER-50	.393-1.33"



COLLET CHUCK Straight Shank

Cat. No.	Shank Dia.	Collet	Capacity
468-8311	5/8"x2-1/2"	ER-11	.02-.275"
468-8312	3/4"x2-1/2"	ER-11	.02-.275"
468-8313	3/4"x4"	ER-11	.02-.275"
468-8314	3/4"x6"	ER-11	.02-.275"
468-8321	3/4"x2-1/2"	ER-16	.02-.393"
468-8322	3/4"x4"	ER-16	.02-.393"
468-8323	3/4"x6"	ER-16	.02-.393"
468-8331	3/4"x2-1/2"	ER-20	.04-.511"
468-8332	3/4"x4"	ER-20	.04-.511"
468-8333	3/4"x6"	ER-20	.04-.511"
468-8341	3/4"x2-1/2"	ER-25	.04-.629"
468-8342	3/4"x4"	ER-25	.04-.629"
468-8351	1"x1-31/32"	ER-32	.08-.787"
468-8352	1-1/4"x2-3/8"	ER-32	.08-.787"
468-8353	1-1/4"x5-29/32"	ER-32	.08-.787"
468-8354	3/4"x1-31/32"	ER-32	.08-.787"
468-8361	1"x2-3/8"	ER-40	.12-1.02"
468-8362	1-1/4"x2-3/8"	ER-40	.12-1.02"



COLLET CHUCK R8 Shank

Cat. No.	Shank Dia.	Collet Type	Capacity
468-8421	R8	ER-16	.02-.393"
468-8215	R8	ER-32	.08-.787"
468-8216	R8	ER-40	.12-1.02"
468-8222	R8	ER-16	.02-.393"



COLLET CHUCK SET



ER-11 Set includes 7 collets: 1/32", 1/16", 3/32", 1/8", 3/16", 7/32", 1/4",
ER-16 Set includes 10 collets: 1/32", 1/16", 3/32", 1/8", 3/16", 7/32", 1/4", 5/16", 11/32", 3/8"

Shank Size	ER-11	ER-16
	Order No.	Order No.
R8	468-9131	468-9231
30	468-9123	468-9223
40	468-9124	468-9224
50	468-9125	468-9225
MT2	468-9112	468-9212
MT3	468-9113	468-9213
MT4	468-9114	468-9214
3/4"-2-1/2"	468-9142	468-9242
3/4"x4"	468-9143	468-9243
3/4"x6"	468-9144	468-9244

ER-25 10 collets include: 3/32", 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8".
ER-25 6 collets include: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8".

Shank Size	10 collets	6 collets
	Order No.	Order No.
R8	468-9431	468-9432
30	468-9423	468-9426
40	468-9424	468-9427
50	468-9425	468-9428
MT2	468-9412	468-9415
MT3	468-9413	468-9416
MT4	468-9414	468-9417
3/4"x2-1/2"	468-9442	468-9446
1"x2-3/8"	468-9443	468-9447

ER-32 12 collets include: 1/16", 3/32", 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 13/16".
ER-32 6 collets include: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4".

Shank Size	12 collets	6 collets
	Order No.	Order No.
R8	468-9531	468-9532
30	468-9523	468-9526
40	468-9524	468-9527
50	468-9525	468-9528
MT2	468-9512	468-9515
MT3	468-9513	468-9516
MT4	468-9514	468-9517
3/4"x2-1/2"	468-9542	468-9546
1"x2-3/8"	468-9543	468-9547

ER COLLET CHUCK SET

ER16 collet chuck set		
Shank Size	Order No.	Order No.
R8	468-9710	468-9720
ISO30	468-9711	468-9721
ISO40	468-9712	468-9722
ISO50	468-9713	468-9723
MT2	468-9714	468-9724
MT3	468-9715	468-9725
MT4	468-9716	468-9726
1/2"	468-9717	468-9727
3/4"	468-9718	468-9728
Each set includes:	1 collet chuck, 1 clamping nut, 1 spanner, 8pcs ER16 collets (2, 3, 4, 5, 6, 7, 8, 10mm)	1 collet chuck, 1 clamping nut, 1 spanner, 8pcs ER16 collets (3/32", 1/8", 3/16", 7/32", 1/4", 5/16", 11/32", 3/8")



ER25 Collet Chuck Set				
Shank Size	Order No.	Order NO.	Order No.	Order NO.
R8	468-9730	468-9740	468-9750	468-9760
ISO30	468-9731	468-9741	468-9751	468-9761
ISO40	468-9732	468-9742	468-9752	468-9762
ISO50	468-9733	468-9743	468-9753	468-9763
MT2	468-9734	468-9744	468-9754	468-9764
MT3	468-9735	468-9745	468-9755	468-9765
MT4	468-9736	468-9746	468-9756	468-9766
1/2"	468-9737	468-9747	468-9757	468-9767
3/4"	468-9738	468-9748	468-9758	468-9768
Each set includes:	1 collet chuck, 1 clamping nut, 1 spanner, 6pcs ER25 collets (4, 6, 8, 10, 12, 16mm)	1 collet chuck, 1 clamping nut, 1 spanner, 6pcs ER25 collets (1/8", 3/16", 5/16", 3/8", 1/2", 5/8")	1 collet chuck, 1 clamping nut, 1 spanner, 10pcs ER25 collets (3, 4, 5, 6, 8, 10, 12, 14, 15, 16mm)	1 collet chuck, 1 clamping nut, 1 spanner, 6pcs ER25 collets (3/32", 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8")

ER32 Collet Chuck Set				
Shank Size	Order No.	Order NO.	Order No.	Order NO.
R8	468-9770	468-9780	468-9790	468-9800
ISO30	468-9771	468-9781	468-9791	468-9801
ISO40	468-9772	468-9782	468-9792	468-9802
ISO50	468-9773	468-9783	468-9793	468-9803
MT3	468-9774	468-9784	468-9794	468-9804
MT4	468-9775	468-9785	468-9795	468-9805
MT5	468-9776	468-9786	468-9796	468-9806
3/4"	468-9777	468-9787	468-9797	468-9807
1"	468-9778	468-9788	468-9798	468-9808
Each set includes:	1 collet chuck, 1 clamping nut, 1 spanner, 6pcs ER32 collets (6, 8, 10, 12, 16, 20mm)	1 collet chuck, 1 clamping nut, 1 spanner, 6pcs ER32 collets (1/4", 5/16", 3/8", 1/2", 5/8", 3/4")	1 collet chuck, 1 clamping nut, 1 spanner, 12pcs ER32 collets (3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20mm)	1 collet chuck, 1 clamping nut, 1 spanner, 6pcs ER25 collets (3/32", 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4")

- * Packed in wooden case or plastic case.
- * Please specify thread size when ordering.
- * Combination of various shanks and collets available too.

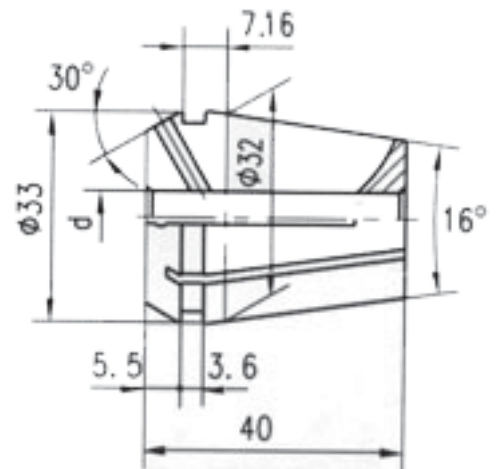
ER COLLET CHUCK SET

ER40 Collet Chuck Set				
Shank Size	Order No.	Order NO.	Order No.	Order NO.
R8	468-9810	468-9820	468-9830	468-9840
ISO30	468-9811	468-9821	468-9831	468-9841
ISO40	468-9812	468-9822	468-9832	468-9842
ISO50	468-9813	468-9823	468-9833	468-9843
MT3	468-9814	468-9824	468-9834	468-9844
MT4	468-9815	468-9825	468-9835	468-9845
MT5	468-9816	468-9826	468-9836	468-9846
1"	468-9817	468-9827	468-9837	468-9847
1-1/4"	468-9818	468-9828	468-9838	468-9848
Each set includes:	1 collet chuck, 1 clamping nut, 1 spanner, 8pcs ER40 collets (3, 5, 8, 12, 15, 18, 22, 26mm)	1 collet chuck, 1 clamping nut, 1 spanner, 8pcs ER40 collets (1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1")	1 collet chuck, 1 clamping nut, 1 spanner, 12pcs ER40 collets (3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 24, 24, 26mm)	1 collet chuck, 1 clamping nut, 1 spanner, 6pcs ER40 collets (1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1")

ER32C COLLETS

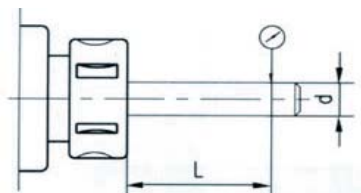


- * 65Mn alloy steel
- * Hardened to HRC44-48
- * Accuracy to DIN64999



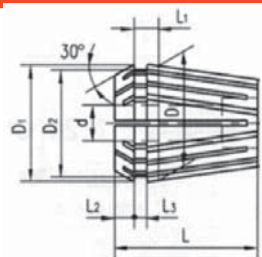
Order No.	d (mm)	Order No.	d (mm)	Order No.	d (mm)
468-1080	3mm	468-1086	9mm	468-1092	15mm
468-1081	4mm	468-1087	10mm	468-1093	16mm
468-1082	5mm	468-1088	11mm	468-1094	17mm
468-1083	6mm	468-1089	12mm	468-1095	18mm
468-1084	7mm	468-1090	13mm	468-1096	19mm
468-1085	8mm	468-1091	14mm	468-1097	20mm

DIN64998B tolerance standard



II. Regular supply
I. Special order

d	L	Run outD	
		I	II
1.0~1.6	6	0.01MM	0.015MM
>1.6~3.0	10		
>3.0~6.0	16		
>6.0~10.0	25	0.015mm	0.02mm
>10.0~18.0	40		
>18.0~26.0	50		
>26.0~30.0	60		
>30.0~34.0	80	0.02mm	0.03mm



DIN6499B ER SPRING COLLETS

Collet	d H7	D	D1	D2	L	L1	L2	L3	Collapsible capacity
ER8	0.5~5.0	8	8.5	6.5	13.5	2.7	1.5	1.2	0.5
ER11	1.0~7.0	11	11.5	9.5	18	3.8	2.5	2	0.5
ER16	1.0~2.0	16	17	13.8	27.5	6.26	4	2.7	0.5
ER16	>2.0~10.0	16	17	13.8	27.5	6.26	4	2.7	1
ER20	1.0~2.5	20	21	17.4	31.5	6.36	4.8	2.8	0.5
ER20	>2.5~13.0	20	21	17.4	31.5	6.36	4.8	2.8	1
ER25	1.0~2.5	25	26	22	34	6.66	5	3.1	0.5
ER25	>2.5~16.0	25	26	22	34	6.66	5	3.1	1
ER32	2.0~3.5	32	33	29.2	40	7.16	5.5	3.6	0.5
ER32	>3.5~20.0	32	33	29.2	40	7.16	5.5	3.6	1
ER40	3.0~26.0	40	41	36.2	46	7.66	7	4.1	1
ER50	6.0~10.0	50	52	46	60	12.6	8.5	5.5	1
ER50	>10.0~34.0	50	52	46	60	12.6	8.5	5.5	2

ER8		ER16		ER25		ER32		ER50	
Order NO.	d	Order NO.	d	Order NO.	d	Order NO.	d	Order NO.	d
468-1061	1MM	468-2049	5MM	468-4059	5MM	468-5083	17MM	468-7111	6MM
468-1062	1.5MM	468-2051	6MM	468-4061	6MM	468-5085	18MM	468-7113	7MM
468-1063	2MM	468-2053	7MM	468-4063	7MM	468-5087	19MM	468-7115	8MM
468-1064	2.5MM	468-2055	8MM	468-4065	8MM	468-5089	20MM	468-7117	9MM
468-1065	3MM	468-2057	9MM	468-4067	9MM	ER40		468-7119	10MM
468-1066	3.5MM	468-2059	10MM	468-4069	10MM	Order NO.	d	468-7121	11MM
468-1067	4MM	ER20		468-4071	11MM	468-6085	3MM	468-7123	12MM
468-1068	4.5MM	Order NO.	d	468-4073	12MM	468-6087	4MM	468-7125	13MM
468-1069	5MM	468-3041	1MM	468-4075	13MM	468-6089	5MM	468-7127	14MM
ER11		468-3042	1.5MM	468-4077	14MM	468-6091	6MM	468-7129	15MM
Order NO.	d	468-3043	2MM	468-4079	15MM	468-6093	7MM	468-7131	16MM
468-1031	1MM	468-3044	2.5MM	468-4081	16MM	468-6095	8MM	468-7133	17MM
468-1032	1.5MM	468-3045	3MM	ER32		468-6097	9MM	468-7135	18MM
468-1033	2MM	468-3047	4MM	Order NO.	d	468-6099	10MM	468-7137	19MM
468-1034	2.5MM	468-3049	5MM	468-5053	2MM	468-6101	11MM	468-7139	20MM
468-1035	3MM	468-3051	6MM	468-5054	2.5MM	468-6103	12MM	468-7141	21MM
468-1036	3.5MM	468-3053	7MM	468-5055	3MM	468-6105	13MM	468-7143	22MM
468-1037	4MM	468-3055	8MM	468-5056	3.5MM	468-6107	14MM	468-7145	23MM
468-1038	4.5MM	468-3057	9MM	468-5057	4MM	468-6109	15MM	468-7147	24MM
468-1039	5MM	468-3059	10MM	468-5059	5MM	468-6111	16MM	468-7149	25MM
468-1040	5.5MM	468-3061	11MM	468-5061	6MM	468-6113	17MM	468-7151	26MM
468-1041	6MM	468-3063	12MM	468-5063	7MM	468-6115	18MM	468-7153	27MM
468-1043	7MM	468-3065	13MM	468-5065	8MM	468-6117	19MM	468-7155	28MM
ER16		ER25		468-5067	9MM	468-6119	20MM	468-7157	29MM
Order NO.	d	Order NO.	d	468-5069	10MM	468-6121	21MM	468-7159	30MM
468-2041	1MM	468-4051	1MM	468-5071	11MM	468-6123	22MM	468-7161	31MM
468-2042	1.5MM	468-4052	1.5MM	468-5073	12MM	468-6125	23MM	468-7163	32MM
468-2043	2MM	468-4053	2MM	468-5075	13MM	468-6127	24MM	468-7165	33MM
468-2044	2.5MM	468-4054	2.5MM	468-5077	14MM	468-6129	25MM	468-7167	34MM
468-2045	3MM	468-4055	3MM	468-5079	15MM	468-6131	26MM		
468-2047	4MM	468-4057	4MM	468-5081	16MM				

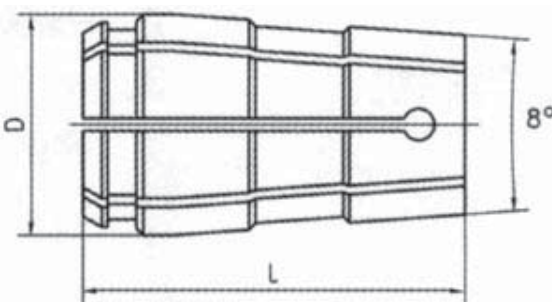
- * 8° taper design
- * Powerful 16 jaw gripping.
- * Self-releasing system eliminates sticking.
- * Extreme concentricity with double angles.
- * Wide holding range.

DIN6499B ER SPRING COLLETS

ER8		ER16		ER25		ER32		ER40		ER50		
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	
468-1050	1/32"	468-2013	7/32"	468-4003	1/16"	468-5016	17/64"	468-6025	13/32"	468-7027	7/16"	
468-1051	3/64"	468-2014	15/64"	468-4004	5/64"	468-5017	9/32"	468-6026	27/64"	468-7028	29/64"	
468-1052	1/16"	468-2015	1/4"	468-4005	3/32"	468-5018	19/64"	468-6027	7/16"	468-7029	15/32"	
468-1053	5/64"	468-2016	17/64"	468-4006	7/64"	468-5019	5/16"	468-6028	29/64"	468-7030	31/64"	
468-1054	3/32"	468-2017	9/32"	468-4007	1/8"	468-5020	21/64"	468-6029	15/32"	468-7036	37/64"	
468-1055	7/64"	468-2018	19/64"	468-4008	9/64"	468-5021	11/32"	468-6030	31/64"	468-7037	19/32"	
468-1056	1/8"	468-2019	5/16"	468-4009	5/32"	468-5022	23/64"	468-6031	1/2"	468-7038	39/64"	
468-1057	9/64"	468-2020	21/64"	468-4010	11/64"	468-5023	3/8"	468-6032	33/64"	468-7039	5/8"	
468-1058	5/32"	468-2021	11/32"	468-4011	3/16"	468-5024	25/64"	468-6033	17/32"	468-7040	41/64"	
468-1059	11/64"	468-2022	23/64"	468-4012	13/64"	468-5025	13/32"	468-6034	35/64"	468-7041	21/32"	
468-1060	3/16"	468-2023	3/8"	468-4013	7/32"	468-5026	27/64"	468-6035	9/16"	468-7042	43/64"	
ER11		ER20		468-4014	15/64"	468-5027	7/16"	468-6036	37/64"	468-7043	11/16"	
Order No.	Size	Order No.	Size	468-4015	1/4"	468-5028	29/64"	468-6037	19/32"	468-7044	45/64"	
468-1001	1/32"	468-3002	3/64"	468-4016	17/64"	468-5029	15/32"	468-6038	39/64"	468-7045	23/32"	
468-1002	3/64"	468-3003	1/16"	468-4017	9/32"	468-5030	31/64"	468-6039	5/8"	468-7046	47/64"	
468-1003	1/16"	468-3004	5/64"	468-4018	19/64"	468-5031	1/2"	468-6040	41/64"	468-7047	3/4"	
468-1004	5/64"	468-3005	3/32"	468-4019	5/16"	468-5032	33/64"	468-6041	21/32"	468-7053	27/32"	
468-1005	3/32"	468-3006	7/64"	468-4020	21/64"	468-5033	17/32"	468-6042	43/64"	468-7054	55/64"	
468-1006	7/64"	468-3007	1/8"	468-4021	11/32"	468-5034	35/64"	468-6043	11/16"	468-7055	7/8"	
468-1007	1/8"	468-3008	9/64"	468-4022	23/64"	468-5035	9/16"	468-6044	45/64"	468-7056	57/64"	
468-1008	9/64"	468-3009	5/32"	468-4023	3/8"	468-5036	37/64"	468-6045	23/32"	468-7057	29/32"	
468-1009	5/32"	468-3010	11/64"	468-4024	25/64"	468-5037	19/32"	468-6046	47/64"	468-7058	59/64"	
468-1010	11/64"	468-3011	3/16"	468-4025	13/32"	468-5038	39/64"	468-6047	3/4"	468-7059	15/16"	
468-1011	3/16"	468-3012	13/64"	468-4026	27/64"	468-5039	5/8"	468-6048	49/64"	468-7060	61/62"	
468-1012	13/64"	468-3013	7/32"	468-4027	7/16"	ER40		468-6049	25/32"	468-7061	31/32"	
468-1013	7/32"	468-3014	15/64"	468-4028	29/64"	Order No.	Size	468-6050	51/64"	468-7062	63/64"	
468-1014	15/64"	468-3015	1/4"	468-4029	15/32"	468-6007	1/8"	468-6051	13/16"	468-7063	1"	
468-1015	1/4"	468-3016	17/64"	468-4030	31/64"	468-6008	9/64"	468-6052	53/64"	468-7064	1-1/64"	
468-1016	17/64"	468-3017	9/32"	468-4031	1/2"	468-6009	5/32"	468-6053	27/32"	468-7070	1-7/64"	
468-1017	9/32"	468-3018	19/64"	468-4032	33/64"	468-6010	11/64"	468-6054	55/64"	468-7071	1-1/8"	
ER16		468-3019	5/16"	ER32		D	468-6011	3/16"	468-6055	7/8"	468-7072	1-9/64"
Order No.	Size	468-3020	21/64"	Order No.	Size	468-6012	13/64"	468-6056	57/64"	468-7073	1-5/32"	
468-2001	1/32"	468-3021	11/32"	468-5005	3/32"	468-6013	7/32"	468-6057	29/32"	468-7074	1-11/64"	
468-2002	3/64"	468-3022	23/64"	468-5006	7/64"	468-6014	15/64"	468-6058	59/64"	468-7075	1-3/16"	
468-2003	1/16"	468-3023	3/8"	468-5007	1/8"	468-6015	1/4"	ER50		468-7076	1-13/64"	
468-2004	5/64"	468-3024	25/64"	468-5008	9/64"	468-6016	17/64"	Order No.	Size	468-7077	1-7/32"	
468-2005	3/32"	468-3025	13/32"	468-5009	5/32"	468-6017	9/32"	468-7019	5/16"	468-7078	1-15/64"	
468-2006	7/64"	468-3026	27/64"	468-5010	11/64"	468-6018	19/64"	468-7020	21/64"	468-7079	1-1/4"	
468-2007	1/8"	468-3027	7/16"	468-5011	3/16"	468-6019	5/16"	468-7021	11/32"	468-7080	1-17/64"	
468-2008	9/64"	468-3028	29/64"	468-5012	13/64"	468-6020	21/64"	468-7022	23/64"	468-7081	1-9/32"	
468-2009	5/32"	468-3029	15/32"	468-5013	7/32"	468-6021	11/32"	468-7023	3/8"			
468-2010	11/64"	468-3030	31/64"	468-5014	15/64"	468-6022	23/64"	468-7024	25/64"			
468-2011	3/16"	468-3031	1/2"	468-5015	1/4"	468-6023	3/8"	468-7025	13/32"			
468-2012	13/64"					468-6024	25/64"	468-7026	27/64"			

MACHINE ACCESSORIES

TG SPRING COLLETS



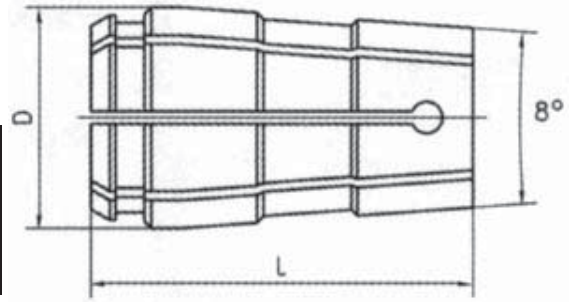
TG COLLET	D (mm)	L (mm)
TG75	27	46.9
TG100	35	60.5
TG150	50.8	76.2

TG75		TG75		TG100		TG150		TG150	
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-1801	1/16"	465-1840	43/64"	465-1896	37/64"	465-1956	25/64"	465-1995	1"
465-1802	5/64"	465-1841	11/16"	465-1897	19/32"	465-1957	13/32"	465-1996	1-1/64"
465-1803	3/32"	465-1842	45/64"	465-1898	39/64"	465-1958	27/64"	465-1997	1-1/32"
465-1804	7/64"	465-1843	23/32"	465-1899	5/8"	465-1959	7/16"	465-1998	1-3/64"
465-1805	1/8"	465-1844	47/64"	465-1900	41/64"	465-1960	29/64"	465-1999	1-1/16"
465-1806	9/64"	465-1845	3/4"	465-1901	21/32"	465-1961	15/32"	465-2000	1-5/64"
465-1807	5/32"	465-1846	49/64"	465-1902	43/64"	465-1962	31/64"	465-2001	1-3/32"
465-1808	11/64"	465-1847	25/32"	465-1903	11/16"	465-1963	1/2"	465-2002	1-7/64"
465-1809	3/16"	TG100		465-1904	45/64"	465-1964	33/64"	465-2003	1-1/8"
465-1810	13/64"	Order No.	Size	465-1905	23/32"	465-1965	17/32"	465-2004	1-9/64"
465-1811	7/32"	465-1867	1/8"	465-1906	47/64"	465-1966	35/64"	465-2005	1-5/32"
465-1812	15/64"	465-1868	9/64"	465-1907	3/4"	465-1967	9/16"	465-2006	1-11/64"
465-1813	1/4"	465-1869	5/32"	465-1908	49/64"	465-1968	37/64"	465-2007	1-3/16"
465-1814	17/64"	465-1870	11/64"	465-1909	25/32"	465-1969	19/32"	465-2008	1-13/64"
465-1815	9/32"	465-1871	3/16"	465-1910	51/64"	465-1970	39/64"	465-2009	1-7/32"
465-1816	19/64"	465-1872	13/64"	465-1911	13/16"	465-1971	5/8"	465-2010	1-15/64"
465-1817	5/16"	465-1873	7/32"	465-1912	53/64"	465-1972	41/64"	465-2011	1-1/4"
465-1818	21/64"	465-1874	15/64"	465-1913	27/32"	465-1973	21/32"	465-2012	1-17/64"
465-1819	11/32"	465-1875	1/4"	465-1914	55/64"	465-1974	43/64"	465-2013	1-9/32"
465-1820	23/64"	465-1876	17/64"	465-1915	7/8"	465-1975	11/16"	465-2014	1-19/64"
465-1821	3/8"	465-1877	9/32"	465-1916	57/64"	465-1976	45/64"	465-2015	1-5/16"
465-1822	25/64"	465-1878	19/64"	465-1917	29/32"	465-1977	23/32"	465-2016	1-21/64"
465-1823	13/32"	465-1879	5/16"	465-1918	59/64"	465-1978	47/64"	465-2017	1-11/32"
465-1824	27/64"	465-1880	21/64"	465-1919	15/16"	465-1979	3/4"	465-2018	1-23/64"
465-1825	7/16"	465-1881	11/32"	465-1920	61/62"	465-1980	49/64"	465-2019	1-3/8"
465-1826	29/64"	465-1882	23/64"	465-1921	31/32"	465-1981	25/32"	465-2020	1-25/64"
465-1827	15/32"	465-1883	3/8"	465-1922	63/64"	465-1982	51/64"	465-2021	1-13/32"
465-1828	31/64"	465-1884	25/64"	465-1923	1"	465-1983	13/16"	465-2022	1-27/64"
465-1829	1/2"	465-1885	13/32"	TG150		465-1984	53/64"	465-2023	1-7/16"
465-1830	33/64"	465-1886	27/64"	Order No.	Size	465-1985	27/32"	465-2024	1-29/64"
465-1831	17/32"	465-1887	7/16"	465-1947	1/4"	465-1986	55/64"	465-2025	1-15/32"
465-1832	35/64"	465-1888	29/64"	465-1948	17/64"	465-1987	7/8"	465-2026	1-31/64"
465-1833	9/16"	465-1889	15/32"	465-1949	9/32"	465-1988	57/64"	465-2027	1-1/2"
465-1834	37/64"	465-1890	31/64"	465-1950	19/64"	465-1989	29/32"	465-2028	1-33/64"
465-1835	19/32"	465-1891	1/2"	465-1951	5/16"	465-1990	59/64"	465-2029	1-17/32"
465-1836	39/64"	465-1892	33/64"	465-1952	21/64"	465-1991	15/16"	465-2030	1-35/64"
465-1837	5/8"	465-1893	17/32"	465-1953	11/32"	465-1992	61/62"	465-2031	1-9/16"
465-1838	41/64"	465-1894	35/64"	465-1954	23/64"	465-1993	31/32"	d	d
465-1839	21/32"	465-1895	9/16"	465-1955	3/8"	465-1994	63/64"	d	d



TG SPRING COLLETS

TG COLLET	D (mm)	L (mm)
TG75	27	46.9
TG100	35	60.5
TG150	50.8	76.2



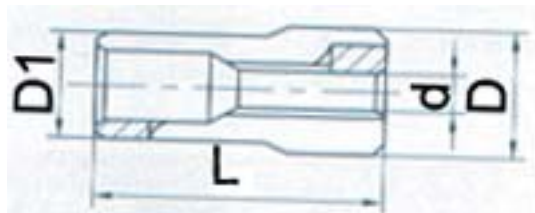
TG75		TG75		TG100		TG150		TG150	
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-1848	2MM	465-1865	19MM	465-1937	16MM	465-2037	11MM	465-2054	28MM
465-1849	3MM	465-1866	20MM	465-1938	17MM	465-2038	12MM	465-2055	29MM
465-1850	4MM	TG100		465-1939	18MM	465-2039	13MM	465-2056	30MM
465-1851	5MM	Order No.	Size	465-1940	19MM	465-2040	14MM	465-2057	31MM
465-1852	6MM	465-1924	3MM	465-1941	20MM	465-2041	15MM	465-2058	32MM
465-1853	7MM	465-1925	4MM	465-1942	21MM	465-2042	16MM	465-2059	33MM
465-1854	8MM	465-1926	5MM	465-1943	22MM	465-2043	17MM	465-2060	34MM
465-1855	9MM	465-1927	6MM	465-1944	23MM	465-2044	18MM	465-2061	35MM
465-1856	10MM	465-1928	7MM	465-1945	24MM	465-2045	19MM	465-2062	36MM
465-1857	11MM	465-1929	8MM	465-1946	25MM	465-2046	20MM	465-2063	37MM
465-1858	12MM	465-1930	9MM	TG150		465-2047	21MM	465-2064	38MM
465-1859	13MM	465-1931	10MM	Order No.	Size	465-2048	22MM	465-2065	39MM
465-1860	14MM	465-1932	11MM	465-2032	6MM	465-2049	23MM	465-2066	40MM
465-1861	15MM	465-1933	12MM	465-2033	7MM	465-2050	24MM		
465-1862	16MM	465-1934	13MM	465-2034	8MM	465-2051	25MM		
465-1863	17MM	465-1935	14MM	465-2035	9MM	465-2052	26MM		
465-1864	18MM	465-1936	15MM	465-2036	10MM	465-2053	27MM		

SHARPENER COLLETS



Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-2601	1/8"	465-2607	1/2"	465-2613	1-1/8"	465-2617	6mm	465-2623	16mm
465-2602	3/16"	465-2608	9/16"			465-2618	8mm	465-2624	18mm
465-2603	1/4"	465-2609	5/8"	METRIC		465-2619	10mm	465-2625	20mm
465-2604	5/16"	465-2610	3/4"	465-2614	3mm	465-2620	12mm	465-2626	25mm
465-2605	3/8"	465-2611	7/8"	465-2615	4mm	465-2621	14mm	465-2627	25mm
465-2606	7/16"	465-2612	1"	465-2616	5mm	465-2622	15mm		

DA COLLETS



Collet	D(mm)	L(mm)	D1(mm)
DA10	19.5	36.5	16.5
DA18	26.045	41.7	22.08
DA20	13.6	30.4	11.43
DA30	905	25.4	7.62

DA100		DA100		DA180		DA180		DA200	
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-2070	1/32"	465-2096	7/16"	465-2147	9/32"	465-2173	11/16"	465-2236	5/16"
465-2071	3/64"	465-2097	29/64"	465-2148	19/64"	465-2174	45/64"	465-2237	21/64"
465-2072	1/16"	465-2098	15/32"	465-2149	5/16"	465-2175	23/32"	465-2238	11/32"
465-2073	5/64"	465-2099	31/64"	465-2150	21/64"	465-2176	47/64"	465-2239	23/64"
465-2074	3/32"	465-2100	1/2"	465-2151	11/32"	465-2177	3/4"	465-2240	3/8"
465-2075	7/64"	465-2101	33/64"	465-2152	23/64"	465-2178	25/32"	465-2241	25/64"
465-2076	1/8"	465-2102	17/32"	465-2153	3/8"	DA200		465-2261	1/32"
465-2077	9/64"	465-2103	35/64"	465-2154	25/64"	Order No.	Size	DA130	
465-2078	5/32"	DA180		465-2155	13/32"	465-2218	1/32"	Order No.	Size
465-2079	11/64"	Order No.	Size	465-2156	27/64"	465-2219	3/64"	465-2262	3/64"
465-2080	3/16"	465-2131	1/32"	465-2157	7/16"	465-2220	1/16"	465-2263	1/16"
465-2081	13/64"	465-2132	3/64"	465-2158	29/64"	465-2221	5/64"	465-2264	5/64"
465-2082	7/32"	465-2133	1/16"	465-2159	15/32"	465-2222	3/32"	465-2265	3/32"
465-2083	15/64"	465-2134	5/64"	465-2160	31/64"	465-2223	7/64"	465-2266	7/64"
465-2084	1/4"	465-2135	3/32"	465-2161	1/2"	465-2224	1/8"	465-2267	1/8"
465-2085	17/64"	465-2136	7/64"	465-2162	33/64"	465-2225	9/64"	465-2268	9/64"
465-2086	9/32"	465-2137	1/8"	465-2163	17/32"	465-2226	5/32"	465-2269	5/32"
465-2087	19/64"	465-2138	9/64"	465-2164	35/64"	465-2227	11/64"	465-2270	11/64"
465-2088	5/16"	465-2139	5/32"	465-2165	9/16"	465-2228	3/16"	465-2271	3/16"
465-2089	21/64"	465-2140	11/64"	465-2166	37/64"	465-2229	13/64"	465-2272	13/64"
465-2090	11/32"	465-2141	3/16"	465-2167	19/32"	465-2230	7/32"	465-2273	7/32"
465-2091	23/64"	465-2142	13/64"	465-2168	39/64"	465-2231	15/64"	465-2274	15/64"
465-2092	3/8"	465-2143	7/32"	465-2169	5/8"	465-2232	1/4"		
465-2093	25/64"	465-2144	15/64"	465-2170	41/64"	465-2233	17/64"		
465-2094	13/32"	465-2145	1/4"	465-2171	21/32"	465-2234	9/32"		
465-2095	27/64"	465-2146	17/64"	465-2172	43/64"	465-2235	19/64"		

R8 EMERGENCY COLLETS

Features:

Face & Pilot Hole are soft. Can be drilled, bored or machine with a H.S.S Tool Bit to your requirements.



Order No.	Made of:
466-3001	Steel
466-3002	Brass
466-3003	Nylon

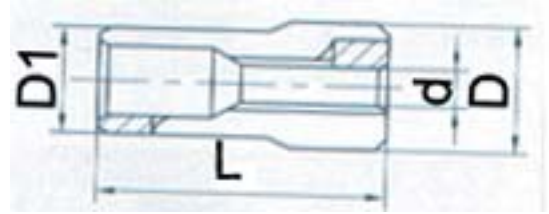
R8 COLLET RACK

- *Holds 12 R8 collets.
- *Closed cover to prevent collet from chips.



Order No. 466-4003

DA COLLETS



Collet	D(mm)	L(mm)	D1(mm)
DA10	19.5	36.5	16.5
DA18	26.045	41.7	22.08
DA20	13.6	30.4	11.43
DA30	905	25.4	7.62

DA100		DA100		DA180		DA180		DA200	
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-2104	1mm	465-2125	11.5mm	465-2192	7.5mm	465-2213	18mm	465-2256	8mm
465-2105	1.5mm	465-2126	12mm	465-2193	8mm	465-2214	18.5mm	465-2257	8.5mm
465-2106	2mm	465-2127	12.5mm	465-2194	8.5mm	465-2215	19mm	465-2258	9mm
465-2107	2.5mm	465-2128	13mm	465-2195	9mm	465-2216	19.5mm	465-2259	9.5mm
465-2108	3mm	465-2129	13.5mm	465-2196	9.5mm	465-2217	20mm	465-2260	10mm
465-2109	3.5mm	465-2130	14mm	465-2197	10mm	DA200		DA300	
465-2110	4mm	DA180		465-2198	10.5mm	Order No.	Size	Order No.	Size
465-2111	4.5mm	Order No.	Size	465-2199	11mm	465-2242	1mm	465-2720	1mm
465-2112	5mm	465-2179	1mm	465-2200	11.5mm	465-2243	1.5mm	465-2721	1.5mm
465-2113	5.5mm	465-2180	1.5mm	465-2201	12mm	465-2244	2mm	465-2722	2mm
465-2114	6mm	465-2181	2mm	465-2202	12.5mm	465-2245	2.5mm	465-2723	2.5mm
465-2115	6.5mm	465-2182	2.5mm	465-2203	13mm	465-2246	3mm	465-2724	3mm
465-2116	7mm	465-2183	3mm	465-2204	13.5mm	465-2247	3.5mm	465-2725	3.5mm
465-2117	7.5mm	465-2184	3.5mm	465-2205	14mm	465-2248	4mm	465-2726	4mm
465-2118	8mm	465-2185	4mm	465-2206	14.5mm	465-2249	4.5mm	465-2727	4.5mm
465-2119	8.5mm	465-2186	4.5mm	465-2207	15mm	465-2250	5mm	465-2728	5mm
465-2120	9mm	465-2187	5mm	465-2208	15.5mm	465-2251	5.5mm	465-2729	5.5mm
465-2121	9.5mm	465-2188	5.5mm	465-2209	16mm	465-2252	6mm	465-2730	6mm
465-2122	10mm	465-2189	6mm	465-2210	16.5mm	465-2253	6.5mm		
465-2123	10.5mm	465-2190	6.5mm	465-2211	17mm	465-2254	7mm		
465-2124	11mm	465-2191	7mm	465-2212	17.5mm	465-2255	7.5mm		

R8 COLLET TRAY

For Bridgeport type mills



Order No. 466-4001

R8 COLLET RACK

- *Holds 48 R8 collets.
- *Can be used to store arbors, end mill adaptors, shend end mill Arbors.
- *12"-1/2"Hx15-1/2"Wx8" Deep.

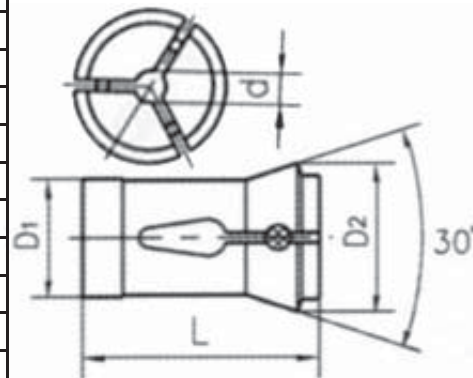


Order No. 466-4002

DIN6343 ROUND CLAMPING COLLETS



Model	D1 (mm)	D2 (mm)	L (mm)	d max	Wt(kg)
DIN6343-F17.5	17.5	22	51	13	0.05
DIN6343-F22	22	30	55	16	0.09
DIN6343-F27	27	38	72.7	22	0.1
DIN6343-F28	28	38	70	22	0.12
DIN6343-F32	32	45	75	26	0.27
DIN6343-F35	35	48	80	30	0.35
DIN6343-F42	42	55	94	36	0.49
DIN6343-F48	48	60	94	42	0.57
DIN6343-F56	56	68	94	50	0.65
DIN6343-F66	66	84	110	60	1.16



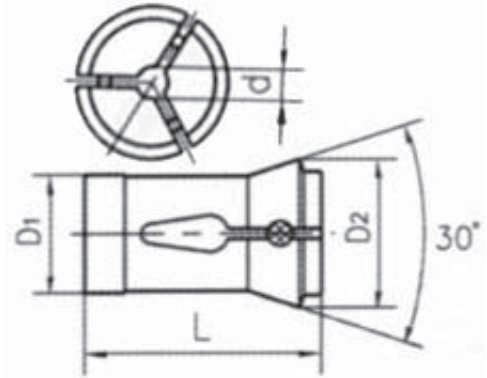
DIN6343-F17.5		DIN6343-F27		DIN6343-F28		DIN6343-F35		DIN6343-F42	
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-3001	2mm	465-3068	5mm	465-3131	16mm	465-3227	4mm	465-3299	8mm
465-3002	3mm	465-3069	6mm	465-3132	17mm	465-3228	5mm	465-3300	9mm
465-3003	4mm	465-3070	7mm	465-3133	18mm	465-3229	6mm	465-3301	10mm
465-3004	5mm	465-3071	8mm	465-3134	19mm	465-3230	7mm	465-3302	11mm
465-3005	6mm	465-3072	9mm	465-3135	20mm	465-3231	8mm	465-3303	12mm
465-3006	7mm	465-3073	10mm	465-3136	21mm	465-3232	9mm	465-3304	13mm
465-3007	8mm	465-3074	11mm	465-3137	22mm	465-3233	10mm	465-3305	14mm
465-3008	9mm	465-3075	12mm	DIN6343-F32		465-3234	11mm	465-3306	15mm
465-3009	10mm	465-3076	13mm	Order No.	Size	465-3235	12mm	465-3307	16mm
465-3010	11mm	465-3077	14mm	465-3170	4mm	465-3236	13mm	465-3308	17mm
465-3011	12mm	465-3078	15mm	465-3171	5mm	465-3237	14mm	465-3309	18mm
465-3012	13mm	465-3079	16mm	465-3172	6mm	465-3238	15mm	465-3310	19mm
DIN6343-F22		465-3080	17mm	465-3173	7mm	465-3239	16mm	465-3311	20mm
Order No.	Size	465-3081	18mm	465-3174	8mm	465-3240	17mm	465-3312	21mm
465-3029	2mm	465-3082	19mm	465-3175	9mm	465-3241	18mm	465-3313	22mm
465-3030	3mm	465-3083	20mm	465-3176	10mm	465-3242	19mm	465-3314	23mm
465-3031	4mm	465-3084	21mm	465-3177	11mm	465-3243	20mm	465-3315	24mm
465-3032	5mm	465-3085	22mm	465-3178	12mm	465-3244	21mm	465-3316	25mm
465-3033	6mm	DIN6343-F28		465-3179	13mm	465-3245	22mm	465-3317	26mm
465-3034	7mm	Order No.	Size	465-3180	14mm	465-3246	23mm	465-3318	27mm
465-3035	8mm	465-3118	3mm	465-3181	15mm	465-3247	24mm	465-3319	28mm
465-3036	9mm	465-3119	4mm	465-3182	16mm	465-3248	25mm	465-3320	29mm
465-3037	10mm	465-3120	5mm	465-3183	17mm	465-3249	26mm	465-3321	30mm
465-3038	11mm	465-3121	6mm	465-3184	18mm	465-3250	27mm	465-3322	31mm
465-3039	12mm	465-3122	7mm	465-3185	19mm	465-3251	28mm	465-3323	32mm
465-3040	13mm	465-3123	8mm	465-3186	20mm	465-3252	29mm	465-3324	33mm
465-3041	14mm	465-3124	9mm	465-3187	21mm	465-3253	30mm	465-3325	34mm
465-3042	15mm	465-3125	10mm	465-3188	22mm	DIN6343-F42		465-3326	35mm
465-3043	16mm	465-3126	11mm	465-3189	23mm	Order No.	Size	465-3327	36mm
DIN6343-F27		465-3127	12mm	465-3190	24mm	465-3295	4mm		
Order No.	Size	465-3128	13mm	465-3191	25mm	465-3296	5mm		
465-3066	3mm	465-3129	14mm	465-3192	26mm	465-3297	6mm		
465-3067	4mm	465-3130	15mm			465-3298	7mm		

DIN6343 ROUND CLAMPING COLLETS

- * Elastic steel 65Mn
- * Clamping part HRC55-60, elastick part HRC40-45
- * Applicable to automatic lathes, turrent lates etc.



Model	D1 (mm)	D2 (mm)	L (mm)	d max	Wt(kg)
DIN6343-F17.5	17.5	22	51	13	0.05
DIN6343-F22	22	30	55	16	0.09
DIN6343-F27	27	38	72.7	22	0.1
DIN6343-F28	28	38	70	22	0.12
DIN6343-F32	32	45	75	26	0.27
DIN6343-F35	35	48	80	30	0.35
DIN6343-F42	42	55	94	36	0.49
DIN6343-F48	48	60	94	42	0.57
DIN6343-F56	56	68	94	50	0.65
DIN6343-F66	66	84	110	60	1.16

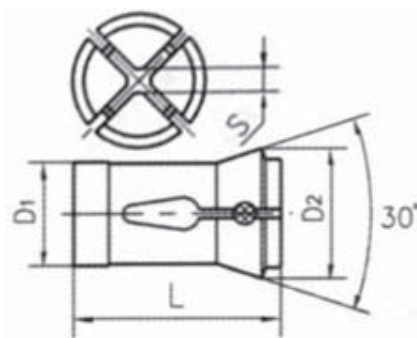


DIN6343-F48		DIN6343-F48		DIN6343-F56		DIN6343-F60		DIN6343-F60	
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-3377	4mm	465-3405	32mm	465-3490	23mm	465-3581	10mm	465-3607	36mm
465-3378	5mm	465-3406	33mm	465-3491	24mm	465-3582	11mm	465-3608	37mm
465-3379	6mm	465-3407	34mm	465-3492	25mm	465-3583	12mm	465-3609	38mm
465-3380	7mm	465-3408	35mm	465-3493	26mm	465-3584	13mm	465-3610	39mm
465-3381	8mm	465-3409	36mm	465-3494	27mm	465-3585	14mm	465-3611	40mm
465-3382	9mm	465-3410	37mm	465-3495	28mm	465-3586	15mm	465-3612	41mm
465-3383	10mm	465-3411	38mm	465-3496	29mm	465-3587	16mm	465-3613	42mm
465-3384	11mm	465-3412	39mm	465-3497	30mm	465-3588	17mm	465-3614	43mm
465-3385	12mm	465-3413	40mm	465-3498	31mm	465-3589	18mm	465-3615	44mm
465-3386	13mm	465-3414	41mm	465-3499	32mm	465-3590	19mm	465-3616	45mm
465-3387	14mm	465-3415	42mm	465-3500	33mm	465-3591	20mm	465-3617	46mm
465-3388	15mm	DIN6343-F56		465-3501	34mm	465-3592	21mm	465-3618	47mm
465-3389	16mm	Order No.	Size	465-3502	35mm	465-3593	22mm	465-3619	48mm
465-3390	17mm	465-3475	8mm	465-3503	36mm	465-3594	23mm	465-3620	49mm
465-3391	18mm	465-3476	9mm	465-3504	37mm	465-3595	24mm	465-3621	50mm
465-3392	19mm	465-3477	10mm	465-3505	38mm	465-3596	25mm	465-3622	51mm
465-3393	20mm	465-3478	11mm	465-3506	39mm	465-3597	26mm	465-3623	52mm
465-3394	21mm	465-3479	12mm	465-3507	40mm	465-3598	27mm	465-3624	53mm
465-3395	22mm	465-3480	13mm	465-3508	41mm	465-3599	28mm	465-3625	54mm
465-3396	23mm	465-3481	14mm	465-3509	42mm	465-3600	29mm	465-3626	55mm
465-3397	24mm	465-3482	15mm	465-3510	43mm	465-3601	30mm	465-3627	56mm
465-3398	25mm	465-3483	16mm	465-3511	44mm	465-3602	31mm	465-3628	57mm
465-3399	26mm	465-3484	17mm	465-3512	45mm	465-3603	32mm	465-3629	58mm
465-3400	27mm	465-3485	18mm	465-3513	46mm	465-3604	33mm	465-3630	59mm
465-3401	28mm	465-3486	19mm	465-3514	47mm	465-3605	34mm	465-3631	60mm
465-3402	29mm	465-3487	20mm	465-3515	48mm	465-3606	35mm		
465-3403	30mm	465-3488	21mm	465-3516	49mm				
465-3404	31mm	465-3489	22mm	465-3517	50mm				

DIN6343 SQUARE CLAMPING COLLETS

- * Elastic steel 65Mn
- * Clamping part HRC55-60, elastick part HRC40-45
- * Applicable to automatic lathes, turrent lates etc.

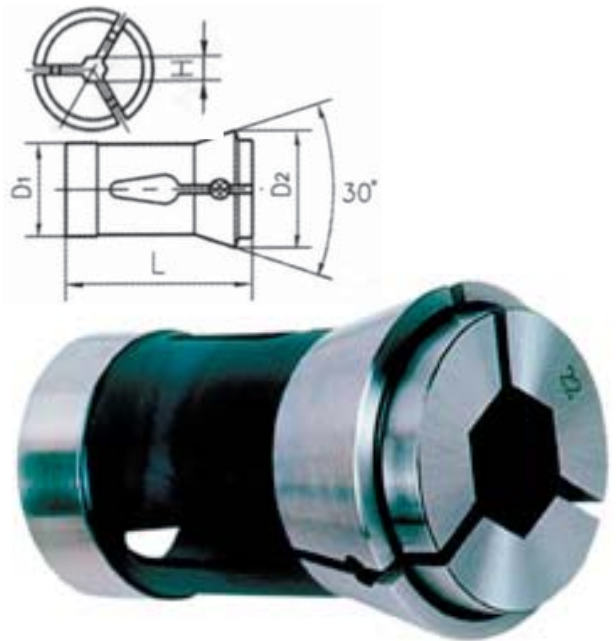
Model	D1 (mm)	D2 (mm)	L (mm)	Smax	Wt(kg)
DIN6343-F17.5	17.5	22	51	8	0.05
DIN6343-F22	22	30	55	11	0.09
DIN6343-F27	27	38	72.7	15	0.1
DIN6343-F28	28	38	70	15	0.12
DIN6343-F32	32	45	75	18	0.27
DIN6343-F35	35	48	80	21	0.35
DIN6343-F42	42	55	94	25	0.49
DIN6343-F48	48	60	94	29	0.57
DIN6343-F56	56	68	94	35	0.65
DIN6343-F66	66	84	110	42	1.16



								DIN6343-F56	
								Order No.	Size
DIN6343-F17.5		DIN6343-F28		DIN6343-F35		DIN6343-F56		465-3632	10mm
Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	465-3633	11mm
465-3013	2mm	465-3138	2mm	465-3328	4mm	465-3518	8mm	465-3634	12mm
465-3014	3mm	465-3139	3mm	465-3329	5mm	465-3519	9mm	465-3635	13mm
465-3015	4mm	465-3140	4mm	465-3330	6mm	465-3520	10mm	465-3636	14mm
465-3016	5mm	465-3141	5mm	465-3331	7mm	465-3521	11mm	465-3637	15mm
465-3017	6mm	465-3142	6mm	465-3332	8mm	465-3522	12mm	465-3638	16mm
465-3018	7mm	465-3143	7mm	465-3333	9mm	465-3523	13mm	465-3639	17mm
465-3019	8mm	465-3193	4mm	465-3334	10mm	465-3524	14mm	465-3640	18mm
DIN6343-F22		465-3194	5mm	465-3335	11mm	465-3525	15mm	465-3641	19mm
Order No.	Size	465-3195	6mm	465-3336	12mm	465-3526	16mm	465-3642	20mm
465-3044	2mm	465-3196	7mm	465-3337	13mm	465-3527	17mm	465-3643	21mm
465-3045	3mm	465-3197	8mm	465-3338	14mm	465-3528	18mm	465-3644	22mm
465-3046	4mm	465-3198	9mm	465-3349	25mm	465-3529	19mm	465-3645	23mm
465-3047	5mm	465-3199	10mm	DIN6343-F48		465-3530	20mm	465-3646	24mm
465-3048	6mm	465-3200	11mm	Order No.	Size	465-3531	21mm	465-3647	25mm
465-3049	7mm	465-3201	12mm	465-3416	4mm	465-3532	22mm	465-3648	26mm
465-3050	8mm	465-3202	13mm	465-3417	5mm	465-3533	23mm	465-3649	27mm
465-3051	9mm	465-3203	14mm	465-3418	6mm	465-3534	24mm	465-3650	28mm
465-3052	10mm	465-3204	15mm	465-3419	7mm	465-3535	25mm	465-3651	29mm
465-3053	11mm	465-3205	16mm	465-3420	8mm	465-3536	26mm	465-3652	30mm
DIN6343-F27		465-3206	17mm	465-3421	9mm	465-3537	27mm	465-3653	31mm
465-3089	5mm	465-3207	18mm	465-3422	10mm	465-3538	28mm	465-3654	32mm
465-3090	6mm	DIN6343-F32		465-3423	11mm	465-3539	29mm	465-3655	33mm
465-3091	7mm	Order No.	Size	465-3424	12mm	465-3540	30mm	465-3656	34mm
465-3092	8mm	465-3254	4mm	465-3425	13mm	465-3541	31mm	465-3657	35mm
465-3093	9mm	465-3255	5mm	465-3426	14mm	465-3542	32mm	465-3658	36mm
465-3094	10mm	465-3266	16mm	465-3427	15mm	465-3543	33mm	465-3659	37mm
465-3095	11mm	465-3267	17mm	465-3428	16mm	465-3544	34mm	465-3660	38mm
465-3096	12mm	465-3268	18mm	465-3429	17mm	465-3545	35mm	465-3661	39mm
465-3097	13mm	465-3269	19mm	465-3430	18mm			465-3662	40mm
465-3098	14mm	465-3270	20mm	465-3431	19mm			465-3663	41mm
465-3099	15mm	465-3271	21mm					465-3664	42mm

DIN6343 HEX CLAMPING COLLETS

- * Elastic steel 65Mn
- * Clamping part HRC55-60, elastick part HRC40-45
- * Applicable to automatic lathes, turrent lates etc.



Model	D1 (mm)	D2 (mm)	L (mm)	Hmax	Wt(kg)
DIN6343-F17.5	17.5	22	51	10	0.05
DIN6343-F22	22	30	55	13	0.09
DIN6343-F27	27	38	72.7	19	0.1
DIN6343-F28	28	38	70	19	0.12
DIN6343-F32	32	45	75	22	0.27
DIN6343-F35	35	48	80	26	0.35
DIN6343-F42	42	55	94	30	0.49
DIN6343-F48	48	60	94	36	0.57
DIN6343-F56	56	68	94	42	0.65
DIN6343-F66	66	84	110	52	1.16

DIN6343-F17.5		DIN6343-F27		DIN6343-F28		DIN6343-F35		DIN6343-F42	
Order NO.	Size	Order NO.	Size	Order NO.	Size	Order NO.	Size	Order NO.	Size
465-3020	2mm	465-3105	7mm	465-3167	17mm	465-3276	8mm	465-3359	13mm
465-3021	3mm	465-3106	8mm	465-3168	18mm	465-3277	9mm	465-3360	14mm
465-3022	4mm	465-3107	9mm	465-3169	19mm	465-3278	10mm	465-3361	15mm
465-3023	5mm	465-3108	10mm	DIN6343-F32		465-3279	11mm	465-3362	16mm
465-3024	6mm	465-3109	11mm	Order NO.	Size	465-3280	12mm	465-3363	17mm
465-3025	7mm	465-3110	12mm	465-3208	4mm	465-3281	13mm	465-3364	18mm
465-3026	8mm	465-3111	13mm	465-3209	5mm	465-3282	14mm	465-3365	19mm
465-3027	9mm	465-3112	14mm	465-3210	6mm	465-3283	15mm	465-3366	20mm
465-3028	10mm	465-3113	15mm	465-3211	7mm	465-3284	16mm	465-3367	21mm
DIN6343-F22		465-3114	16mm	465-3212	8mm	465-3285	17mm	465-3368	22mm
Order NO.	Size	465-3115	17mm	465-3213	9mm	465-3286	18mm	465-3369	23mm
465-3054	2mm	465-3116	18mm	465-3214	10mm	465-3287	19mm	465-3370	24mm
465-3055	3mm	465-3117	19mm	465-3215	11mm	465-3288	20mm	465-3371	25mm
465-3056	4mm	DIN6343-F28		465-3216	12mm	465-3289	21mm	465-3372	26mm
465-3057	5mm	Order NO.	Size	465-3217	13mm	465-3290	22mm	465-3373	27mm
465-3058	6mm	465-3152	2mm	465-3218	14mm	465-3291	23mm	465-3374	28mm
465-3059	7mm	465-3153	3mm	465-3219	15mm	465-3292	24mm	465-3375	29mm
465-3060	8mm	465-3154	4mm	465-3220	16mm	465-3293	25mm	465-3376	30mm
465-3061	9mm	465-3155	5mm	465-3221	17mm	465-3294	26mm	DIN6343-F48	
465-3062	10mm	465-3156	6mm	465-3222	18mm	DIN6343-F42		Order NO.	Size
465-3063	11mm	465-3157	7mm	465-3223	19mm	Order NO.	Size	465-3442	4mm
465-3064	12mm	465-3158	8mm	465-3224	20mm	465-3350	4mm	465-3443	5mm
465-3065	13mm	465-3159	9mm	465-3225	21mm	465-3351	5mm	465-3444	6mm
DIN6343-F27		465-3160	10mm	465-3226	22mm	465-3352	6mm	465-3445	7mm
Order NO.	Size	465-3161	11mm	DIN6343-F35		465-3353	7mm	465-3446	8mm
465-3100	2mm	465-3162	12mm	Order NO.	Size	465-3354	8mm	465-3447	9mm
465-3101	3mm	465-3163	13mm	465-3272	4mm	465-3355	9mm	465-3448	10mm
465-3102	4mm	465-3164	14mm	465-3273	5mm	465-3356	10mm	465-3449	11mm
465-3103	5mm	465-3165	15mm	465-3274	6mm	465-3357	11mm	465-3450	12mm
465-3104	6mm	465-3166	16mm	465-3275	7mm	465-3358	12mm	465-3451	13mm

DIN6343 HEX CLAMPING COLLETS

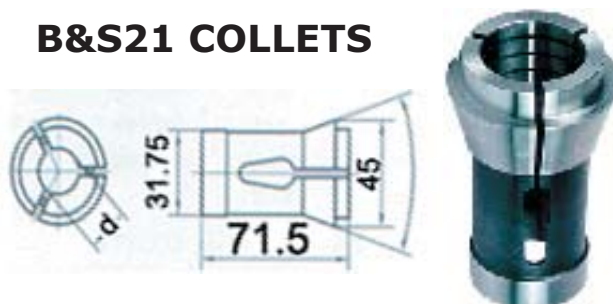
- * Elastic steel 65Mn
- * Clamping part HRC55-60, elastick part HRC40-45
- * Applicable to automatic lathes, turrent lates etc.



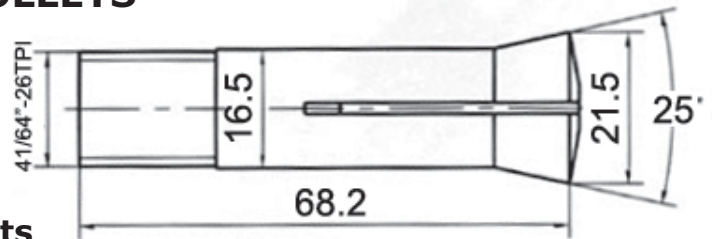
Model	D1 (mm)	D2 (mm)	L (mm)	Hmax	Wt(kg)
DIN6343-F17.5	17.5	22	51	10	0.05
DIN6343-F22	22	30	55	13	0.09
DIN6343-F27	27	38	72.7	19	0.1
DIN6343-F28	28	38	70	19	0.12
DIN6343-F32	32	45	75	22	0.27
DIN6343-F35	35	48	80	26	0.35
DIN6343-F42	42	55	94	30	0.49
DIN6343-F48	48	60	94	36	0.57
DIN6343-F56	56	68	94	42	0.65
DIN6343-F66	66	84	110	52	1.16

DIN6343-F48		DIN6343-F48		DIN6343-F56		DIN6343-F66		DIN6343-F66	
Order NO.	Size	Order NO.	Size	Order NO.	Size	Order NO.	Size	Order NO.	Size
465-3452	14mm	465-3473	35mm	465-3563	25mm	465-3666	11mm	465-3687	32mm
465-3453	15mm	465-3474	36mm	465-3564	26mm	465-3667	12mm	465-3688	33mm
465-3454	16mm	DIN6343-F56		465-3565	27mm	465-3668	13mm	465-3689	34mm
465-3455	17mm	Order NO.	Size	465-3566	28mm	465-3669	14mm	465-3690	35mm
465-3456	18mm	465-3546	8mm	465-3567	29mm	465-3670	15mm	465-3691	36mm
465-3457	19mm	465-3547	9mm	465-3568	30mm	465-3671	16mm	465-3692	37mm
465-3458	20mm	465-3548	10mm	465-3569	31mm	465-3672	17mm	465-3693	38mm
465-3459	21mm	465-3549	11mm	465-3570	32mm	465-3673	18mm	465-3694	39mm
465-3460	22mm	465-3550	12mm	465-3571	33mm	465-3674	19mm	465-3695	40mm
465-3461	23mm	465-3551	13mm	465-3572	34mm	465-3675	20mm	465-3696	41mm
465-3462	24mm	465-3552	14mm	465-3573	35mm	465-3676	21mm	465-3697	42mm
465-3463	25mm	465-3553	15mm	465-3574	36mm	465-3677	22mm	465-3698	43mm
465-3464	26mm	465-3554	16mm	465-3575	37mm	465-3678	23mm	465-3699	44mm
465-3465	27mm	465-3555	17mm	465-3576	38mm	465-3679	24mm	465-3700	45mm
465-3466	28mm	465-3556	18mm	465-3577	39mm	465-3680	25mm	465-3701	46mm
465-3467	29mm	465-3557	19mm	465-3578	40mm	465-3681	26mm	465-3702	47mm
465-3468	30mm	465-3558	20mm	465-3579	41mm	465-3682	27mm	465-3703	48mm
465-3469	31mm	465-3559	21mm	465-3580	42mm	465-3683	28mm	465-3704	49mm
465-3470	32mm	465-3560	22mm	DIN6343-F66		465-3684	29mm	465-3705	50mm
465-3471	33mm	465-3561	23mm	Order NO.	Size	465-3685	30mm	465-3706	51mm
465-3472	34mm	465-3562	24mm	465-3665	10mm	465-3686	31mm	465-3707	52mm

Order No.	D (mm)	Order No.	D (mm)	Order No.	D (mm)
465-2585	1/8"	465-2590	7/16"	465-2595	3/4"
465-2586	3/16"	465-2591	1/2"	465-2596	13/16"
465-2587	1/4"	465-2592	9/16"	465-2597	7/8"
465-2588	5/16"	465-2593	5/8"	465-2598	15/16"
465-2589	3/8"	465-2594	11/16"	465-2599	1"



3C COLLETS



3C Round Collets

Order NO.	Hole Size	Order NO.	Hole Size	Order NO.	Hole Size	Order NO.	Hole Size	Order NO.	Hole Size
465-2470	1/16"	465-2481	15/64"	465-2492	13/32"	465-2501	2MM	465-2512	7.5MM
465-2471	5/64"	465-2482	1/4"	465-2493	27/64"	465-2502	2.5MM	465-2513	8MM
465-2472	3/32"	465-2483	17/64"	465-2494	7/16"	465-2503	3MM	465-2514	8.5MM
465-2473	7/64"	465-2484	9/32"	465-2495	29/64"	465-2504	3.5MM	465-2515	9MM
465-2474	1/8"	465-2485	19/64"	465-2496	15/32"	465-2505	4MM	465-2516	9.5MM
465-2475	9/64"	465-2486	5/16"	465-2497	31/64"	465-2506	4.5MM	465-2517	10MM
465-2476	5/32"	465-2487	21/64"	465-2498	1/2"	465-2507	5MM	465-2518	10.5MM
465-2477	11/64"	465-2488	11/32"	Metric		465-2508	5.5MM	465-2519	11MM
465-2478	3/16"	465-2489	23/64"	Order NO.	Hole Size	465-2509	6MM	465-2520	11.5MM
465-2479	13/64"	465-2490	3/8"	465-2499	1MM	465-2510	6.5MM	465-2521	12MM
465-2480	7/32"	465-2491	25/64"	465-2500	1.5MM	465-2511	7MM	465-2522	12.5MM

3C HEX Collets

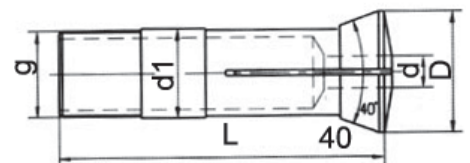
Order No.	Hole Size	Order No.	Hole Size	Order No.	Hole Size	Order No.	Hole Size	Order No.	Hole Size
1526-465	1/8"	465-1533	15/64"	465-1540	11/32"	465-1556	3.5MM	465-1563	7MM
1527-465	9/64"	465-1534	1/4"	465-1541	23/64"	465-1557	4MM	465-1564	7.5MM
1528-465	5/32"	465-1535	17/64"	465-1542	3/8"	465-1558	4.5MM	465-1565	8MM
1529-465	11/64"	465-1536	9/32"	465-1543	25/64"	465-1559	5MM	465-1566	8.5MM
1530-465	3/16"	465-1537	19/64"	465-1544	13/32"	465-1560	5.5MM	465-1567	9MM
1531-465	13/64"	465-1538	5/16"	Metric		465-1561	6MM	465-1568	9.5MM
1532-465	7/32"	465-1539	21/64"	465-1555	3MM	465-1562	6.5MM	465-1569	10MM

3C SQUARE Collets

Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size	Order No.	Size
465-1616	1/8"	465-1621	13/64"	465-1626	9/32"	465-1636	3.5MM	465-1641	6MM
465-1617	9/64"	465-1622	7/32"	465-1627	19/64"	465-1637	4MM	465-1642	6.5MM
465-1618	5/32"	465-1623	15/64"	Metric		465-1638	4.5MM	465-1643	7MM
465-1619	11/64"	465-1624	1/4"	465-1635	3MM	465-1639	5MM	465-1644	7.5MM
465-1620	3/16"	465-1625	17/64"	465-1635	3MM	465-1640	5.5MM	465-1645	10MM

DIN6341 COLLETS

Order No.	d1	D(mm)	L(mm)	dmax (mm)	g	Wt(kg)
465-2630	8	12	45	5	M8x0.75	0.06
465-2631	10	15	52	6	Tr10x1	0.09
465-2632	12	18	60	8	Tr12x1	0.11
465-2633	16	24	70	11	Tr16x1.5	0.12
465-2634	20	28	80	15	Tr20x1.5	0.15
465-2635	23	32	90	18	Tr23x1.5	0.21
465-2636	28	38	100	22	Tr28x1.5	0.23
465-2637	32	45	110	27	Tr32x1.5	0.27
465-2638	45	60	140	36	Tr45x2	0.32





3AT COLLETS

- * Alloy elastic steel
- * Hardened to HRC55-60 clamping part and HRC40-50 elastic body.
- * Precision ground

3AT ROUND COLLETS

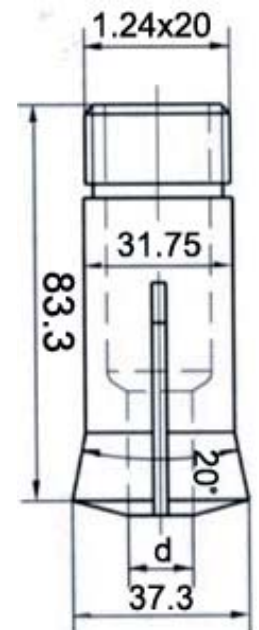
Order NO.	Size	Order NO.	Size	Order NO.	Size	Order NO.	Size	Order NO.	Size
465-2360	3/64"	465-2371	7/32"	465-2382	25/64"	465-2392	2MM	465-2403	7.5MM
465-2361	1/16"	465-2372	15/64"	465-2383	13/32"	465-2393	2.5MM	465-2404	8MM
465-2362	5/64"	465-2373	1/4"	465-2384	27/64"	465-2394	3MM	465-2405	8.5MM
465-2363	3/32"	465-2374	17/64"	465-2385	7/16"	465-2395	3.5MM	465-2406	9MM
465-2364	7/64"	465-2375	9/32"	465-2386	29/64"	465-2396	4MM	465-2407	9.5MM
465-2365	1/8"	465-2376	19/64"	465-2387	15/32"	465-2397	4.5MM	465-2408	10MM
465-2366	9/64"	465-2377	5/16"	465-2388	31/64"	465-2398	5MM	465-2409	10.5MM
465-2367	5/32"	465-2378	21/64"	465-2389	1/2"	465-2399	5.5MM	465-2410	11MM
465-2368	11/64"	465-2379	11/32"	Metric		465-2400	6MM	465-2411	11.5MM
465-2369	3/16"	465-2380	23/64"	465-2390	1MM	465-2401	6.5MM	465-2412	12MM
465-2370	13/64"	465-2381	3/8"	465-2391	1.5MM	465-2402	7MM	465-2413	12.5MM

3AT HEX COLLETS

Order No.	Size	Order No.	Size
465-2433	1/8"	465-2443	3MM
465-2434	5/32"	465-2444	4MM
465-2435	3/16"	465-2445	5MM
465-2436	7/32"	465-2446	6MM
465-2437	1/4"	465-2447	7MM
465-2438	9/32"	465-2448	8MM
465-2439	5/16"	465-2449	9MM
465-2440	11/32"	465-2450	10MM
465-2441	3/8"		
465-2442	13/32"		

3AT SQUARE COLLETS

Order No.	Size	Order No.	Size
465-2420	1/8"	465-2427	3MM
465-2421	5/32"	465-2428	4MM
465-2422	3/16"	465-2429	5MM
465-2423	7/32"	465-2430	6MM
465-2424	1/4"	465-2431	7MM
465-2425	9/32"	465-2432	8MM
465-2426	5/16"		

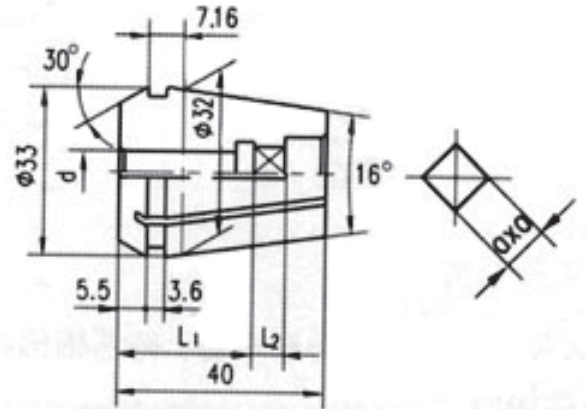


5ST COLLETS

Order NO.	Size	Order NO.	Size	Order NO.	Size	Order NO.	Size
465-2280	1/32"	465-2298	5/16"	465-2316	19/32"	465-2334	7/8"
465-2281	3/64"	465-2299	21/64"	465-2317	39/64"	465-2335	57/64"
465-2282	1/16"	465-2300	11/32"	465-2318	5/8"	465-2336	29/32"
465-2283	5/64"	465-2301	23/64"	465-2319	41/64"	465-2337	59/64"
465-2284	3/32"	465-2302	3/8"	465-2320	21/32"	465-2338	15/16"
465-2285	7/64"	465-2303	25/64"	465-2321	43/64"	465-2339	61/62"
465-2286	1/8"	465-2304	13/32"	465-2322	11/16"	465-2340	31/32"
465-2287	9/64"	465-2305	27/64"	465-2323	45/64"	465-2341	63/64"
465-2288	5/32"	465-2306	7/16"	465-2324	23/32"	465-2342	1"
465-2289	11/64"	465-2307	29/64"	465-2325	47/64"	465-2343	1-1/64"
465-2290	3/16"	465-2308	15/32"	465-2326	3/4"	465-2344	1-1/32"
465-2291	13/64"	465-2309	31/64"	465-2327	49/64"	465-2345	1-3/64"
465-2292	7/32"	465-2310	1/2"	465-2328	25/32"	465-2346	1-1/16"
465-2293	15/64"	465-2311	33/64"	465-2329	51/64"	465-2347	1-5/64"
465-2294	1/4"	465-2312	17/32"	465-2330	13/16"	465-2348	1-3/32"
465-2295	17/64"	465-2313	35/64"	465-2331	53/64"	465-2349	1-7/64"
465-2296	9/32"	465-2314	9/16"	465-2332	27/32"	465-2350	1-1/8"
465-2297	19/64"	465-2315	37/64"	465-2333	55/64"		



ERG TAPPING COLLET



ER16G					ER32G				
Order No.	d	a	L1	L2	Order No.	d	a	L1	L2
468-1100	3.5mm	2.7mm	18mm	3mm	468-1145	3.5mm	2.7mm	18mm	3mm
468-1101	4mm	3mm	18mm	3mm	468-1146	4mm	3mm	18mm	3mm
468-1102	4.5mm	3.4mm	18mm	3mm	468-1147	4.5mm	3.4mm	18mm	3mm
468-1103	5.5mm	4.3mm	18mm	4mm	468-1148	5.5mm	4.3mm	18mm	4mm
468-1104	6mm	4.9mm	18mm	4mm	468-1149	6mm	4.9mm	18mm	4mm
468-1105	7mm	5.5mm	18mm	5mm	468-1151	7mm	5.5mm	18mm	5mm
468-1106	8mm	6.2mm	22mm	6mm	468-1152	8mm	6.2mm	22mm	6mm
ER20G					468-1153	9mm	7mm	22mm	6mm
Order No.	d	a	L1	L2	468-1154	10mm	8mm	25mm	7mm
468-1110	3.5mm	2.7mm	18mm	3mm	468-1155	11mm	9mm	25mm	8mm
468-1111	4mm	3mm	18mm	3mm	468-1156	12mm	9mm	25mm	8mm
468-1112	4.5mm	3.4mm	18mm	3mm	468-1157	14mm	11mm	25mm	10mm
468-1113	5.5mm	4.3mm	18mm	4mm	468-1158	16mm	12mm	25mm	10mm
468-1114	6mm	4.9mm	18mm	4mm	468-1159	18mm	14.5mm	25mm	10mm
468-1116	7mm	5.5mm	18mm	5mm	468-1160	20mm	16mm	28mm	12mm
468-1117	8mm	6.2mm	22mm	6mm	ER40G				
468-1118	9mm	7mm	22mm	6mm	Order No.	d	a	L1	L2
468-1119	10mm	8mm	25mm	7mm	468-1165	3.5mm	2.7mm	18mm	3mm
ER25G					468-1166	4mm	3mm	18mm	3mm
Order No.	d	a	L1	L2	468-1167	4.5mm	3.4mm	18mm	3mm
468-1125	3.5mm	2.7mm	18mm	3mm	468-1168	5.5mm	4.3mm	18mm	4mm
468-1126	4mm	3mm	18mm	3mm	468-1169	6mm	4.9mm	18mm	4mm
468-1127	4.5mm	3.4mm	18mm	3mm	468-1171	7mm	5.5mm	18mm	5mm
468-1128	5.5mm	4.3mm	18mm	4mm	468-1172	8mm	6.2mm	22mm	6mm
468-1129	6mm	4.9mm	18mm	4mm	468-1173	9mm	7mm	22mm	6mm
468-1131	7mm	5.5mm	18mm	5mm	468-1174	10mm	8mm	25mm	7mm
468-1132	8mm	6.2mm	22mm	6mm	468-1175	11mm	9mm	25mm	8mm
468-1133	9mm	7mm	22mm	6mm	468-1176	12mm	9mm	25mm	8mm
468-1134	10mm	8mm	25mm	7mm	468-1177	14mm	11mm	25mm	10mm
468-1135	11mm	9mm	25mm	8mm	468-1178	16mm	12mm	25mm	10mm
468-1136	12mm	9mm	25mm	8mm	468-1179	18mm	14.5mm	25mm	10mm
468-1137	14mm	11mm	25mm	10mm	468-1180	20mm	16mm	28mm	12mm
468-1138	16mm	12mm	25mm	10mm	468-1181	22mm	18mm	32mm	14mm
					468-1182	25mm	20mm	32mm	14mm

QUICK ACTION MILLING CHUCK SET

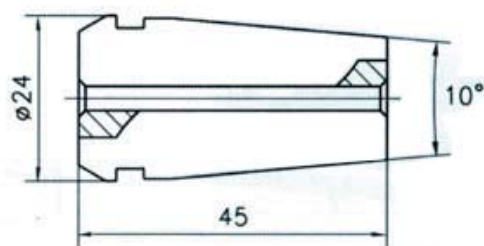
These milling chuck sets are used for work that needs to change tools frequently. Insert the quick action mount into the machine spindle, put the tools into the mount, turn the byunet lock by 90°, it's all done. All the components are hardend and precision ground.

Order No.	468-9000	468-9001
Milling Chuck Shank	ISO40	ISO50
Each Set Includes	1 Quick action mount 1 collet chuck 8 collets : (4, 5, 6, 8, 10, 12, 14, 16mm) 1 MT1 adaptor 1 MT2 adptor 1 MT3 adaptor 1 B12 drill chuck arbor 1 drill chuck 1 face mill arbor 1 spanner	1 Quick action mount 1 collet chuck 9 collets : (6, 8, 10, 12, 14, 16,18,20,25mm) 1 MT2 adptor 1 MT3 adaptor 1 MT4 adaptor 1 B16 drill chuck arbor 1 drill chuck 1 face mill arbor 2 spanner



Q24-16 MILLING CHUCK SET

Order No.	Shank	Each set include	Wt(kg)	
468-9004	R8	One each of 4mm, 5mm, 6mm, 8mm, 10mm, 12mm, 14mm, 16mm collet One collet chuck One clamping nut One spanner	2.0	
468-9005	ISO30		1.93	
468-9006	ISO40		2.5	
468-9007	ISO50		3.9	
468-9008	MT2		1.6	
468-9009	MT3		1.9	
468-9010	MT4		2.1	
468-9011	MT5		3.5	
468-9012	1"		2.3	
468-9013	1-1/4"		2.6	
468-9014	R8		One each of 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 9/16", 5/8" collet One collet chuck One clamping nut One spanner	2.0
468-9015	ISO30			1.93
468-9016	ISO40			2.5
468-9017	ISO50	3.9		
468-9018	MT2	1.6		
468-9019	MT3	1.9		
468-9020	MT4	2.1		
468-9021	MT5	3.5		
468-9022	1"	2.3		
468-9023	1-1/4"	2.6		



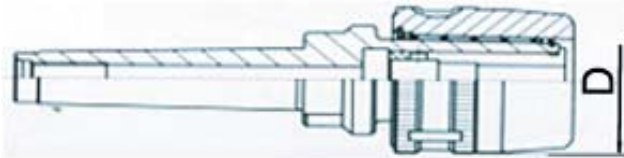
ISO/ISO ADAPTOR (DRAWBAR TYPE)

Order No.	Outside Taper	Inside Taper	D(mm)	D1 (mm)	d (mm)	L(mm0)
435-0695	ISO40	ISO30	44.45	31.75	18	86
435-0696	ISO50	ISO30	69.85	31.75	18	129.5
435-0697	ISO50	ISO40	69.85	44.45	26	129.5



MILLING CHUCK SET

- * Exceptionally great clamping force
- * High concentricity tolerance.
- * Suitable for powerful cutting.



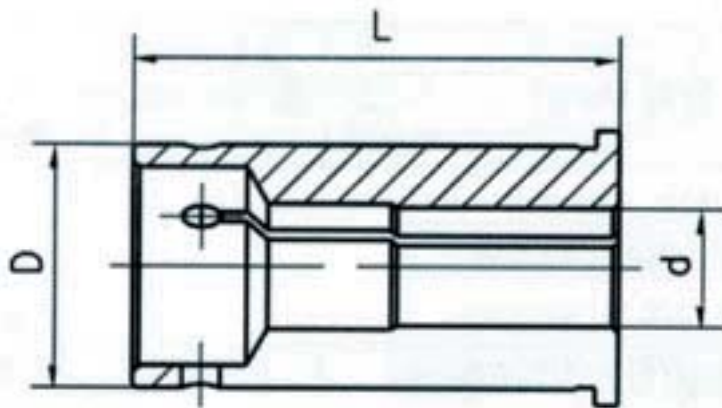
Order No.	Shank Size	Each Set Include	Order No.	Shank Size	Each Set Include
468-9030	R8	One collet chuck (50mm) one spanner One each of 4mm, 5mm, 6mm, 8mm, 10mm, 12mm collet	468-9049	ISO30	1 collet chuck ,1 spanner 1 each of 4mm, 5mm, 6mm, 8mm, 10mm, 12mm,14mm, 16mm, 18mm, 20mm collet
468-9031	MT2		468-9050	ISO40	
468-9032	MT3		468-9051	ISO50	
468-9033	MT4		468-9052	R8	
468-9034	ISO30		468-9053	MT2	
468-9035	ISO40	One collet chuck (56mm) one spanner One each of 4mm, 5mm, 6mm, 8mm, 10mm, 12mm,14mm,16mm collet	468-9054	MT3	One collet chuck (70mm) one spanner One each of 4mm, 5mm, 6mm, 8mm, 10mm, 12mm,14mm, 16mm, 18mm, 20mm, 25mm collet
468-9036	R8		468-9055	MT4	
468-9037	MT2		468-9056	MT5	
468-9038	MT3		468-9057	ISO30	
468-9039	MT4		468-9058	ISO40	
468-9040	MT5	One collet chuck (63mm) one spanner One each of 4mm, 5mm, 6mm, 8mm, 10mm, 12mm,14mm, 16mm, 18mm, 20mm collet	468-9059	ISO50	One collet chuck (70mm) one spanner One each of 6mm, 8mm, 10mm, 12mm,14mm, 16mm, 18mm, 20mm, 25mm ,28mm, 30mm, 32mm collet
468-9041	ISO30		468-9060	R8	
468-9042	ISO40		468-9061	MT2	
468-9043	ISO50		468-9062	MT3	
468-9044	R8		468-9063	MT4	
468-9045	MT2	One milling chuck holder One spanner One each of 1/4", 3/8", 1/2", 5/8" collet	468-9064	MT5	One milling chuck holder One spanner One each of 6mm, 10mm, 12mm, 16mm collet
468-9046	MT3		468-9065	ISO30	
468-9047	MT4		468-9066	ISO40	
468-9048	MT5		468-9067	ISO50	



AUTO-LOCK MILLING CHUCK

Order No.	Shank Dia.	Each set includes	Order No.	Shank Dia.	Each set includes
468-9468	R8	One milling chuck holder One spanner One each of 1/4", 3/8", 1/2", 5/8" collet	468-9477	R8	One milling chuck holder One spanner One each of 6mm, 10mm, 12mm, 16mm collet
468-9469	ISO30		468-9478	ISO30	
468-9470	ISO40		468-9479	ISO40	
468-9472	ISO50		468-9481	ISO50	
468-9473	MT2		468-9482	MT2	
468-9474	MT3		468-9483	MT3	
468-9475	MT4		468-9484	MT4	
468-9476	MT5		468-9485	MT5	

STRAIGHT SHANK COLLETS



Order No.	d	D	L	Order No.	d	D	L	Order No.	d	D	L
465-3740	4mm	16mm	45mm	465-3763	5mm	25mm	60mm	465-3786	12mm	42mm	80mm
465-3741	5mm			465-3764	6mm			465-3787	14mm		
465-3742	6mm			465-3765	8mm			465-3788	16mm		
465-3743	8mm			465-3766	10mm			465-3789	18mm		
465-3744	10mm			465-3767	12mm			465-3790	20mm		
465-3745	12mm			465-3768	14mm			465-3791	25mm		
465-3746	4mm			22mm	50mm			465-3769	16mm		
465-3747	5mm	465-3770	18mm			465-3793	30mm				
465-3748	6mm	465-3771	20mm			465-3794	32mm				
465-3749	8mm	465-3772	4mm			465-3795	6mm				
465-3750	10mm	465-3773	5mm			465-3796	8mm				
465-3751	12mm	465-3774	6mm			465-3797	10mm				
465-3752	14mm	465-3775	8mm			465-3798	12mm				
465-3753	16mm	20mm	50mm	465-3776	10mm	42mm	80mm	465-3799	14mm	40mm	80mm
465-3754	4mm			465-3777	12mm			465-3800	16mm		
465-3755	5mm			465-3778	14mm			465-3801	18mm		
465-3756	6mm			465-3779	16mm			465-3802	20mm		
465-3757	8mm			465-3780	18mm			465-3803	25mm		
465-3758	10mm			465-3781	20mm			465-3804	28mm		
465-3759	12mm			465-3782	25mm			465-3805	30mm		
465-3760	14mm	25mm	60mm	465-3783	6mm	42mm	80mm	465-3806	32mm		
465-3761	16mm			465-3784	8mm						
465-3762	4mm			465-3785	10mm						

POSI-LOCK MILLING CHUCK

Order No.	Shank Dia.	Each set includes	Order No.	Shank Dia.	Each set includes
468-9450	R8	One milling chuck holder One spanner One each of 1/4", 3/8", 1/2", 5/8" collet	468-9459	R8	One milling chuck holder One spanner One each of 6mm, 10mm, 12mm, 16mm collet
468-9451	ISO30		468-9460	ISO30	
468-9452	ISO40		468-9461	ISO40	
468-9454	ISO50		468-9463	ISO50	
468-9455	MT2		468-9464	MT2	
468-9456	MT3		468-9465	MT3	
468-9457	MT4		468-9466	MT4	
468-9458	MT5		468-9467	MT5	



EOCA COLLET MILLING CHUCK



- * 65Mn alloy steel
- * Hardend and ground
- * Packed in fitted plastic case or wooden box.
- * Each set consists of one collet chuck, one spanner and full set of collets.

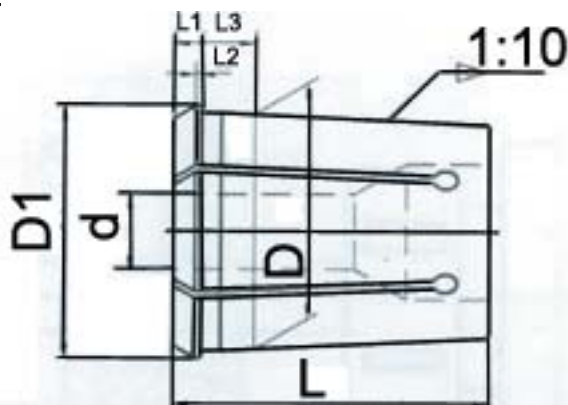
Shank Size	Order No.	Order No.	Order No.	Order No.
	8pcs Metric	8pcs Metric	12pcs Inch	12pcs Inch
R8	468-9500	468-9509	468-9550	468-9559
MT2	468-9501	468-9510	468-9551	468-9560
MT3	468-9502	468-9511	468-9552	468-9561
MT4	468-9503	468-9512	468-9553	468-9562
MT5	468-9504	468-9513	468-9554	468-9563
ISO30	468-9505	468-9514	468-9555	468-9564
ISO40	468-9506	468-9515	468-9556	468-9565
ISO45	468-9507	468-9516	468-9557	468-9566
ISO50	468-9508	468-9517	468-9558	468-9567
Each set includes	One collet chuck One spanner One each of 4, 5, 6, 8, 10, 12, 16, 20mm EOC20A collet	One collet chuck One spanner One each of 3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20mm EOC20A collet	One collet chuck One spanner One each of 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" EOC20A collet	One collet chuck One spanner One each of 3/32", 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16, 3/4" EOC20A collet
Shank Size	Order No.	Order No.	Order No.	Order No.
	8pcs metric	15pcs metric	8pcs inch	15pcs inch
R8	468-9518	468-9529	468-9568	468-9579
ISO30	468-9519	468-9530	468-9569	468-9580
ISO40	468-9520	468-9531	468-9570	468-9581
ISO45	468-9521	468-9532	468-9571	468-9582
ISO50	468-9522	468-9533	468-9572	468-9583
MT2	468-9523	468-9534	468-9573	468-9584
MT3	468-9524	468-9535	468-9574	468-9585
MT4	468-9525	468-9536	468-9575	468-9586
MT5	468-9526	468-9537	468-9576	468-9587
1"	468-9527	468-9538	468-9577	468-9588
1-1/4"	468-9528	468-9539	468-9578	468-9589
Each set includes	One collet chuck One spanner One each of 3mm, 5mm, 8mm, 12mm, 15mm, 18mm, 22mm, 25mm EOC25A collet	One collet chuck One spanner One each of 3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 24, 25mm EOC25A collet	One collet chuck One spanner One each of 1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1" EOC25A collet	One collet chuck One spanner One each of 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1" EOC25A collet

DIN 6388A COLLETS



Specifications of EOCA collets

Collet	D	D1	d	L	L1	L2	L3
EOC6A	10	11.5	1~6	21	3.5	0.5	4
EOC8A	12.65	14.5	1~8	26	4	0.8	4.5
EOC10A	15.15	17.2	1~10	30	4.5	0.8	4.5
EOC12A	17.75	19.8	1~12	34	5	1.1	4.5
EOC16A	22.65	25.5	2~16	40	5.5	1.2	5.5
EOC20A	27.4	29.8	2~20	45	6	1.35	6
EOC25A	32.9	35.05	2~25	52	6	1.4	6
EOC32A	41.3	43.7	4~32	60	6	1.45	7
EOC40A	49.7	52.2	6~39	68	6	1.45	8
EOC50A	61.1	63.8	8~49	80	7	1.55	9



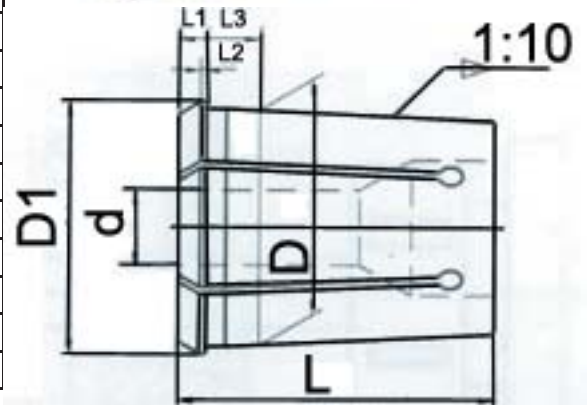
Order No.	d	Order No.	d	Order No.	d	Order No.	d
EOC6A		468-1273	10mm	468-1297	13mm	468-1321	3mm
468-1250	1mm	EOC12A		468-1298	14mm	468-1322	4mm
468-1251	2mm	468-1274	1mm	468-1299	15mm	468-1323	5mm
468-1252	3mm	468-1275	2mm	468-1300	16mm	468-1324	6mm
468-1253	4mm	468-1276	3mm	EOC20A		468-1325	7mm
468-1254	5mm	468-1277	4mm	468-1301	2mm	468-1326	8mm
468-1255	6mm	468-1278	5mm	468-1302	3mm	468-1327	9mm
EOC8A		468-1279	6mm	468-1303	4mm	468-1328	10mm
468-1256	1mm	468-1280	7mm	468-1304	5mm	468-1329	11mm
468-1257	2mm	468-1281	8mm	468-1305	6mm	468-1330	12mm
468-1258	3mm	468-1282	9mm	468-1306	7mm	468-1331	13mm
468-1259	4mm	468-1283	10mm	468-1307	8mm	468-1332	14mm
468-1260	5mm	468-1284	11mm	468-1308	9mm	468-1333	15mm
468-1261	6mm	468-1285	12mm	468-1309	10mm	468-1334	16mm
468-1262	7mm	EOC16A		468-1310	11mm	468-1335	17mm
468-1263	8mm	468-1286	2mm	468-1311	12mm	468-1336	18mm
EOC10A		468-1287	3mm	468-1312	13mm	468-1337	19mm
468-1264	1mm	468-1288	4mm	468-1313	14mm	468-1338	20mm
468-1265	2mm	468-1289	5mm	468-1314	15mm	468-1339	21mm
468-1266	3mm	468-1290	6mm	468-1315	16mm	468-1340	22mm
468-1267	4mm	468-1291	7mm	468-1316	17mm	468-1341	23mm
468-1268	5mm	468-1292	8mm	468-1317	18mm	468-1342	24mm
468-1269	6mm	468-1293	9mm	468-1318	19mm	468-1343	25mm
468-1270	7mm	468-1294	10mm	468-1319	20mm	EOC32A	
468-1271	8mm	468-1295	11mm	EOC25A		468-1344	4mm
468-1272	9mm	468-1296	12mm	468-1320	2mm	468-1345	5mm

DIN 6388A COLLETS



Specifications of EOCA collets

Collet	D	D1	d	L	L1	L2	L3
EOC6A	10	11.5	1~6	21	3.5	0.5	4
EOC8A	12.65	14.5	1~8	26	4	0.8	4.5
EOC10A	15.15	17.2	1~10	30	4.5	0.8	4.5
EOC12A	17.75	19.8	1~12	34	5	1.1	4.5
EOC16A	22.65	25.5	2~16	40	5.5	1.2	5.5
EOC20A	27.4	29.8	2~20	45	6	1.35	6
EOC25A	32.9	35.05	2~25	52	6	1.4	6
EOC32A	41.3	43.7	4~32	60	6	1.45	7
EOC40A	49.7	52.2	6~39	68	6	1.45	8
EOC50A	61.1	63.8	8~49	80	7	1.55	9

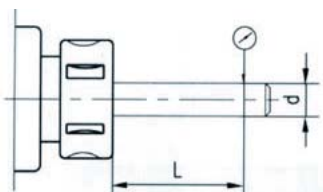


Order No.	d	Order No.	d	Order No.	d	Order No.	d
EOCA32		468-1372	32mm	468-1398	31mm	468-1424	24mm
468-1346	6mm	EOCA40		468-1399	32mm	468-1425	25mm
468-1347	7mm	468-1373	6mm	468-1400	33mm	468-1426	26mm
468-1348	8mm	468-1374	7mm	468-1401	34mm	468-1427	27mm
468-1349	9mm	468-1375	8mm	468-1402	35mm	468-1428	28mm
468-1350	10mm	468-1376	9mm	468-1403	36mm	468-1429	29mm
468-1351	11mm	468-1377	10mm	468-1404	37mm	468-1430	30mm
468-1352	12mm	468-1378	11mm	468-1405	38mm	468-1431	31mm
468-1353	13mm	468-1379	12mm	468-1406	39mm	468-1432	32mm
468-1354	14mm	468-1380	13mm	468-1407	40mm	468-1433	33mm
468-1355	15mm	468-1381	14mm	EOCA50		468-1434	34mm
468-1356	16mm	468-1382	15mm	468-1408	8mm	468-1435	35mm
468-1357	17mm	468-1383	16mm	468-1409	9mm	468-1436	36mm
468-1358	18mm	468-1384	17mm	468-1410	10mm	468-1437	37mm
468-1359	19mm	468-1385	18mm	468-1411	11mm	468-1438	38mm
468-1360	20mm	468-1386	19mm	468-1412	12mm	468-1439	39mm
468-1361	21mm	468-1387	20mm	468-1413	13mm	468-1440	40mm
468-1362	22mm	468-1388	21mm	468-1414	14mm	468-1441	41mm
468-1363	23mm	468-1389	22mm	468-1415	15mm	468-1442	42mm
468-1364	24mm	468-1390	23mm	468-1416	16mm	468-1443	43mm
468-1365	25mm	468-1391	24mm	468-1417	17mm	468-1444	44mm
468-1366	26mm	468-1392	25mm	468-1418	18mm	468-1445	45mm
468-1367	27mm	468-1393	26mm	468-1419	19mm	468-1446	46mm
468-1368	28mm	468-1394	27mm	468-1420	20mm	468-1447	47mm
468-1369	29mm	468-1395	28mm	468-1421	21mm	468-1448	48mm
468-1370	30mm	468-1396	29mm	468-1422	22mm	468-1449	49mm
468-1371	31mm	468-1397	30mm	468-1423	23mm	468-1450	50mm

DIN 6388B COLLETS

Specifications of EOCB collets

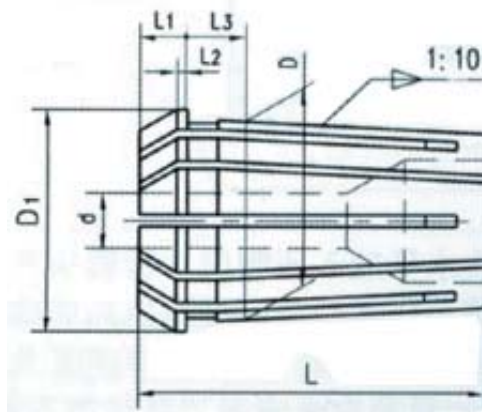
Collets	D1	D	d	L	L1	L2	L3
EOC16B	25.5	22.65	2~16	40	5.5	1.2	9.5
EOC20B	29.8	22.4	2~20	45	6	1.35	10
EOC25B	35.05	32.9	2~25	52	6	1.4	10
EOC32B	43.7	41.3	4~32	60	6	1.45	11
EOC40B	52.2	49.7	6~40	68	6	14.5	12
EOC50B	63.8	61.1	8~50	80	7	1.55	13



II. Regular supply
I. Special order

Accuracy

d	L	Run outD	
		I	II
1.0~1.6	6	0.01MM	0.015MM
>1.6~3.0	10		
>3.0~6.0	16		
>6.0~10.0	25	0.015mm	0.02mm
>10.0~18.0	40		
>18.0~26.0	50		
>26.0~30.0	60	0.02mm	0.03mm
>30.0~34.0	80		

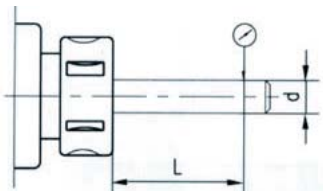


Order No.	d	Order No.	d	Order No.	d	Order No.	d
EOC16B		468-1525	12mm	468-1551	19mm	468-1577	23mm
468-1500	2mm	468-1526	13mm	468-1552	20mm	468-1578	24mm
468-1501	3mm	468-1527	14mm	468-1553	21mm	468-1579	25mm
468-1502	4mm	468-1528	15mm	468-1554	22mm	468-1580	26mm
468-1503	5mm	468-1529	16mm	468-1555	23mm	468-1581	27mm
468-1504	6mm	468-1530	17mm	468-1556	24mm	468-1582	28mm
468-1505	7mm	468-1531	18mm	468-1557	25mm	468-1583	29mm
468-1506	8mm	468-1532	19mm	EOC32B		468-1584	30mm
468-1507	9mm	468-1533	20mm	468-1558	4mm	468-1585	31mm
468-1508	10mm	EOC25B		468-1559	5mm	468-1586	32mm
468-1509	11mm	468-1534	2mm	468-1560	6mm	EOC40B	
468-1510	12mm	468-1535	3mm	468-1561	7mm	468-1587	6mm
468-1511	13mm	468-1536	4mm	468-1562	8mm	468-1588	7mm
468-1512	14mm	468-1537	5mm	468-1563	9mm	468-1589	8mm
468-1513	15mm	468-1538	6mm	468-1564	10mm	468-1590	9mm
468-1514	16mm	468-1539	7mm	468-1565	11mm	468-1591	10mm
EOC20B		468-1540	8mm	468-1566	12mm	468-1592	11mm
468-1515	2mm	468-1541	9mm	468-1567	13mm	468-1593	12mm
468-1516	3mm	468-1542	10mm	468-1568	14mm	468-1594	13mm
468-1517	4mm	468-1543	11mm	468-1569	15mm	468-1595	14mm
468-1518	5mm	468-1544	12mm	468-1570	16mm	468-1596	15mm
468-1519	6mm	468-1545	13mm	468-1571	17mm	468-1597	16mm
468-1520	7mm	468-1546	14mm	468-1572	18mm	468-1598	17mm
468-1521	8mm	468-1547	15mm	468-1573	19mm	468-1599	18mm
468-1522	9mm	468-1548	16mm	468-1574	20mm	468-1600	19mm
468-1523	10mm	468-1549	17mm	468-1575	21mm	468-1601	20mm
468-1524	11mm	468-1550	18mm	468-1576	22mm	468-1602	21mm

DIN 6388B COLLETS

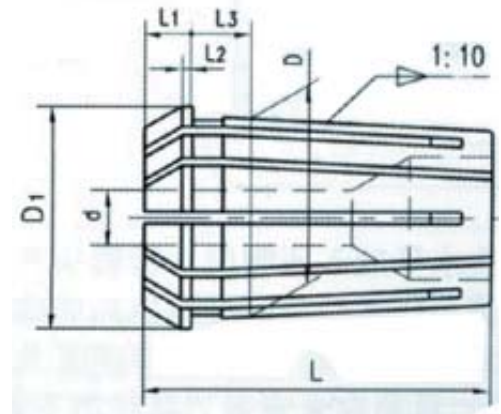
Specifications of EOCB collets

Collets	D1	D	d	L	L1	L2	L3
EOC16B	25.5	22.65	2~16	40	5.5	1.2	9.5
EOC20B	29.8	22.4	2~20	45	6	1.35	10
EOC25B	35.05	32.9	2~25	52	6	1.4	10
EOC32B	43.7	41.3	4~32	60	6	1.45	11
EOC40B	52.2	49.7	6~40	68	6	14.5	12
EOC50B	63.8	61.1	8~50	80	7	1.55	13



Accuracy

d	L	Run outD	
		I	II
1.0~1.6	6	0.01MM	0.015MM
>1.6~3.0	10		
>3.0~6.0	16		
>6.0~10.0	25	0.015mm	0.02mm
>10.0~18.0	40		
>18.0~26.0	50		
>26.0~30.0	60	0.02mm	0.03mm
>30.0~34.0	80		



II. Regular supply
I. Special order

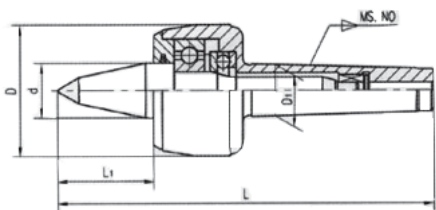
Order No.	d	Order No.	d	Order No.	d	Order No.	d
EOC40B		468-1618	37mm	468-1633	19mm	468-1649	35mm
468-1603	22mm	468-1619	38mm	468-1634	20mm	468-1650	36mm
468-1604	23mm	468-1620	39mm	468-1635	21mm	468-1651	37mm
468-1605	24mm	468-1621	40mm	468-1636	22mm	468-1652	38mm
468-1606	25mm	EOC50B		468-1637	23mm	468-1653	39mm
468-1607	26mm	468-1622	8mm	468-1638	24mm	468-1654	40mm
468-1608	27mm	468-1623	9mm	468-1639	25mm	468-1655	41mm
468-1609	28mm	468-1624	10mm	468-1640	26mm	468-1656	42mm
468-1610	29mm	468-1625	11mm	468-1641	27mm	468-1657	43mm
468-1611	30mm	468-1626	12mm	468-1642	28mm	468-1658	44mm
468-1612	31mm	468-1627	13mm	468-1643	29mm	468-1659	45mm
468-1613	32mm	468-1628	14mm	468-1644	30mm	468-1660	46mm
468-1614	33mm	468-1629	15mm	468-1645	31mm	468-1661	47mm
468-1615	34mm	468-1630	16mm	468-1646	32mm	468-1662	48mm
468-1616	35mm	468-1631	17mm	468-1647	33mm	468-1663	49mm
468-1617	36mm	468-1632	18mm	468-1648	34mm	468-1664	50mm

ISO/ISO ADAPTOR (DRAWBAR TYPE)

Order No.	Outside Taper	Inside Taper	D(mm)	d(mm)	L(mm0)
435-0660	ISO40	ISO30	44.45	31.75	152.4
435-0661	ISO50	ISO30	69.85	31.75	185.8
435-0662	ISO50	ISO40	69.85	44.45	207.8

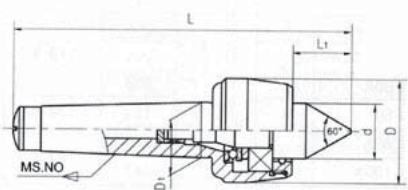


PRECISION LIVE CENTER



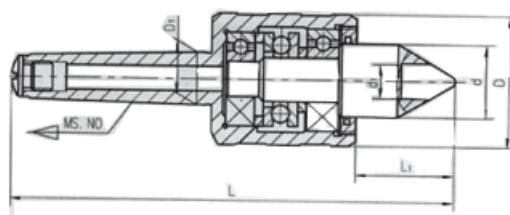
Order No.	Size	L (mm)	D (mm)	L1 (mm)	d (mm)	D1 (mm)	Max Load (kg)	Max Speed (rpm)	Accuracy (mm)
437-0211	MT1	124	36	27	15	12.065	80	7000	0.01
437-0212	MT2	139	45	34	20	17.78	140	7000	0.005
437-0213	MT3	176.5	60	47	25	23.825	400	5000	0.005
437-0214	MT4	217	70	53	32	31.267	500	3800	0.005
437-0215	MT5	273	90	65	40	44.399	1200	3000	0.005
437-0216	MT6	354.5	105	78	50	63.348	2500	2600	0.01

PRECISION LIGHT-DUTY LIVE CENTER



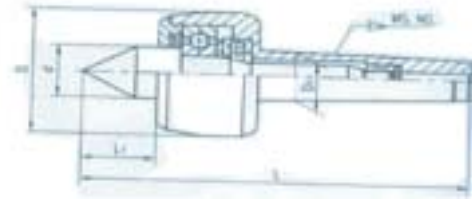
Order No.	Size	L (mm)	D (mm)	L1 (mm)	d (mm)	D1 (mm)	Max Radial Load (N)	Max Speed (rpm)	Accuracy (mm)
437-0221	MT1	115	34	19.9	18	12.065	320	5000	0.005
437-0222	MT2	130.6	45	29.6	25	17.78	400	5000	0.006
437-0223	MT3	161.7	52	33.5	28	23.825	800	4500	0.006
437-0224	MT4	195.7	60	40.5	32	31.267	1250	3500	0.006
437-0225	MT5	245.5	80	51.8	45	44.399	1500	3000	0.006
437-0226	MT6	357.5	130	82.3	75	63.348	1800	2500	0.006

CARBIDE TIPPED MEDIUM-DUTY LIVE CENTER



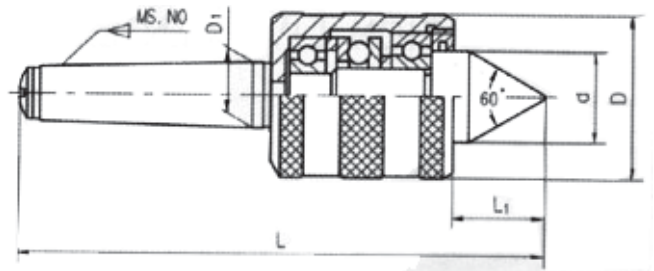
Order No.	Morse Taper	L (mm)	L1 (mm)	d (mm)	D (mm)	D1 (mm)	d1 (mm)	Max Load (kg)	Max Speed (rpm)	Accuracy (mm)
437-0262	MT2	145	26	45	25	17.78	12	1500	5000	0.01
437-0263	MT3	170	30	52	28	23.825	15	2000	4200	0.01
437-0264	MT4	205.7	34.7	60	32	31.267	18	3200	3200	0.01
437-0265	MT5	254	45	77	45	44.399	24	6300	2000	0.015
437-0266	MT6	362	68.5	125	75	63.348	40	10000	1600	0.015

PRECISION LIVE CENTER



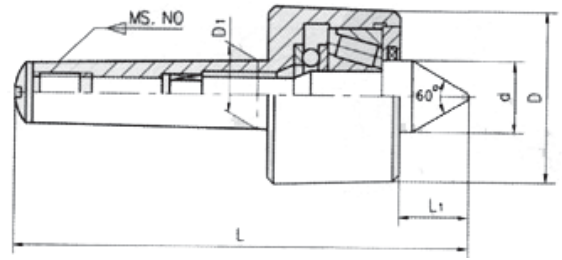
Order No.	Morse Taper	L (mm)	D (mm)	L1 (mm)	d (mm)	D1 (mm)	Max Load (kg)	Max Speed (rpm)	Accuracy (mm)
437-0241	MT1	114	36	17	15	12.065	100	7000	0.01
437-0242	MT2	129	45	24	20	17.78	200	7000	0.005
437-0243	MT3	151.5	50	27.5	22	23.825	400	6300	0.005
437-0244	MT3	160.5	60	31	25	23.825	500	5000	0.005
437-0245	MT4	205	70	41	32	31.267	800	3800	0.005
437-0246	MT5	258.5	90	50.5	40	44.399	2000	3000	0.005
437-0247	MT6	334	105	57.5	50	63.348	3500	2600	0.01
437-0248	MT6	378	140	67	60	63.348	4500	1500	0.01

MEDIUM DUTY LIVE CENTER



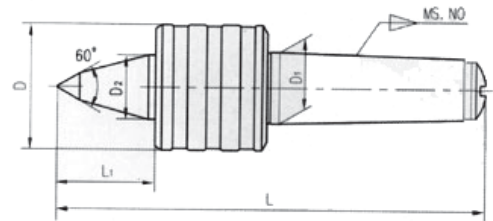
Order No.	Morse Taper	L (mm)	L1 (mm)	D (mm)	D1 (mm)	d (mm)	Max Radial Load (N)	Max Speed (rpm)	Wt(kg)	Accuracy (mm)
437-0201	MT1	115	20	34	12.065	18	900	5000	0.29	0.01
437-0202	MT2	145	26	45	17.78	25	1500	5000	0.7	0.01
437-0203	MT3	170	30	52	23.825	28	2000	4200	0.93	0.01
437-0204	MT4	205.7	34.7	60	31.267	32	3200	3200	1.7	0.01
437-0205	MT5	254	45	77	44.399	45	6300	2000	3.39	0.015
437-0206	MT6	362	68.5	125	63.348	75	10000	1600	12	0.015
437-0251	MT1	125	30	34	12.065	18	900	5000	0.31	0.01
437-0252	MT2	155	36	45	17.78	25	1500	5000	0.74	0.01
437-0253	MT3	183	43	52	23.825	28	2000	4200	0.99	0.01
437-0254	MT4	222	51	60	31.267	32	3200	3200	1.8	0.01
437-0255	MT5	272	63	77	44.399	45	6300	2000	3.62	0.015
437-0256	MT6	382	88.5	125	63.348	75	10000	1600	12.69	0.015

PRECISION HEAVY DUTY LIVE CENTER



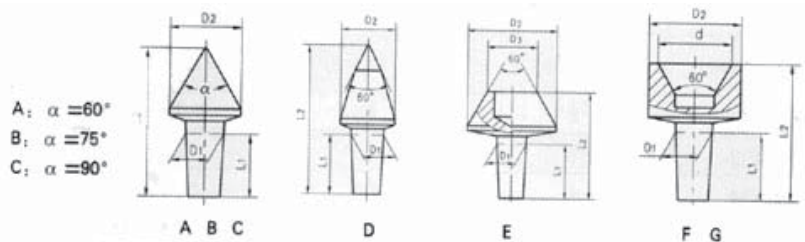
Order No.	Morse Taper	L (mm)	D (mm)	L1 (mm)	d (mm)	D1 (mm)	Max Radial Load (N)	Max Speed (rpm)	Wt (kg)	Accuracy (mm)
437-0231	MT1	109.6	38	18.5	16	12.065	1400	3600	0.29	0.008
437-0232	MT2	128.5	48	24	22	17.78	3500	3400	0.39	0.01
437-0233	MT3	156	56	28.5	25	23.825	5500	3200	1.09	0.01
437-0234	MT4	184	64	31.5	28	31.267	8000	3000	1.69	0.01
437-0235	MT5	239.5	85	45	41	44.399	10000	2500	4	0.015
437-0236	MT6	333.5	130	64	63	66.348	15000	1500	11.61	0.015

MEDIUM DUTY LIVE CENTER WITH LONG NOSE



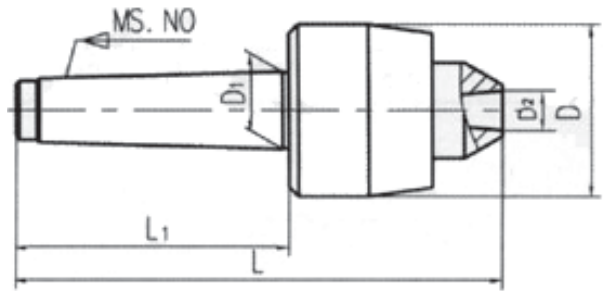
Order No.	Morse Taper	L1 (mm)	D (mm)	D1 (mm)	D2 (mm)	L (mm)	Wt (kg)
437-0272	MT2	30	40	17.78	18	141	0.84
437-0273	MT3	36	45	23.825	22	165	0.91
437-0274	MT4	36	45	31.267	22	188	1.62
437-0275	MT5	64	78	44.399	40	270	3.43
437-0276	MT6	75	102	63.348	50	346	11

MEDIUM DUTY INSERT LIVE CENTER SET



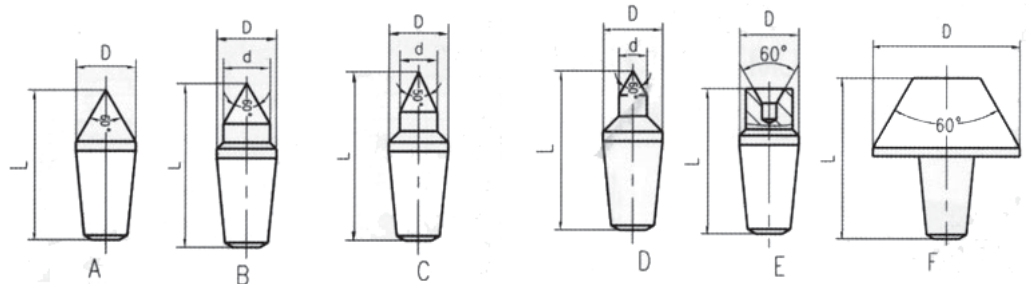
Order No.	Morse Taper	D1	L1	A	B	C	D	E	F	G
				D2/L2	D2/L2	D2/L2	D2/L2	D2/D3/L2	D2/L2/d	D2/L2/d
437-0402	MT2	10	20	16/39	16/35.5	16/33	16/46	25/10/40	16/36/10	20/39/16
437-0403	MT3	12	24	20/48	20/43.5	20/40.5	18/56	35/15/50	22/42/18	35/48/30
437-0404	MT4	15	30	28/61.5	28/55.5	28/51.5	26/73	55/30/61.5	40/55/35	55/60/48
437-0405	MT5	20	40	36/80	36/72.45	36/66.8	36/101	70/41/78	60/81/50	70/85/61

HIGH SPEED MEDIUM DUTY INSERT LIVE CENTER SET



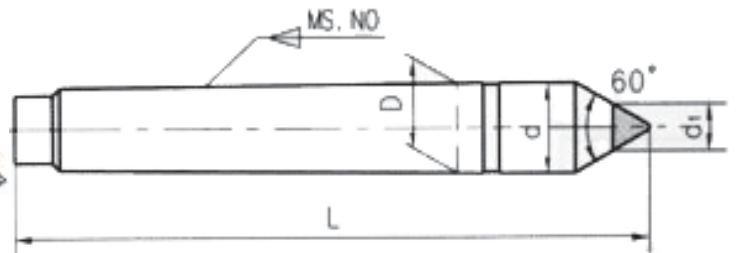
Order No.	Morse Taper	D (mm)	D1 (mm)	L1 (mm)	L (mm)
437-0412	MT2	48	17.78	69	127
437-0413	MT3	54	23.825	86	153
437-0414	MT4	63	31.367	109	182
437-0415	MT5	83	44.399	136	217

Insert Size



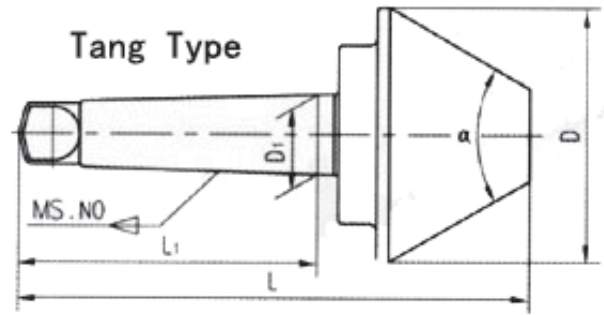
Order No.	A		B			C			D			E			F	
	L	D	L	D	d	L	D	d	L	D	d	L	D	d	L	D
437-0412	26	10.2	28.5	10.2	8	29	10.2	6.5	27.5	10.2	5	25	10.2	8	30	28
437-0413	32	12.75	35	12.75	10	36	12.75	8	34	12.75	6	31	12.75	10	37	34
437-0414	32	12.75	35	12.75	10	36	12.75	8	34	12.75	6	31	12.75	10	37	34
437-0415	39	15.7	44	15.7	12	45	15.7	10	42	15.7	8	43	15.7	12	48	40

CARBIDE TIPPED SOLIDE CENTER



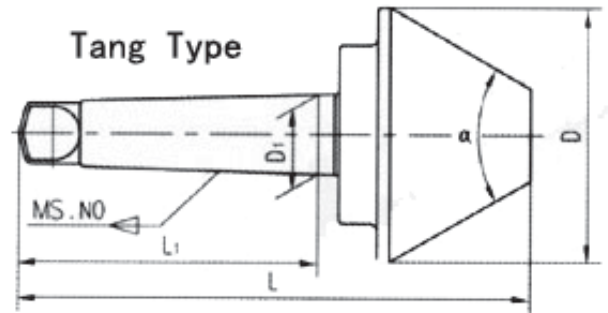
Order No.	Morse Taper	D (mm)	L (mm)	d(mm)	d1(mm)	Weight (kg)	Accuracy
437-0001	MT1	12.065	80	12.2	8	0.057	0.01mm
437-0002	MT2	17.780	100	18	8	0.151	
437-0003	MT3	23.825	125	24.1	12	0.335	
437-0004	MT4	31.267	160	31.6	15	0.746	
437-0005	MT5	44.399	200	44.7	18	1.826	
437-0006	MT6	63.348	270	63.8	24	5.230	

BULL NOSE CENTER WITH TANG



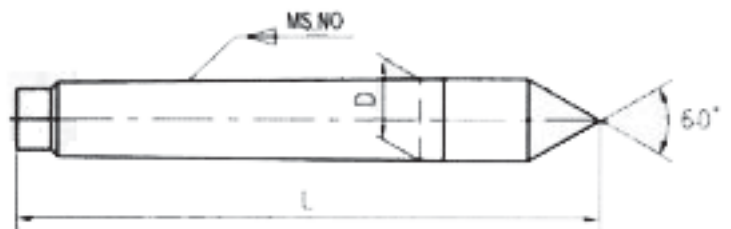
Order No.	Shank Taper	L (mm)	L1 (mm)	D (mm)	D1 (mm)	d (mm)	α
437-0450	MT2	143	75	60	17.78	20	60°
437-0451		143		70		20	
437-0452		156		80		25	
437-0453		156		90		25	
437-0454	MT3	168	94	60	23.825	20	
437-0455		168		70		20	
437-0456		175		80		25	
437-0457		175		90		25	
437-0458		183		100		30	
437-0459		183		110		35	
437-0460		183		120		40	
437-0461		197		130		40	
437-0462	202	81	140	40			
437-0463	MT4	193	117.5	60	31.267	20	
437-0464		193		70		20	
437-0465		208		80		25	
437-0466		208		90		25	
437-0467		208		100		30	
437-0468		208		110		35	
437-0469		208		120		40	
437-0470		222		130		40	
437-0471		227		140		40	
437-0472		237		150		40	
437-0473		247		160		40	
437-0474	247	200	66				
437-0475	MT5	225	149.5	60	44.399	20	
437-0476		225		70		20	
437-0477		240		80		25	
437-0478		240		90		25	
437-0479		248		100		30	
437-0480		248		110		35	
437-0481		248		120		40	
437-0482		254		130		40	

BULL NOSE CENTER WITH TANG



Order No.	Shank Taper	L (mm)	L1 (mm)	D (mm)	D1 (mm)	d (mm)	a (°)
437-0483	MT5	259	149.5	140	44.399	40	60°
437-0484		269	149.5	150		40	
437-0485		279	149.5	160		40	
437-0486		279	149.5	200		66	
437-0487		302.5	149.5	250		57	
437-0488		310	210	100		30	
437-0489		310	210	110		35	
437-0490		310	210	120		40	
437-0491		MT6	324	210		130	
437-0492	329		210	140	40		
437-0493	341		210	150	40		
437-0494	351		210	160	40		
437-0495	307		182	170	38		
437-0496	335		182	250	57		

SOLIDE CENTER

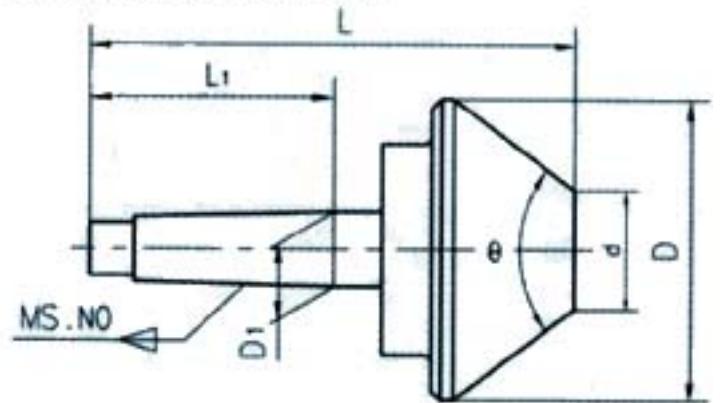


Order No.	Morse Taper	D (mm)	L (mm)	Weight (kg)	Accuracy
437-0011	MT1	12.065	80	0.057	0.01mm
437-0012	MT2	17.780	100	0.150	
437-0013	MT3	23.825	125	0.334	
437-0014	MT4	31.267	160	0.746	
437-0015	MT5	44.399	200	1.862	
437-0016	MT6	63.348	270	4.925	

BULL NOSE CENTER



DRAWBAR TYPE

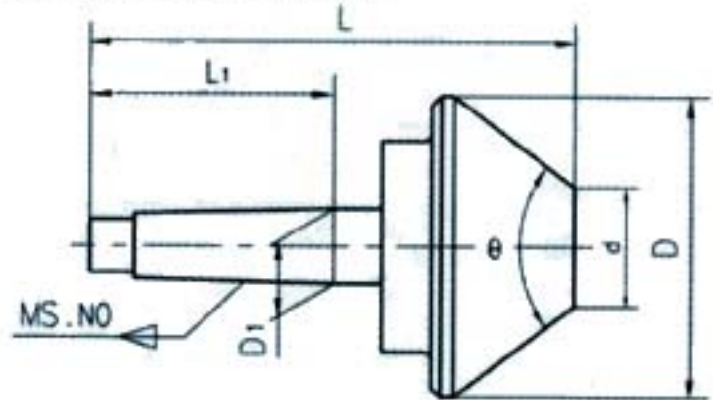


Order No.	Shank Taper	L (mm)	L1 (mm)	D (mm)	D1 (mm)	d (mm)	α (°)
437-0500	MT2	132	64	60	17.78	20	60
437-0501	MT2	129	64	60	17.78	12	75
437-0502	MT2	135	64	61.9	17.78	13	70
437-0503	MT2	130	64	62	17.78	13	54.6
437-0504	MT2	132	64	63	17.78	13	70
437-0505	MT2	132	64	70	17.78	20	60
437-0506	MT2	129	64	70	17.78	12	75
437-0507	MT2	145	64	80	17.78	25	60
437-0508	MT2	133	64	80	17.78	12	75
437-0509	MT2	145	64	90	17.78	25	60
437-0510	MT2	133	64	90	17.78	12	75
437-0511	MT3	165	81	60	23.825	20	60
437-0512	MT3	152	81	60	23.825	12	75
437-0513	MT3	155	81	70	23.825	20	60
437-0514	MT3	152	81	70	23.825	12	75
437-0515	MT3	152	81	76.2	23.825	19	54.6
437-0516	MT3	150	81	76.2	23.825	19	70
437-0517	MT3	162	81	80	23.825	25	60
437-0518	MT3	156	81	80	23.825	12	75
437-0519	MT3	162	81	90	23.825	25	60
437-0520	MT3	156	81	90	23.825	12	75
437-0521	MT3	170	81	100	23.825	30	60
437-0522	MT3	164	81	100	23.825	32	75
437-0523	MT3	170	81	110	23.825	35	60
437-0524	MT3	164	81	110	23.825	32	75
437-0525	MT3	170	81	120	23.825	40	60
437-0526	MT3	164	81	120	23.825	32	75
437-0527	MT3	184	81	130	23.825	40	60
437-0528	MT3	174	81	130	23.825	35	75
437-0529	MT3	189	94	140	23.825	40	60
437-0530	MT3	174	94	140	23.825	35	75
437-0531	MT4	178	102.5	60	31.267	20	60
437-0532	MT4	175	102.5	60	31.267	12	75

BULL NOSE CENTER



DRAWBAR TYPE

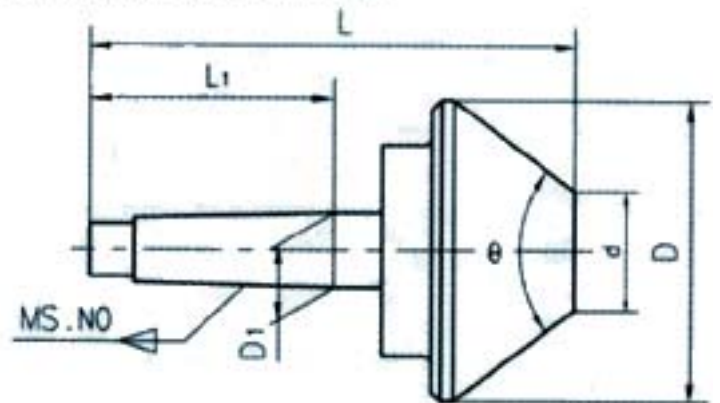


Order No.	Shank Taper	L (mm)	L1 (mm)	D (mm)	D1 (mm)	d (mm)	α (°)
437-0533	MT4	178	102.5	70	31.267	20	60
437-0534	MT4	175	102.5	70	31.267	12	75
437-0535	MT4	193	102.5	80	31.267	25	60
437-0536	MT4	179	102.5	80	31.267	12	75
437-0537	MT4	193	102.5	90	31.267	25	60
437-0538	MT4	179	102.5	90	31.267	12	75
437-0539	MT4	193	102.5	100	31.267	30	60
437-0540	MT4	187	102.5	100	31.267	32	75
437-0541	MT4	193	102.5	110	31.267	35	60
437-0542	MT4	187	102.5	110	31.267	32	75
437-0543	MT4	193	102.5	120	31.267	40	60
437-0544	MT4	187	102.5	120	31.267	32	75
437-0545	MT4	207	102.5	130	31.267	40	60
437-0546	MT4	197	102.5	130	31.267	35	75
437-0547	MT4	212	102.5	140	31.267	40	60
437-0548	MT4	197	102.5	140	31.267	35	75
437-0549	MT4	222	102.5	150	31.267	40	60
437-0550	MT4	207	102.5	150	31.267	35	75
437-0551	MT4	232	102.5	160	31.267	40	60
437-0552	MT4	212	102.5	160	31.267	35	75
437-0553	MT4	232	102.5	200	31.267	66	60
437-0554	MT4	225	102.5	200	31.267	40	75
437-0555	MT5	205	129.5	60	44.399	20	60
437-0556	MT5	202	129.5	60	44.399	12	75
437-0557	MT5	205	129.5	70	44.399	20	60
437-0558	MT5	202	129.5	70	44.399	12	75
437-0559	MT5	220	129.5	80	44.399	25	60
437-0560	MT5	206	129.5	80	44.399	12	75
437-0561	MT5	220	129.5	90	44.399	25	60
437-0562	MT5	206	129.5	90	44.399	12	75
437-0563	MT5	228	129.5	100	44.399	30	60
437-0564	MT5	222	129.5	100	44.399	32	75
437-0565	MT5	228	129.5	110	44.399	35	60

BULL NOSE CENTER

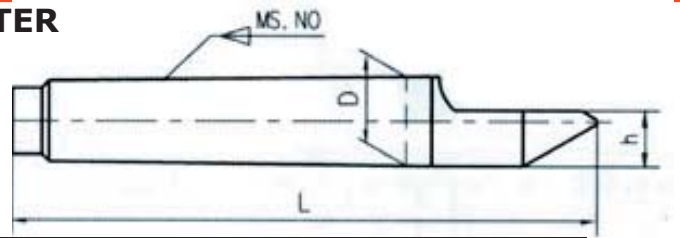


DRAWBAR TYPE



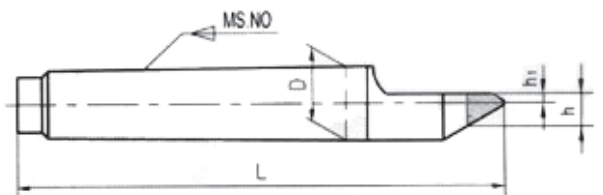
Order No.	Shank Taper	L (mm)	L1 (mm)	D (mm)	D1 (mm)	d (mm)	α (°)
437-0566	MT5	222	129.5	110	44.399	32	75
437-0567	MT5	228	129.5	120	44.399	40	60
437-0568	MT5	222	129.5	120	44.399	32	75
437-0569	MT5	231	129.5	130	44.399	40	70
437-0570	MT5	254	129.5	130	44.399	40	60
437-0571	MT5	232	129.5	130	44.399	35	75
437-0572	MT5	239	129.5	140	44.399	40	60
437-0573	MT5	232	129.5	140	44.399	35	75
437-0574	MT5	249	129.5	150	44.399	40	60
437-0575	MT5	234	129.5	150	44.399	35	75
437-0576	MT5	259	129.5	160	44.399	40	60
437-0577	MT5	239	129.5	160	44.399	35	75
437-0578	MT5	259	129.5	200	44.399	66	60
437-0579	MT5	252	129.5	200	44.399	40	75
437-0580	MT5	281	129.5	250	44.399	57	75
437-0581	MT5	282	182	100	44.399	30	60
437-0582	MT5	276	182	100	44.399	32	75
437-0583	MT5	282	182	110	44.399	35	60
437-0584	MT5	276	182	110	44.399	32	75
437-0585	MT5	282	182	120	44.399	40	60
437-0586	MT5	276	182	120	44.399	32	75
437-0587	MT6	296	182	130	63.348	40	60
437-0588	MT6	296	182	130	63.348	35	75
437-0589	MT6	301	182	140	63.348	40	60
437-0590	MT6	286	182	140	63.348	35	75
437-0591	MT6	313	182	150	63.348	40	60
437-0592	MT6	298	182	150	63.348	35	75
437-0593	MT6	323	182	160	63.348	40	60
437-0594	MT6	303	182	160	63.348	35	75
437-0595	MT6	341	210	200	63.348	66	60
437-0596	MT6	313	182	200	63.348	66	60
437-0597	MT6	364.5	210	250	63.348	57	75

HALF CENTER



Order No.	Morse Taper	D (mm)	h (mm)	L (mm)	Weight (kg)	Accuracy
437-0111	MT1	12.065	7.6	80	0.057	0.01mm
437-0112	MT2	17.780	11	100	0.150	
437-0113	MT3	23.825	15.05	125	0.334	
437-0114	MT4	31.267	20.8	160	0.746	
437-0115	MT5	44.399	29.35	200	1.862	
437-0116	MT6	63.348	41.9	270	4.925	

CARBIDE TIPPED HALF CENTER



Order No.	Morse Taper	D (mm)	h (mm)	h1 (mm)	L (mm)	Weight (kg)	Accuracy
437-0101	MT1	12.065	7.6	1.5	80	0.057	0.01mm
437-0102	MT2	17.780	11	2	100	0.150	
437-0103	MT3	23.825	15.05	3	125	0.334	
437-0104	MT4	31.267	20.8	5	160	0.746	
437-0105	MT5	44.399	29.35	7	200	1.862	
437-0106	MT6	63.348	41.9	10	270	4.925	

Order No.	Arbor Diameter	Length	Expanding Range	Size of Wrench
435-1002	1/4"	3"	.005"	5/64"
435-1003	3/8"	3"	.005"	3/32"
435-1004	1/2"	3"	.005"	3/32"
435-1005	5/8"	3"	.005"	9/64"
435-1006	3/4"	4"	.005"	9/64"
435-1007	7/8"	4"	.005"	3/16"
435-1008	1"	4"	.005"	3/16"
435-1009	1-1/4"	4"	.005"	3/16"
435-1010	1-3/4"	4"	.005"	3/16"
435-1011	6mm	3"	.005"	5/64"
435-1012	10mm	3"	.005"	3/32"
435-1013	12mm	3"	.005"	3/32"
435-1014	16mm	3"	.005"	9/64"
435-1015	19mm	4"	.005"	9/64"
435-1016	22mm	4"	.005"	3/16"
435-1017	25mm	4"	.005"	3/16"
435-1018	32mm	4"	.005"	3/16"
435-1019	45mm	4"	.005"	3/16"

EXPANDING MANDRELS



EXPANDING MANDREL SETS

Order No.	Arbor Sizes
435-1002	1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4", 1-1/2"
435-1003	6mm, 10mm, 12mm, 16mm, 19mm, 22mm, 25mm, 32mm

R8 END MILL HOLDER

- * 7/16"-20TPI thread for drawbar.
- * Made from high quality steel forgings.
- * Heated treated and precision ground.



Order No.	Hole Dia.	End Mill Type	Order No.	Hole Dia.	End Mill Type	Order No.	Hole Dia.	End Mill Type
430-0001	3/16"	Single End Mill	430-0015	1-1/2"	Single End Mill	430-0206	6mm	Single End Mill
430-0002	1/4"		430-0016	2"		430-0207	7mm	
430-0003	5/16"		430-0017	2-1/2"		430-0208	8mm	
430-0004	3/8"		430-0104	3/8"	Double End Mills	430-0210	10mm	
430-0005	7/16"		430-0105	7/16"		430-0212	12mm	
430-0006	1/2"		430-0106	1/2"		430-0214	14mm	
430-0007	9/16"		430-0107	9/16"		430-0216	16mm	
430-0008	5/8"		430-0108	5/8"		430-0218	18mm	
430-0009	11/16"		430-0109	11/16"		430-0220	20mm	
430-0010	3/4"		430-0110	3/4"		430-0222	22mm	
430-0011	7/8"		430-0111	7/8"		430-0225	25mm	
430-0012	1"		430-0112	1"	430-0227	27mm		
430-0013	1-1/8"		430-0204	4mm	Single End Mill	430-0232	32mm	
430-0014	1-1/4"		430-0205	5mm		430-0240	40mm	

R8 END MILL HOLDER

- * M12 thread for drawbar.
- * Made from high quality steel forgings.
- * Heated treated and precision ground.



Order No.	Hole Size	Order No.	Hole Size	Order No.	Hole Size	Order No.	Hole Size
430-0204	4mm	430-0208	8mm	430-0216	16mm	430-0225	25mm
430-0205	5mm	430-0210	10mm	430-0218	18mm	430-0227	27mm
430-0206	6mm	430-0212	12mm	430-0220	20mm	430-0232	32mm
430-0207	7mm	430-0214	14mm	430-0222	22mm	430-0240	40mm

R8 SHELL MILL ARBOR



Order No.	Hole Dia.	Order No.	Hole Dia.
430-1001	1/2"	430-1011	13mm
430-1002	5/8"	430-1012	16mm
430-1003	3/4"	430-1013	22mm
430-1004	7/8"	430-1014	27mm
430-1005	1"	430-1015	32mm
430-1006	1-1/4"	430-1016	40mm
430-1007	1-1/2"		

R8 COMB SHELL END MILL ARBOR



Order No.	Hole Dia.	Order No.	Hole Dia.
430-2001	1/2"	430-2021	13mm
430-2002	5/8"	430-2022	16mm
430-2003	3/4"	430-2023	22mm
430-2004	7/8"	430-2024	27mm
430-2005	1"	430-2025	32mm
430-2006	1-1/4"		

MORSE TAPER END MILL HOLDER-DRAWBAR TYPE



Order No.	Hole Dia.	Shank Taper	Order No.	Hole Dia.	Shank Taper	Order No.	Hole Dia.	Shank Taper	Order No.	Hole Dia.	Shank Taper	
431-0101	3/16"	MT1	431-0301	3/16"	MT3	431-0401	3/16"	MT4	431-0504	3/8"	MT5	
431-0102	1/4"		431-0302	1/4"		431-0402	1/4"		431-0505	1/2"		
431-0103	5/16"		431-0303	5/16"		431-0403	5/16"		431-0506	5/8"		
431-0104	3/8"		431-0304	3/8"		431-0404	3/8"		431-0507	3/4"		
431-0105	1/2"		431-0305	1/2"		431-0405	1/2"		431-0508	7/8"		
431-0106	5/8"		431-0306	5/8"		431-0406	5/8"		431-0509	1"		
431-0107	3/4"		431-0307	3/4"		431-0407	3/4"		431-0510	1-1/4"		
431-0201	3/16"	MT2	431-0308	7/8"	MT4	431-0408	7/8"	MT5	431-0511	1-1/2"		MT6
431-0202	1/4"		431-0309	1"		431-0409	1"		431-0512	2"		
431-0203	5/16"		431-0401	3/16"		431-0409	1-1/4"		431-0513	2-1/2"		
431-0204	3/8"		431-0402	1/4"		431-0410	1-1/2"		431-0608	7/8"		
431-0205	1/2"		431-0403	5/16"		431-0501	3/16"		431-0609	1"		
431-0206	5/8"		431-0404	3/8"		431-0502	1/4"		431-0610	1-1/4"		
431-0207	3/4"		431-0405	1/2"		431-0503	5/16"		431-0611	1-1/2"		
								431-0612	2"			
								431-0613	2-1/2"			

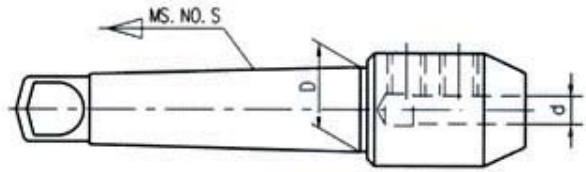
MORSE TAPER END MILL HOLDER-DRAWBAR TYPE



Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper
431-0110	4mm	MT1	431-0128	12mm	MT3	431-0146	24mm	MT4	431-0164	50mm	MT5
431-0111	6mm		431-0129	14mm		431-0147	25mm		431-0165	63mm	
431-0112	8mm		431-0130	16mm		431-0148	32mm		431-0166	4mm	
431-0113	10mm		431-0131	18mm		431-0149	40mm		431-0167	6mm	
431-0114	12mm		431-0132	20mm		431-0150	4mm		431-0168	8mm	
431-0115	4mm	MT2	431-0133	22mm	MT4	431-0151	6mm	MT5	431-0169	10mm	MT6
431-0116	6mm		431-0134	24mm		431-0152	8mm		431-0170	12mm	
431-0117	8mm		431-0135	25mm		431-0153	10mm		431-0171	14mm	
431-0118	10mm		431-0136	4mm		431-0154	12mm		431-0172	16mm	
431-0119	12mm		431-0137	6mm		431-0155	14mm		431-0173	18mm	
431-0120	14mm		431-0138	8mm		431-0156	16mm		431-0174	20mm	
431-0121	16mm		431-0139	10mm		431-0157	18mm		431-0175	22mm	
431-0122	18mm	MT3	431-0140	12mm	MT4	431-0158	20mm	MT5	431-0176	24mm	
431-0123	20mm		431-0141	14mm		431-0159	22mm		431-0177	25mm	
431-0124	4mm		431-0142	16mm		431-0160	24mm		431-0178	32mm	
431-0125	6mm		431-0143	18mm		431-0161	25mm		431-0179	40mm	
431-0126	8mm		431-0144	20mm		431-0162	32mm		431-0180	50mm	
431-0127	10mm		431-0145	22mm		431-0163	40mm		431-0181	63mm	

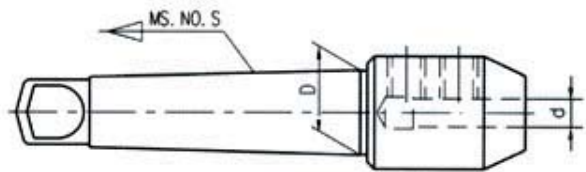
MACHINE ACCESSORIES

MORSE TAPER END MILL HOLDER-TANG TYPE



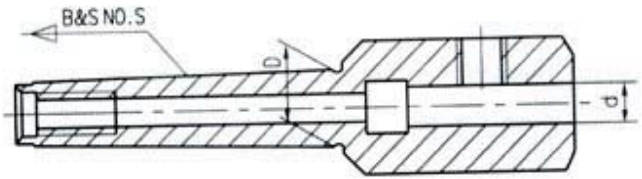
Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper
431-1101	3/16"	MT1	431-1207	3/4"	MT2	431-1404	3/8"	MT4	431-1507	3/4"	MT5
431-1102	1/4"		431-1301	3/16"	MT3	431-1405	1/2"		431-1508	7/8"	
431-1103	5/16"		431-1302	1/4"		431-1406	5/8"		431-1509	1"	
431-1104	3/8"		431-1303	5/16"		431-1407	3/4"		431-1510	1-1/4"	
431-1105	1/2"		431-1304	3/8"		431-1408	7/8"		431-1511	1-1/2"	
431-1106	5/8"		431-1305	1/2"		431-1409	1"		431-1512	2"	
431-1107	3/4"		431-1306	5/8"		431-1410	1-1/2"		431-1513	2-1/2"	
431-1201	3/16"	MT2	431-1307	3/4"		MT4	431-1501	3/16"	MT5	431-1608	7/8"
431-1202	1/4"		431-1308	7/8"	431-1502		1/4"	431-1609		1"	
431-1203	5/16"		431-1309	1"	431-1503		5/16"	431-1610		1-1/4"	
431-1204	3/8"		431-1401	3/16"	431-1504		3/8"	431-1611		1-1/2"	
431-1205	1/2"		431-1402	1/4"	431-1505		1/2"	431-1612		2"	
431-1206	5/8"		431-1403	5/16"	431-1506		5/8"	431-1613		2-1/2"	

MORSE TAPER END MILL HOLDER-TANG TYPE



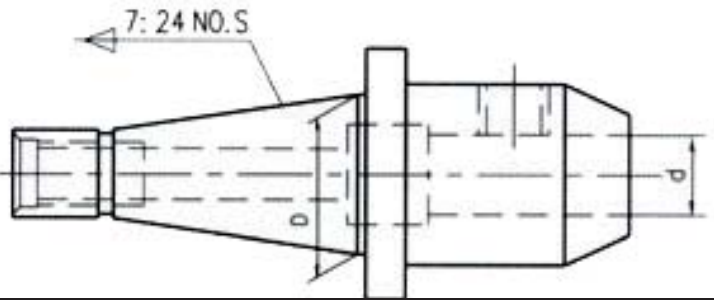
Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper
431-0210	4mm	MT1	431-0228	12mm	MT3	431-0246	24mm	MT4	431-0264	50mm	MT5
431-0211	6mm		431-0229	14mm		431-0247	25mm		431-0265	63mm	
431-0212	8mm		431-0230	16mm		431-0248	32mm		431-0266	4mm	
431-0213	10mm		431-0231	18mm		431-0249	40mm		431-0267	6mm	
431-0214	12mm		431-0232	20mm		431-0250	4mm		431-0268	8mm	
431-0215	4mm	MT2	431-0233	22mm	MT4	431-0251	6mm	MT5	431-0269	10mm	MT6
431-0216	6mm		431-0234	24mm		431-0252	8mm		431-0270	12mm	
431-0217	8mm		431-0235	25mm		431-0253	10mm		431-0271	14mm	
431-0218	10mm		431-0236	4mm		431-0254	12mm		431-0272	16mm	
431-0219	12mm		431-0237	6mm		431-0255	14mm		431-0273	18mm	
431-0220	14mm		431-0238	8mm		431-0256	16mm		431-0274	20mm	
431-0221	16mm		431-0239	10mm		431-0257	18mm		431-0275	22mm	
431-0222	18mm		431-0240	12mm		431-0258	20mm		431-0276	24mm	
431-0223	20mm		431-0241	14mm		431-0259	22mm		431-0277	25mm	
431-0224	4mm		MT3	431-0242		16mm	431-0260		24mm	431-0278	
431-0225	6mm	431-0243		18mm	431-0261	25mm	431-0279	40mm			
431-0226	8mm	431-0244		20mm	431-0262	32mm	431-0280	50mm			
0227-431	10mm	0245-431		22mm	0263-431	40mm	0281-431	63mm			

BROWN AND SHARP TAPER END MILL HOLDER



Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper
430-0020	3/16"	B&S7	430-0030	3/8"	B&S9	430-0040	3/4"	B&S10	430-0050	5/8"	B&S11
430-0021	1/4"		430-0031	1/2"		430-0041	7/8"		430-0051	3/4"	
430-0022	5/16"		430-0032	5/8"		430-0042	1"		430-0052	7/8"	
430-0023	3/8"		430-0033	3/4"	430-0043	1-1/4"	430-0053	1"			
430-0024	1/2"		430-0034	3/16"	430-0044	1-1/2"	430-0054	1-1/4"			
430-0025	5/8"		430-0035	1/4"	430-0045	3/16"	430-0055	1-1/2"			
430-0026	3/4"	B&S10	430-0036	5/16"	B&S11	430-0046	1/4"	430-0056	2"		
430-0027	3/16"		430-0037	3/8"		430-0047	5/16"	430-0057	2-1/2"		
430-0028	1/4"		430-0038	1/2"		430-0048	3/8"				
430-0029	5/16"		430-0039	5/8"	430-0049	1/2"					

ISO TAPER END MILL HOLDER



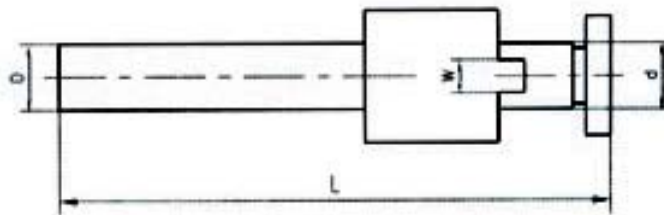
INCH

Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper	Order No.	Hole Size	Shank Taper
432-0301	3/16"	ISO30	432-0309	1-1/4"	ISO30	432-0408	1"	ISO40	432-0506	3/4"	ISO50
432-0302	5/16"		432-0401	3/16"	ISO40	432-0409	1-1/4"		432-0507	7/8"	
432-0303	3/8"		432-0402	5/16"		432-0410	1-1/2"		432-0508	1"	
432-0304	1/2"		432-0403	3/8"		432-0411	2"	432-0509	1-1/4"		
432-0305	5/8"		432-0404	1/2"		432-0412	2-1/2"	432-0510	1-1/2"		
432-0306	3/4"		432-0405	5/8"		432-0503	3/8"	432-0511	2"		
432-0307	7/8"		432-0406	3/4"		432-0504	1/2"	432-0512	2-1/2"		
432-0308	1"		432-0407	7/8"	432-0505	5/8"					

Metric

Order NO.	Hole Size	Shank Taper	Hole Size	Hole Size	Shank Taper	Hole Size	Hole Size	Shank Taper	Hole Size	Hole Size	Shank Taper
432-0321	6mm	ISO30	432-0330	32mm	ISO30	432-0429	25mm	ISO40	432-0527	18mm	ISO50
432-0322	8mm		432-0421	6mm	ISO40	432-0430	32mm		432-0528	20mm	
432-0323	10mm		432-0422	8mm		432-0431	40mm		432-0529	25mm	
432-0324	12mm		432-0423	10mm		432-0521	6mm	ISO50	432-0530	32mm	
432-0325	14mm		432-0424	12mm		432-0522	8mm		432-0531	40mm	
432-0326	16mm		432-0425	14mm		432-0523	10mm		432-0532	42mm	
432-0327	18mm		432-0426	16mm		432-0524	12mm		432-0533	50mm	
432-0328	20mm		432-0427	18mm	432-0525	14mm	432-0534		63mm		
432-0329	25mm		432-0428	20mm	432-0526	16mm					

STRAIGHT SHANK SHELL END MILL ARBORS



Metric, mm

Order No.	D	d	W	L	Order No.	D	d	W	L
431-0420	12	13	8	85	431-0443	32	27	12	117
431-0421	12	16	8	90	431-0444	32	32	14	123
431-0422	12	22	10	97	431-0445	32	40	16	130
431-0423	16	13	8	88	431-0446	32	50	18	137
431-0424	16	16	8	93	431-0447	32	60	20	162
431-0425	16	22	10	100	431-0448	40	16	8	115
431-0426	16	27	12	105	431-0449	40	22	10	122
431-0427	20	13	8	90	431-0450	40	27	12	127
431-0428	20	16	8	95	431-0451	40	32	14	133
431-0429	20	22	10	102	431-0452	40	40	16	140
431-0430	20	27	12	107	431-0453	40	50	18	147
431-0431	20	32	14	113	431-0454	40	60	20	172
431-0432	20	40	16	120	431-0455	50	22	10	132
431-0433	25	13	8	96	431-0456	50	27	12	137
431-0434	25	16	8	101	431-0457	50	32	14	143
431-0435	25	22	10	108	431-0458	50	40	16	150
431-0436	25	27	12	113	431-0459	50	50	18	157
431-0437	25	32	14	119	431-0460	50	60	20	182
431-0438	25	40	16	126	431-0461	63	27	12	147
431-0439	25	50	18	133	431-0462	63	32	14	153
431-0440	32	13	8	100	431-0463	63	40	16	160
431-0441	32	16	8	105	431-0464	63	50	18	167
431-0442	32	22	10	112	431-0465	63	60	20	192

Inch Diameter

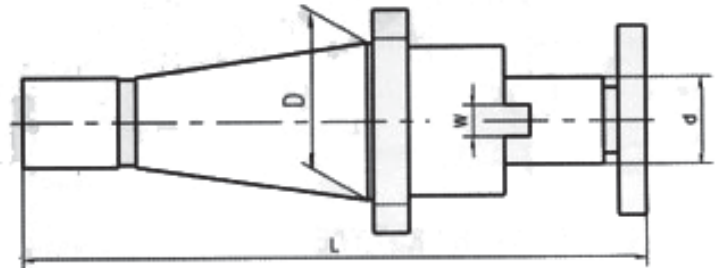
Order No.	D (in)	d (in)	W (mm)	L (mm)	Order No.	D (in)	d (in)	W (mm)	L (mm)
431-0470	1/2	1/2	6.35	104	431-0477	3/4	1/2	6.35	146
431-0471	1/2	5/8	7.14	105	431-0478	3/4	5/8	7.14	147
431-0472	1/2	3/4	7.94	113	431-0479	3/4	3/4	7.94	154.5
431-0473	1/2	7/8	8.7	114	431-0480	3/4	7/8	8.7	155.5
431-0474	1/2	1	9.53	114	431-0481	3/4	1	9.53	155.5
431-0475	1/2	1-1/4	12.7	117	431-0482	3/4	1-1/4	12.7	159
431-0476	1/2	1-1/2	15.88	130	431-0483	3/4	1-1/2	15.88	168

ISO/R8 ADAPTOR

Order No.	Outside Taper	Inside Taper	D(mm)	D1 (mm)	L(mm)
435-0623	ISO30	R8	42	31.75	180
435-0624	ISO40	R8	44.5	44.45	167
435-0625	ISO50	R8	44.5	69.85	175



7:24 SHANK SHELL END MILL ARBORS

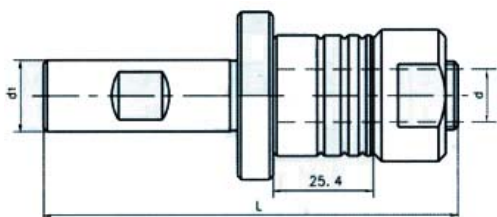


Metric Diameter

Order No.	Shank Taper	D (mm)	d (mm)	W (mm)	L (mm)	Weight (kg)	Order No.	Shank Taper	D (mm)	d (mm)	W (mm)	L (mm)	Weight (kg)
432-1300	ISO30	31.75	13	8	121	0.31	432-1316	ISO40	44.45	40	16	182	1.91
432-1301		31.75	16	8	126	0.37	432-1317		44.45	50	18	187	2.8
432-1303		31.75	22	10	129	0.47	432-1318		44.45	60	20	209	4.23
432-1305		31.75	27	12	134	0.6	432-1320		ISO50	69.85	16	8	205
432-1306		31.75	32	14	141	1.04	432-1322	69.85		22	10	208	3.04
432-1307		31.75	40	16	150	1.59	432-1324	69.85		27	12	211	3.22
432-1308		31.75	50	18	155	2.43	432-1325	69.85		32	14	215	3.49
432-1310		ISO40	44.45	16	8	153	0.71	432-1326	69.85	40	16	219	3.91
432-1312	44.45		22	10	156	0.82	432-1327	69.85	50	18	224	4.75	
432-1314	44.45		27	12	159	0.95	432-1328	69.85	60	20	246	6.15	
432-1315	44.45		32	14	178	1.45							

Inch Diameter

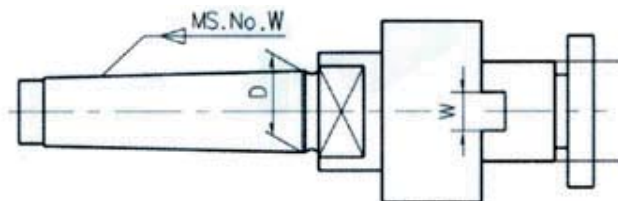
Order No.	Shank Taper	D (mm)	d (mm)	W (mm)	L (mm)	Weight (kg)	Order No.	Shank Taper	D (mm)	d (mm)	W (mm)	L (mm)	Weight (kg)
432-1330	ISO30	31.75	1/2"	6.35	139.5	0.55	432-1342	ISO40	44.45	1"	9.53	170	1.4
432-1331		31.75	5/8"	7.14	140.5	0.64	432-1343		44.45	1-1/4"	12.7	171	1.7
432-1332		31.75	3/4"	7.94	144	0.75	432-1344		44.45	1-1/2"	15.88	178	2.2
432-1333		31.75	7/8"	8.7	145	0.88	432-1345		44.45	2"	19.05	205	3.9
432-1334		31.75	1"	9.53	145	1.02	432-1346	ISO50	69.85	1/2"	6.35	198	2.7
432-1335		31.75	1-1/4"	12.7	146	1.41	432-1347		69.85	5/8"	7.14	199	2.8
432-1336		31.75	1-1/2"	15.88	153	1.83	432-1348		69.85	3/4"	7.94	202	2.9
432-1337		31.75	2"	19.05	180	3.57	432-1349		69.85	7/8"	8.7	203	3
432-1338	ISO40	44.45	1/2"	6.35	164.5	0.92	432-1350	69.85	1"	9.53	203	3.2	
432-1339		44.45	5/8"	7.14	165.5	1.01	432-1351	69.85	1-1/4"	12.7	204	4	
432-1340		44.45	3/4"	7.94	169	1.13	432-1352	69.85	1-1/2"	15.88	214.5	4	
432-1341		44.45	7/8"	8.7	170	1.3	432-1353	69.85	2"	19.05	138.5	5.7	



STRAIGHT SHANK MILLING MACHINE ARBORS

Order No.	d1	d	L1(mm)	Order No.	d1	d	L1(mm)
430-0550	1/2"	1/2"	102.4	430-0556	3/4"	1/2"	108.7
430-0551	1/2"	5/8"	102.4	430-0557	3/4"	5/8"	108.7
430-0552	1/2"	3/4"	105.6	430-0558	3/4"	3/4"	111.9
430-0553	1/2"	7/8"	105.6	430-0559	3/4"	7/8"	111.9
430-0554	1/2"	1"	111.9	430-0560	3/4"	1"	118.3
430-0555	1/2"	1-1/4"	111.9	430-0561	3/4"	1-1/4"	118.3

MORSE SHANK SHELL END MILL ARBORS (Drawbar Type)



Inch diameter

Order No.	Shank Taper	D(mm)	d(in)	W(mm)	Wt(kg)	Order No.	Shank Taper	D(mm)	d(in)	W(mm)	Wt(kg)
431-3252	MT2	17.78	1/2"	6.35	0.253	431-3265	MT4	31.267	7/8"	8.7	1.105
431-3253		17.78	5/8"	7.14	0.307	431-3266		31.267	1"	9.53	1.36
431-3254		17.78	3/4"	7.94	0.369	431-3267		31.267	1-1/4"	12.7	1.526
431-3255		17.78	7/8"	8.7	0.59	431-3268		31.267	1-1/2"	15.88	1.859
431-3256	MT3	23.825	1/2"	6.35	0.48	431-3269	MT5	44.399	1/2"	6.35	1.931
431-3257		23.825	5/8"	7.14	0.53	431-3270		44.399	5/8"	7.14	1.994
431-3258		23.825	3/4"	7.94	0.65	431-3271		44.399	3/4"	7.94	2.079
431-3259		23.825	7/8"	8.7	0.73	431-3272		44.399	7/8"	8.7	2.76
431-3260		23.825	1"	9.53	0.85	431-3273		44.399	1"	9.53	2.278
431-3261		23.825	1-1/4"	12.7	1.148	431-3274		44.399	1-1/4"	12.7	2.55
431-3262	MT4	31.267	1/2"	6.35	0.859	431-3275	44.399	1-1/2"	15.88	2.428	
431-3263		31.267	5/8"	7.14	0.923	431-3276	44.399	2"	19.05	2.725	
431-3264		31.267	3/4"	7.94	1.008						

Metric diameter

Order NO.	Shank Taper	D(mm)	d (mm)	W (mm)	Wt (kg)	Order No.	Shank Taper	D (mm)	d (mm)	W (mm)	Wt(kg)
431-3277	MT2	17.78	13	8	0.269	431-3289	MT4	31.267	27	12	1.198
431-3278		17.78	16	8	0.314	431-3290		31.267	32	14	1.42
431-3279		17.78	22	10	0.417	431-3291		31.267	40	16	2.224
431-3280	MT3	23.825	13	8	0.484	431-3292	MT5	31.267	50	18	2.482
431-3281		23.825	16	8	0.53	431-3293		44.399	16	8	2.064
431-3282		23.825	22	10	0.637	431-3294		44.399	22	10	2.219
431-3283		23.825	27	12	0.77	431-3295		44.399	27	12	2.41
431-3284		23.825	32	14	0.969	431-3296		44.399	32	14	2.697
431-3285		23.825	40	16	1.507	431-3297		44.399	40	16	3.145
431-3286	MT4	31.267	13	8	0.879	431-3298	44.399	50	18	4.035	
431-3287		31.267	16	8	0.931	431-3299	44.399	60	20	5.154	
431-3288		31.267	22	10	1.05						

R8 STUB MILLING ARBOR



Order NO.	Bush Diameter	Clamping Length(mm)	Overall Length	Wt(kg)
430-0311	13mm	63mm	199	0.527
430-0312	16mm		201	0.591
430-0313	22mm		206	0.733
430-0314	27mm		211	0.905
430-0315	32mm		215	1.089
430-0304	1"	50.8mm	193	0.786
430-0305	1-1/4"		196	0.947

**MORSE SHANK SHELL END MILL ARBORS
(Tang Type)**

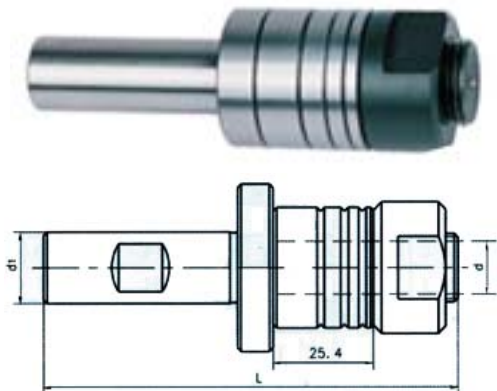


Inch diameter

Order No.	Shank Taper	D(mm)	d(in)	W(mm)	Wt(kg)	Order No.	Shank Taper	D(mm)	d(in)	W(mm)	Wt(kg)
431-3201	MT2	17.78	1/2"	6.35	0.253	431-3214	MT4	31.267	7/8"	8.7	1.105
431-3202		17.78	5/8"	7.14	0.307	431-3215		31.267	1"	9.53	1.36
431-3203		17.78	3/4"	7.94	0.369	431-3216		31.267	1-1/4"	12.7	1.526
431-3204		17.78	7/8"	8.7	0.59	431-3217		31.267	1-1/2"	15.88	1.859
431-3205	MT3	23.825	1/2"	6.35	0.48	431-3218	MT5	44.399	1/2"	6.35	1.931
431-3206		23.825	5/8"	7.14	0.53	431-3219		44.399	5/8"	7.14	1.994
431-3207		23.825	3/4"	7.94	0.65	431-3220		44.399	3/4"	7.94	2.079
431-3208		23.825	7/8"	8.7	0.73	431-3221		44.399	7/8"	8.7	2.76
431-3209		23.825	1"	9.53	0.85	431-3222		44.399	1"	9.53	2.278
431-3210	MT4	23.825	1-1/4"	12.7	1.148	431-3223	MT5	44.399	1-1/4"	12.7	2.55
431-3211		31.267	1/2"	6.35	0.859	431-3224		44.399	1-1/2"	15.88	2.428
431-3212		31.267	5/8"	7.14	0.923	431-3225		44.399	2"	19.05	2.728
431-3213		31.267	3/4"	7.94	1.008						

Metric diameter

Order NO.	Shank Taper	D(mm)	d (mm)	W (mm)	Wt (kg)	Order No.	Shank Taper	D (mm)	d (mm)	W (mm)	Wt(kg)
431-3226	MT2	17.78	13	8	0.269	431-3241	MT4	31.267	27	12	1.198
431-3227		17.78	16	8	0.314	431-3242		31.267	32	14	1.42
431-3228		17.78	22	10	0.417	431-3243		31.267	40	16	2.224
431-3232	MT3	23.825	13	8	0.484	431-3244	MT5	31.267	50	18	2.482
431-3233		23.825	16	8	0.53	431-3245		44.399	16	8	2.064
431-3234		23.825	22	10	0.637	431-3246		44.399	22	10	2.219
431-3235		23.825	27	12	0.77	431-3247		44.399	27	12	2.41
431-3236		23.825	32	14	0.969	431-3248		44.399	32	14	2.697
431-3237	MT4	23.825	40	16	1.507	431-3249	MT5	44.399	40	16	3.145
431-3238		31.267	13	8	0.879	431-3250		44.399	50	18	4.035
431-3239		31.267	16	8	0.931	431-3251		44.399	60	20	5.154
431-3240		31.267	22	10	1.05						



STRAIGHT SHANK MILLING MACHINE ARBORS

Order No.	d1	d	L1(mm)	Order No.	d1	d	L1(mm)
430-0550	1/2"	1/2"	102.4	430-0556	3/4"	1/2"	108.7
430-0551	1/2"	5/8"	102.4	430-0557	3/4"	5/8"	108.7
430-0552	1/2"	3/4"	105.6	430-0558	3/4"	3/4"	111.9
430-0553	1/2"	7/8"	105.6	430-0559	3/4"	7/8"	111.9
430-0554	1/2"	1"	111.9	430-0560	3/4"	1"	118.3
430-0555	1/2"	1-1/4"	111.9	430-0561	3/4"	1-1/4"	118.3

Inch Milling Machine Arbors



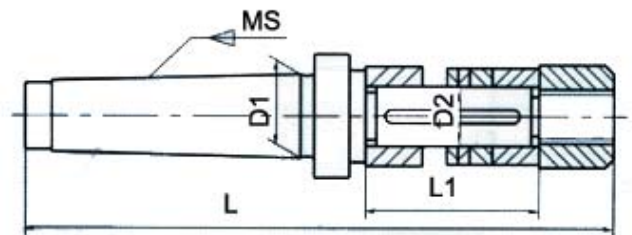
Order No.	Taper	Shank Dia.	Clamping Length	Bush Diameter	Type	Bush Numbers
430-0331	ISO30	1"	10"		A	none
430-0332	ISO30	1"	12"		A	none
430-0333	ISO30	1-1/4"	10"		A	none
430-0334	ISO30	1"	2"		B	none
430-0335	ISO30	1"	8"		B	none
430-0336	ISO30	1"	12"	1-7/8"	B	1
430-0337	ISO30	7/8"	10"		A	none
430-0338	ISO40	7/8"	16"	1-7/8"	A	1
430-0339	ISO40	1"	8"		A	none
430-0340	ISO40	1"	10"		A	none
430-0341	ISO40	1"	12"		A	none
430-0342	ISO40	1"	16"		A	none
430-0343	ISO40	1"	20"		A	none
430-0344	ISO40	1-1/4"	8"		A	none
430-0345	ISO40	1-1/4"	10"		A	none
430-0346	ISO40	1-1/4"	12"		A	none
430-0347	ISO40	1-1/4"	16"		A	none
430-0348	ISO40	1-1/4"	3"		A	none
430-0349	ISO40	1"	3"		B	none
430-0350	ISO40	7/8"	16"	1-7/8"	B	none
430-0351	ISO40	1-1/4"	16"	1-7/8"	A	1
430-0352	ISO40	7/8"	14"	1-7/8"	B	1
430-0353	ISO40	1"	14"	1-7/8"	B	1
430-0354	ISO40	1-1/4"	14"	1-7/8"	B	1
430-0355	ISO40	1"	20"	1-7/8"	B	1
430-0356	ISO40	1-1/4"	20"	1-7/8"	B	1
430-0357	ISO40	1-1/2"	20"	2-1/8"	B	1
430-0358	ISO50	7/8"	18"	2-1/8"	A	1
430-0359	ISO50	1"	8"	2-1/8"	A	1
430-0360	ISO50	1"	12"		A	none
430-0361	ISO50	1"	18"	2-1/8"	A	1
430-0362	ISO50	1-1/4"	8"		A	none
430-0363	ISO50	1-1/4"	12"		A	none
430-0364	ISO50	1-1/4"	18"	2-1/8"	A	1

Inch Milling Machine Arbors



Order No.	Taper	Shank Dia.	Clamping Length	Bush Diameter	Type	Bush Numbers
430-0365	ISO50	1"	15"	2-1/8"	B	1
430-0366	ISO50	1"	18"	2-1/8"	B	2
430-0367	ISO50	1"	24"	2-1/8"	B	2
430-0368	ISO50	1-1/4"	15"	2-1/8"	B	1
430-0369	ISO50	1-1/4"	18"	2-1/8"	B	2
430-0370	ISO50	1-1/4"	24"	2-3/4"	B	2
430-0371	ISO50	1-1/4"	30"	2-3/4"	B	2
430-0372	ISO50	1-1/2"	18"	2-3/4"	B	2
430-0373	ISO50	1-1/2"	24"	2-3/4"	B	2
430-0374	ISO50	1-1/2"	30"	2-3/4"	B	2
430-0375	ISO50	1-1/2"	36"	2-3/4"	B	2
430-0376	ISO50	1"	3-1/2"		B	none
430-0377	ISO50	1-1/4"	3-1/2"		B	none
430-0378	ISO50	1-1/2"	3-1/2"		B	none
430-0379	ISO50	7/8"	10"		A	none
430-0380	ISO50	2"	24"	2-3/4"	B	2
430-0381	ISO50	2"	30"	2-3/4"	B	2
430-0382	ISO50	2"	36"	2-3/4"	B	2
430-0383	ISO50	2-1/2"	36"	3-3/8"	B	2

MORSE SHANK STUB MILLING MACHINE ARBOR



Model	Shank	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	Wt (kg)	Model	Shank	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	Wt (kg)
430-0570	MT2	17.78	22	171	63	0.421	430-0578	MT3	23.825	27	211	63	0.905
430-0571	MT2	17.78	12.7	148	63	0.43	430-0579	MT3	23.825	31.75	177	50.8	0.795
430-0572	MT2	17.78	15.875	151.6	50.8	0.478	430-0580	MT3	23.825	32	215	63	1.089
430-0573	MT2	17.78	25.4	157	50.8	0.504	430-0581	MT4	31.267	13	227	63	0.336
430-0574	MT3	23.825	13	199	63	0.527	430-0582	MT4	31.267	16	229	63	0.4
430-0575	MT3	23.825	16	201	63	0.591	430-0583	MT4	31.267	22	234	63	0.542
430-0576	MT3	23.825	22	206	63	0.783	430-0584	MT4	31.267	27	239	63	0.714
430-0577	MT3	23.825	25.4	174	50.8	0.634	430-0585	MT4	31.267	32	243	63	0.89

Metric Milling Machine Arbors



Order No.	Taper	d (mm)	L1 (mm)	Wt(kg)	Type	Order No.	Taper	d (mm)	L1 (mm)	Wt(kg)	Type
430-0401	ISO30	16	200	0.722	A	430-0435	ISO40	40	630	7.51	A
430-0402	ISO30	16	250	0.796	A	430-0436	ISO50	22	200	3.533	A
430-0403	ISO30	16	315	0.892	A	430-0437	ISO50	22	250	3.672	A
430-0404	ISO30	16	400	1.108	A	430-0438	ISO50	22	315	3.853	A
430-0405	ISO30	22	200	1.065	A	430-0439	ISO50	22	400	4.089	A
430-0406	ISO30	22	250	1.204	A	430-0440	ISO50	22	500	4.367	A
430-0407	ISO30	22	315	1.385	A	430-0441	ISO50	22	630	4.728	A
430-0408	ISO30	22	400	1.621	A	430-0442	ISO50	27	315	4.445	A
430-0409	ISO30	22	200	1.462	A	430-0443	ISO50	27	400	4.801	A
430-0410	ISO30	22	250	1.671	A	430-0444	ISO50	27	500	5.22	A
430-0411	ISO30	22	315	1.944	A	430-0445	ISO50	27	630	5.766	A
430-0412	ISO30	22	400	2.3	A	430-0446	ISO50	27	800	6.477	A
430-0413	ISO40	16	200	1.308	A	430-0447	ISO50	32	315	4.762	A
430-0414	ISO40	16	250	1.382	A	430-0448	ISO50	32	400	5.269	A
430-0415	ISO40	16	315	1.478	A	430-0449	ISO50	32	500	5.865	A
430-0416	ISO40	16	400	1.664	A	430-0450	ISO50	32	630	6.639	A
430-0417	ISO40	16	200	1.664	A	430-0451	ISO50	32	800	7.652	A
430-0418	ISO40	16	250	1.803	A	430-0452	ISO50	32	1000	8.844	A
430-0419	ISO40	16	315	1.984	A	430-0453	ISO50	40	400	4.538	A
430-0420	ISO40	16	400	2.22	A	430-0454	ISO50	40	500	5.479	A
430-0421	ISO40	16	500	2.498	A	430-0455	ISO50	40	630	6.702	A
430-0422	ISO40	27	250	2.287	A	430-0456	ISO50	40	800	8.302	A
430-0423	ISO40	27	315	2.559	A	430-0457	ISO50	40	1000	10.184	A
430-0424	ISO40	27	400	2.915	A	430-0458	ISO50	50	400	9.98	A
430-0425	ISO40	27	500	3.334	A	430-0459	ISO50	50	500	11.46	A
430-0426	ISO40	27	630	3.879	A	430-0460	ISO50	50	630	13.383	A
430-0427	ISO40	32	250	2.86	A	430-0461	ISO50	50	800	15.897	A
430-0428	ISO40	32	315	3.131	A	430-0462	ISO50	50	1000	18.855	A
430-0429	ISO40	32	400	3.484	A	430-0463	ISO50	60	400	13.294	A
430-0430	ISO40	32	500	3.9	A	430-0464	ISO50	60	500	13.568	A
430-0431	ISO40	32	630	4.649	A	430-0465	ISO50	60	630	13.924	A
430-0432	ISO40	40	315	4.589	A	430-0466	ISO50	60	800	14.39	A
430-0433	ISO40	40	400	5.388	A	430-0467	ISO50	60	1000	14.938	A
430-0434	ISO40	40	500	5.83	A						

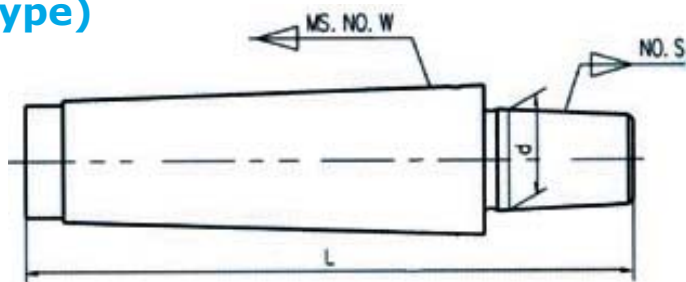
Metric Milling Machine Arbors



Order No.	Taper	d (mm)	L1 (mm)	Wt(kg)	Type
430-0468	ISO30	16	200	0.741	B
430-0469	ISO30	16	250	0.815	B
430-0470	ISO30	16	315	0.911	B
430-0471	ISO30	16	400	1.037	B
430-0472	ISO30	22	200	1.084	B
430-0473	ISO30	22	250	1.223	B
430-0474	ISO30	22	315	1.404	B
430-0475	ISO30	22	400	1.64	B
430-0476	ISO30	27	200	1.481	B
430-0477	ISO30	27	250	1.690	B
430-0478	ISO30	27	315	1.963	B
430-0479	ISO30	27	400	2.319	B
430-0480	ISO40	16	200	1.336	B
430-0481	ISO40	16	250	1.41	B
430-0482	ISO40	16	315	1.506	B
430-0483	ISO40	16	400	1.632	B
0484-430	ISO40	16	200	1.7	B
0485-430	ISO40	22	250	1.836	B
0486-430	ISO40	22	315	2.02	B
0487-430	ISO40	22	400	2.256	B
0488-430	ISO40	22	500	2.534	B
430-0489	ISO40	27	250	2.36	B
430-0490	ISO40	27	315	2.632	B
430-0491	ISO40	27	400	2.988	B
430-0492	ISO40	27	500	3.407	B
430-0493	ISO40	27	630	3.952	B
430-0494	ISO40	32	250	2.957	B
430-0495	ISO40	32	315	3.228	B
430-0496	ISO40	32	400	3.581	B
430-0497	ISO40	32	500	3.997	B
430-0498	ISO40	32	630	4.746	B
430-0499	ISO40	40	315	4.743	B
430-0500	ISO40	40	400	5.542	B
430-0501	ISO40	40	500	5.984	B

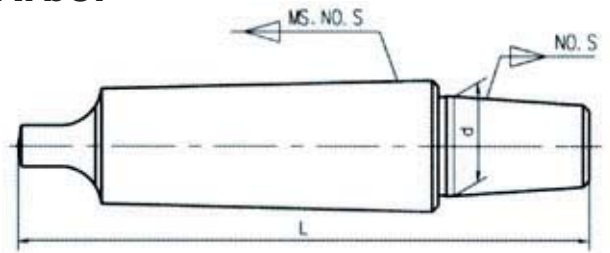
Order No.	Taper	d (mm)	L1 (mm)	Wt(kg)	Type
430-0502	ISO40	40	630	7.704	B
430-0503	ISO50	22	200	3.569	B
430-0504	ISO50	22	250	3.768	B
430-0505	ISO50	22	315	3.889	B
430-0506	ISO50	22	400	4.125	B
430-0507	ISO50	22	500	4.403	B
430-0508	ISO50	22	630	4.764	B
430-0509	ISO50	27	315	4.518	B
430-0510	ISO50	27	400	4.784	B
430-0511	ISO50	27	500	5.296	B
430-0512	ISO50	27	630	5.835	B
430-0513	ISO50	27	800	5.55	B
430-0514	ISO50	32	315	4.859	B
430-0515	ISO50	32	400	5.366	B
430-0516	ISO50	32	500	5.963	B
430-0517	ISO50	32	630	6.736	B
430-0518	ISO50	32	800	7.749	B
430-0519	ISO50	32	1000	8.941	B
430-0520	ISO50	40	400	4.692	B
430-0521	ISO50	40	500	5.633	B
430-0522	ISO50	40	630	6.856	B
430-0523	ISO50	40	800	8.456	B
430-0524	ISO50	40	1000	10.388	B
430-0525	ISO50	50	400	10.366	B
430-0526	ISO50	50	500	11.835	B
430-0527	ISO50	50	630	13.751	B
430-0528	ISO50	50	800	16.72	B
430-0529	ISO50	50	1000	19.23	B
430-0530	ISO50	60	400	13.813	B
430-0531	ISO50	60	500	14.087	B
430-0532	ISO50	60	630	14.443	B
430-0533	ISO50	60	800	14.909	B
430-0534	ISO50	60	1000	15.457	B

Morse Taper Drill Chuck Arbor (Drawbar type)



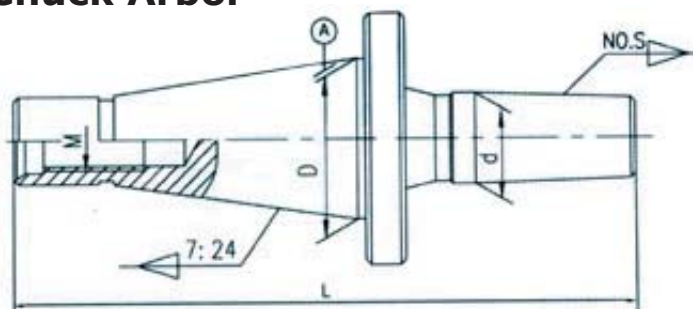
Order No.	Size	d (mm)	L (mm)	Order No.	Size	d (mm)	L (mm)
436-0700	MTOxJ0	6.35	67	436-0738	MT3xJ5	35.89	136
436-0701	MTOxJ1	9.754	72	436-0739	MT3xJ6	17.17	114
436-0702	MTOxJ2	14.199	78	436-0740	MT3xJ33	15.85	114
436-0703	MTOxJ3	20.599	87	436-0741	MT3xB10	10.094	107
436-0704	MTOxJ6	17.17	81	436-0742	MT3xB12	12.065	111
436-0705	MTOxJ33	15.85	81	436-0743	MT3xB16	15.733	118
436-0706	MTOxB10	10.094	74	436-0744	MT3xB18	17.78	126
436-0707	MTOxB12	12.065	78	436-0745	MT3xB22	21.793	135
436-0708	MTOxB16	15.733	85	436-0746	MT3xB24	23.825	145
436-0709	MTOxB18	17.78	93	436-0747	MT4xJ2	14.199	134
436-0710	MT1xJ0	6.35	71	436-0748	MT4xJ3	20.599	143
436-0711	MT1xJ1	9.754	76	436-0749	MT4xJ4	28.55	154
436-0712	MT1xJ2	14.199	82	436-0750	MT4xJ5	35.89	159
436-0713	MT1xJ3	20.599	91	436-0751	MT4xJ6	17.17	137
436-0714	MT1xJ6	17.17	85	436-0752	MT4xJ33	15.85	137
436-0715	MT1xJ33	15.85	85	436-0753	MT4xB16	15.733	141
436-0716	MT1xB10	10.094	78	436-0754	MT4xB18	17.78	149
436-0717	MT1xB12	12.065	82	436-0755	MT4x22	21.793	158
436-0718	MT1xB16	15.733	89	436-0756	MT4x24	23.825	168
436-0719	MT1xB18	17.78	97	436-0757	MT5xJ2	14.199	161
436-0720	MT2xJ0	6.35	83	436-0758	MT5xJ3	20.599	170
436-0721	MT2xJ1	9.754	88	436-0759	MT5xJ4	28.55	181
436-0722	MT2xJ2	14.199	94	436-0760	MT5xJ5	35.89	186
436-0723	MT2xJ3	20.599	103	436-0761	MT5xJ6	17.17	164
436-0724	MT2xJ4	28.55	114	436-0762	MT5xJ33	15.85	164
436-0725	MT2xJ5	35.89	119	436-0763	MT5xB16	15.733	168
436-0726	MT2xJ6	17.17	97	436-0764	MT5xB18	17.78	176
436-0727	MT2xJ33	15.85	97	436-0765	MT5xB22	21.793	185
436-0728	MT2xB10	10.094	90	436-0766	MT5xB24	23.825	195
436-0729	MT2xB12	12.065	94	436-0767	MT6xJ3	20.599	224
436-0730	MT2xB16	15.733	101	436-0768	MT6xJ4	28.55	235
436-0731	MT2xB18	17.78	109	436-0769	MT6xJ5	35.89	240
436-0732	MT2xB22	21.793	117	436-0770	MT6xJ6	17.17	218
436-0733	MT2xB24	23.825	127	436-0771	MT6xJ33	15.85	218
436-0734	MT3xJ1	9.754	105	436-0772	MT6xB16	15.733	222
436-0735	MT3xJ2	14.199	111	436-0773	MT6xB18	17.78	230
436-0736	MT3xJ3	20.599	120	436-0774	MT6xB22	21.793	238
436-0737	MT3xJ4	28.55	131	436-0775	MT6xB24	23.825	248

**Morse Taper Drill Chuck Arbor
(Tang type)**



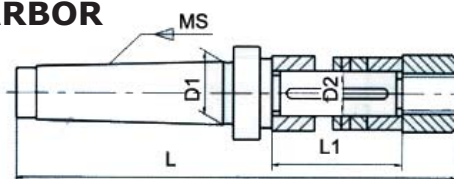
Order No.	Size	d (mm)	L (mm)	Order No.	Size	d (mm)	L (mm)
436-0776	MT0-B6	6.35	75	436-0817	MT3-B16	15.733	131
436-0777	MT0-B10	10.094	80	436-0818	MT3-B18	17.78	139
436-0778	MT0-B12	12.065	84	436-0819	MT3-B22	21.793	147
436-0779	MT0-B16	15.733	91	436-0820	MT3-B24	23.825	157
436-0780	MT0-B18	17.78	99	436-0821	MT3-J0	6.35	113
436-0781	MT0-B22	21.793	108	436-0822	MT3-J1	9.754	118
436-0782	MT0-B24	23.825	118	436-0823	MT3-J2	14.199	124
436-0783	MT0-J0	6.35	73	436-0824	MT3-J3	20.599	133
436-0784	MT0-J3	20.599	93	436-0825	MT3-J4	28.55	144
436-0785	MT0-J33	15.85	88	436-0826	MT3-J5	35.89	149
436-0786	MT1-B10	10.094	86	436-0827	MT3-J6	17.17	127
436-0787	MT1-B12	12.065	90	436-0828	MT3-J33	15.85	127
436-0788	MT1-B16	15.733	97	436-0829	MT4-B10	10.094	145
436-0789	MT1-B18	17.78	105	436-0830	MT4-B12	12.065	149
436-0790	MT1-B22	21.793	114	436-0831	MT4-B16	15.733	156
436-0791	MT1-B24	23.825	124	436-0832	MT4-B18	17.78	164
436-0792	MT1-J0	6.35	79	436-0833	MT4-B22	21.793	172
436-0793	MT1-J1	9.754	85	436-0834	MT4-B24	23.825	182
436-0794	MT1-J2	14.199	90	436-0835	MT4-J0	6.35	138
436-0795	MT1-J3	20.599	99	436-0836	MT4-J1	9.754	143
436-0796	MT1-J4	28.55	110	436-0837	MT4-J2	14.199	149
436-0797	MT1-J5	35.89	116	436-0838	MT4-J3	20.599	158
436-0798	MT1-J6	17.17	94	436-0839	MT4-J4	28.55	169
436-0799	MT1J33	15.85	94	436-0840	MT4-J5	35.89	174
436-0800	MT2-B10	10.094	101	436-0841	MT4-J6	17.17	152
436-0801	MT2-B12	12.065	105	436-0842	MT4-J33	15.85	152
436-0802	MT2-B16	15.733	112	436-0843	MT5-B10	10.094	177
436-0803	MT2-B18	17.78	120	436-0844	MT5-B12	12.065	181
436-0804	MT2-B22	21.793	128	436-0845	MT5-B16	15.733	188
436-0805	MT2-B24	23.825	138	436-0846	MT5-B18	17.78	196
436-0806	MT2-B18S	17.431	113	436-0847	MT5-B22	21.793	204
436-0807	MT2-J0	6.35	94	436-0848	MT5-B24	23.825	214
436-0808	MT2-J1	9.754	100	436-0849	MT5-J0	6.35	170
436-0809	MT2-J2	14.199	105	436-0850	MT5-J1	9.754	175
436-0810	MT2-J3	20.599	114	436-0851	MT5-J2	14.199	181
436-0811	MT2-J4	28.55	125	436-0852	MT5-J3	20.599	190
436-0812	MT2-J5	35.89	130	436-0853	MT5-J4	28.55	201
436-0813	MT2-J6	17.17	108	436-0854	MT5-J5	35.89	206
436-0814	MT2-J33	15.85	108	436-0855	MT5-J6	17.17	184
436-0815	MT3-B10	10.094	120	436-0856	MT5-J33	15.85	184
436-0816	MT3-B12	12.065	124	436-0857	MT6-J6	17.17	246

ISO Taper Drill Chuck Arbor



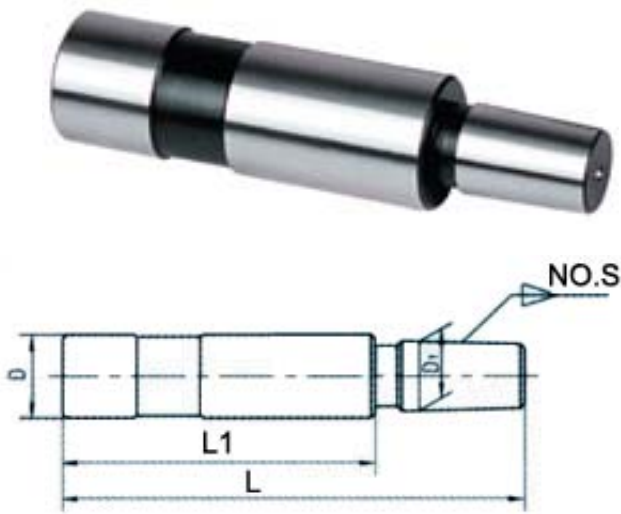
Order No.	Size	D (mm)	d (mm)	L (mm)	M	Order No.	Size	D (mm)	d (mm)	L (mm)	M
436-0858	ISO30-J0	31.75	6.35	99	M12	436-0881	ISO50-J6	69.85	17.17	184	M24
436-0859	ISO30-J1		9.754	106		436-0882	ISO50-J3		20.599	191	
436-0860	ISO30-J2S		13.94	109		436-0883	ISO50-J4		28.55	202	
436-0861	ISO30-J2		14.199	113		436-0884	ISO50-J5		35.89	208	
436-0862	ISO30-J33		15.85	122		436-0885	ISO30-B10	31.75	10.094	104	M12
436-0863	ISO30-J6		17.17	122		436-0886	ISO30-B12		12.065	108	
436-0864	ISO30-J3		20.599	123		436-0887	ISO30-B16		15.733	116	
436-0865	ISO30-J4		28.55	136		436-0888	ISO30-B18		17.78	124	
436-0866	ISO30-J5		35.89	145		436-0889	ISO30-B22		21.793	133	
436-0867	ISO40-J0		6.35	126		436-0890	ISO30-B24		23.825	143	
436-0868	ISO40-J1	44.45	9.754	133	M16	436-0891	ISO40-B10	44.45	10.094	132	M16
436-0869	ISO40-J2S		13.94	136		436-0892	ISO40-B12		12.065	136	
436-0870	ISO40-J2		14.199	141		436-0893	ISO40-B16		15.733	143	
436-0871	ISO40-J33		15.85	145		436-0894	ISO40-B18		17.78	151	
436-0872	ISO40-J6		17.17	145		436-0895	ISO40-B22		21.793	160	
436-0873	ISO40-J3		20.599	150		436-0896	ISO40-B24		23.825	169	
436-0874	ISO40-J4		28.55	165		436-0897	ISO50-B10	69.85	10.094	170	M24
436-0875	ISO40-J5		35.89	170		436-0898	ISO50-B12		12.065	174	
436-0876	ISO50-J0		6.35	167		436-0899	ISO50-B16		15.733	182	
436-0877	ISO50-J1		9.754	175		436-0900	ISO50-B18		17.78	195	
436-0878	ISO50-J2S	13.94	177	436-0901	ISO50-B22	21.793	200				
436-0879	ISO50-J2	14.199	180	436-0902	ISO50-B24	23.825	215				
436-0880	ISO50-J33	15.85	184								

MORSE SHANK STUB MILLING MACHINE ARBOR



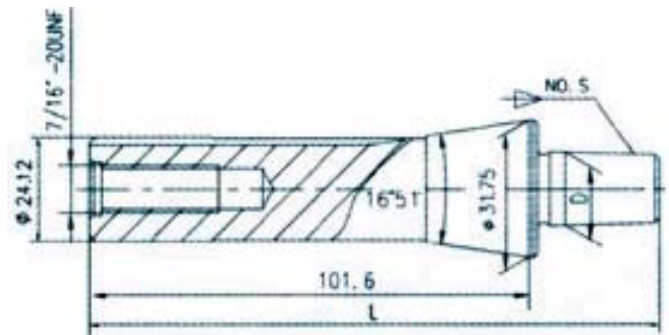
Model	Shank	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	Wt (kg)	Model	Shank	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	Wt (kg)
430-0570	MT2	17.78	22	171	63	0.421	430-0578	MT3	23.825	27	211	63	0.905
430-0571	MT2	17.78	12.7	148	63	0.43	430-0579	MT3	23.825	31.75	177	50.8	0.795
430-0572	MT2	17.78	15.875	151.6	50.8	0.478	430-0580	MT3	23.825	32	215	63	1.089
430-0573	MT2	17.78	25.4	157	50.8	0.504	430-0581	MT4	31.267	13	227	63	0.336
430-0574	MT3	23.825	13	199	63	0.527	430-0582	MT4	31.267	16	229	63	0.4
430-0575	MT3	23.825	16	201	63	0.591	430-0583	MT4	31.267	22	234	63	0.542
430-0576	MT3	23.825	22	206	63	0.783	430-0584	MT4	31.267	27	239	63	0.714
430-0577	MT3	23.825	25.4	174	50.8	0.634	430-0585	MT4	31.267	32	243	63	0.89

Straight Shank Drill Chuck Arbor



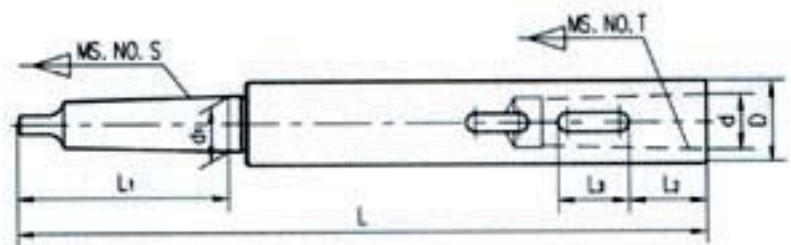
Order No.	Shank Diameter		Shank Taper	D1(mm)
	Inch Size	Metric Size		
D-J0	3/8" 1/2" 5/8" 7/8" 3/4" 1" 1-1/4" 1-1/2"	6mm 8mm 10mm 12mm 14mm 16mm 20mm 25mm 26mm 32mm 35mm 36mm 40mm 50mm	J0	6.35
D-J1			J1	9.754
D-J2			J2	14.199
D-J3			J3	20.599
D-J4			J4	28.55
D-J5			J5	35.89
D-J6			J6	17.17
D-J33			J33	15.85
D-B6			B6	6.35
D-B10			B10	10.094
D-B12			B12	12.065
D-B16			B16	15.733
D-B18			B18	17.78
D-B22			B22	21.793
D-B24			B24	23.825

R8 Shank Drill Chuck Arbor



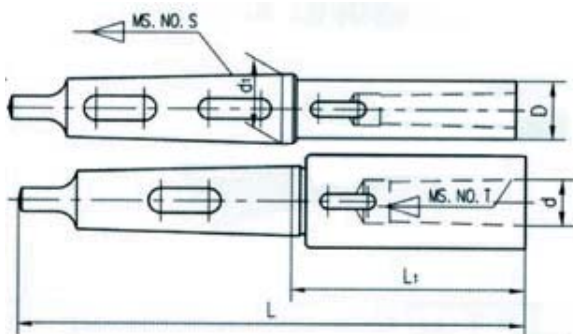
Order No.	Model	D(mm)	L(mm)	Wt(kg)	Order No.	Model	D(mm)	L(mm)	Wt(kg)
436-3320	R8-J0	6.35	117	0.393	436-3329	R8-B6	6.35	119	0.25
436-3321	R8-J1	9.754	122	0.409	436-3330	R8-B10	10.094	124	0.386
436-3322	R8-J2S	13.94	125	0.4	436-3331	R8-B12	12.065	128	0.408
436-3323	R8-J2	14.199	128	0.414	436-3332	R8-B16	15.733	135	0.44
436-3324	R8-J33	15.85	132	0.418	436-3333	R8-B18	17.78	143	0.454
436-3325	R8-J6	17.17	132	0.426	436-3334	R8-B22	21.793	152	0.514
436-3326	R8-J3	20.599	137	0.465	436-3335	R8-B24	23.825	162	0.567
436-3327	R8-J4	28.55	148	0.6					
436-3328	R8-J5	35.89	154	0.742					

Extra Long Drill Sleeve



Order NO.	Outside Taper	Inside Taper	L	L1	D	d	d1	L2	L3
435-0076	MT3	MT2	500	94	30	17.78	23.825	30	26
435-0077	MT3	MT3	300	94	36	23.825	23.825	34	31
435-0078	MT5	MT6	396	149.5	85	63.348	44.399	30	46
435-0079	MT6	MT6	460	210	85	63.348	63.348	30	46

DIN1806 MORSE TAPER SLEEVES



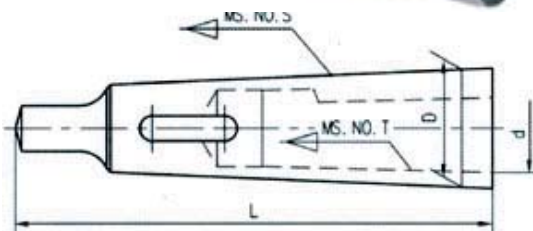
Order No.	Outside Taper	Inside Taper	L (mm)	L1 (mm)	D (mm)	d (mm)	d1 (mm)	Accuracy (mm)
435-0060	MT3	MT1	175	81	20	12.065	23.825	0.03
435-0061		MT2	194	100	30	17.78		0.03
435-0062		MT2	500	406	30			0.04
435-0063		MT3	215	121	36	23.825		0.03
435-0064		MT	300	206	36			0.04
435-0065	MT4	MT2	215	97.5	30	17.18	31.267	0.03
435-0066		MT3	240	122.5	36	23.825		0.03
435-0067		MT4	265	147.5	48	31.267		0.03
435-0068	MT5	MT2	247	97.5	30	17.78	44.399	0.04
435-0069		MT3	268	118.5	36	23.825		0.04
435-0070		MT4	300	150.5	48	31.267		0.04
435-0071		MT5	335	185.5	63	44.399		0.04
435-0072		MT6	396	246.5	85	63.348		0.05
435-0073	MT6	MT4	355	145	48	31.267	63.348	0.04
435-0074		MT5	390	180	63	44.399		0.04
435-0075		MT6	460	250	85	63.348		0.05

Morse Taper Drill Sleeve (Draw bar type)



Order No.	Outside/Inside	D (mm)	d (mm)	L (mm)	Accuracy
435-0480	MT2-MT1	17.78	12.065	108.5	0.01mm
0481-435	MT3-MT1	23.825	12.065	106	
0482-435	MT3-MT2	23.825	17.78	116	
0483-435	MT4-MT1	31.267	12.065	110	
0484-435	MT4-MT2	31.267	17.78	120	
0485-435	MT4-MT3	31.267	23.825	140	0.02mm
0486-435	MT5-MT1	44.399	12.065	136	
0487-435	MT5-MT2	44.399	17.78	136	
0488-435	MT5-MT3	44.399	23.825	148	
0489-435	MT5-MT4	44.399	31.267	176	

High Torque Drill Sleeve



Order No.	435-0476	435-0477	435-0478
Outside Taper	MT2	MT3	MT4
Inside Taper	MT1	MT2	MT3
D(mm)	17.78	23.825	31.267
d(mm)	12.065	17.78	23.825
L(mm)	92	112	140
Wt(kg)	0.1	0.12	0.38

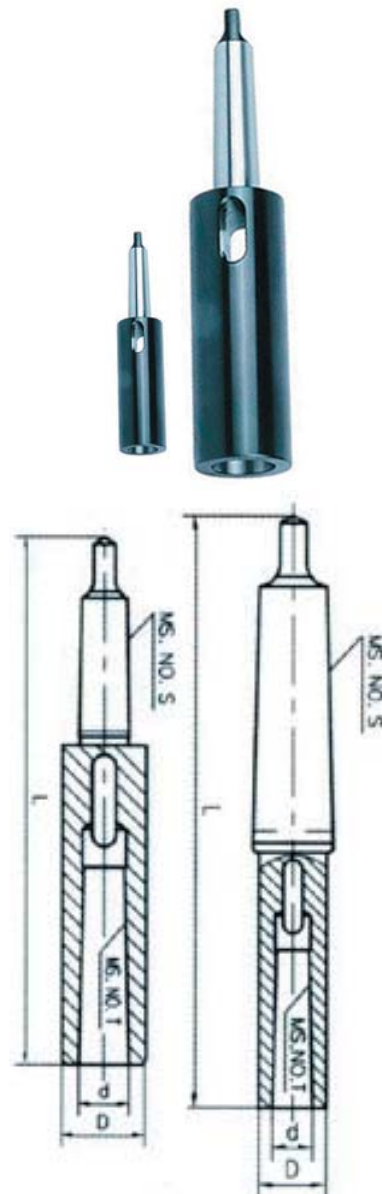
EXTRA LONG EXTENSION SOCKETS WITH MORSE TAPER HOLES

Order No.	Outside Taper	Inside Taper	L	L1	D	d	D1
435-0510	MT1	MT1	175	113	19	12.065	12.065
435-0511	MT1	MT1	200	138	20	12.065	12.065
435-0512	MT1	MT1	250	188	20	12.065	12.065
435-0513	MT1	MT1	300	238	20	12.065	12.065
435-0514	MT1	MT1	350	288	20	12.065	12.065
435-0515	MT1	MT1	400	338	20	12.065	12.065
435-0516	MT1	MT1	450	338	20	12.065	12.065
435-0517	MT1	MT1	500	438	20	12.065	12.065
435-0518	MT2	MT1	215	140	20	12.065	17.78
435-0519	MT2	MT1	332	257	20	12.065	17.78
435-0520	MT2	MT2	200	125	25	17.78	17.78
435-0521	MT2	MT2	225	150	25	17.78	17.78
435-0522	MT2	MT2	250	175	25	17.78	17.78
435-0523	MT2	MT2	300	225	25	17.78	17.78
435-0524	MT2	MT2	350	275	25	17.78	17.78
435-0525	MT2	MT2	400	325	25	17.78	17.78
435-0526	MT2	MT2	450	375	25	17.78	17.78
435-0527	MT2	MT2	500	425	25	17.78	17.78
435-0528	MT2	MT2	600	525	25	17.78	17.78
435-0529	MT2	MT3	300	225	34	23.285	17.78
435-0530	MT3	MT2	254	160	25	17.78	23.285
435-0531	MT3	MT2	300	206	25	17.78	23.285
435-0532	MT3	MT2	320	226	25	17.78	23.285
435-0533	MT3	MT2	354	260	30	17.78	23.285
435-0534	MT3	MT2	415	321	25	17.78	23.285
435-0535	MT3	MT2	704	610	25	17.78	23.285
435-0536	MT3	MT3	250	156	32	23.825	23.285
435-0537	MT3	MT3	300	206	32	23.825	23.285
435-0538	MT3	MT3	350	256	32	23.825	23.285
435-0539	MT3	MT3	400	306	32	23.825	23.285
435-0540	MT3	MT3	450	356	32	23.825	23.285
435-0541	MT3	MT3	500	406	32	23.825	23.285
435-0542	MT3	MT3	600	506	32	23.825	23.285
435-0543	MT4	MT3	450	332.5	32	23.825	31.267
435-0544	MT4	MT4	300	182.5	40	31.267	31.267
435-0545	MT4	MT4	350	232.5	40	31.267	31.267
435-0546	MT4	MT4	400	282.5	40	31.267	31.267
435-0547	MT4	MT4	450	332.5	40	31.267	31.267
435-0548	MT4	MT4	500	382.5	40	31.267	31.267
435-0549	MT4	MT4	600	482.5	40	31.267	31.267
435-0550	MT4	MT4	800	682.5	40	31.267	31.267
435-0551	MT5	MT4	450	300.5	42	31.267	44.399
435-0552	MT5	MT5	500	350.5	56	44.399	44.399
435-0553	MT5	MT5	550	400.5	63	44.399	44.399
435-0554	MT5	MT5	600	450.5	56	44.399	44.399
435-0555	MT6	MT6	465	255	85	63.348	63.348
435-0556	MT6	MT6	500	290	85	63.348	63.348
435-0557	MT6	MT6	600	390	85	63.348	63.348

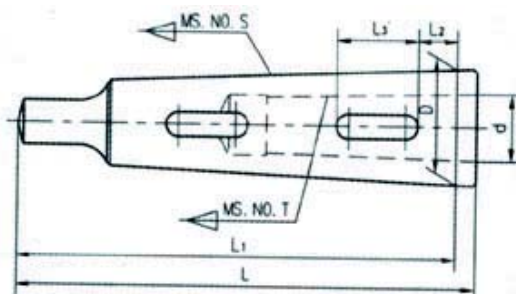


EXTENSION SOCKETS WITH MORSE TAPER HOLES

Order No.	Outside Taper	Inside Taper	D(mm)	d(mm)	L(mm)	Wt(kg)	Accuracy (mm)
435-0370	MT1	MT1	20	12.065	145	0.19	0.03
435-0371	MT1	MT2	30	17.78	160	0.4	0.03
435-0372	MT1	MT3	36	23.825	181	0.4	0.03
435-0373	MT2	MT1	20	12.065	160	0.29	0.03
435-0374	MT2	MT2	30	17.78	175	0.5	0.03
435-0375	MT3	MT3	36	23.825	196	0.6	0.03
435-0376	MT3	MT4	48	31.267	221	1.43	0.03
435-0377	MT3	MT1	20	12.065	175	0.41	0.03
435-0378	MT3	MT2	30	17.78	194	0.62	0.03
435-0379	MT3	MT3	36	23.825	215	0.89	0.03
435-0380	MT3	MT3	40	23.825	215	1.1	0.03
435-0381	MT3	MT4	48	31.267	240	1.55	0.03
435-0382	MT3	MT5	63	44.399	275	2.8	0.03
435-0383	MT4	MT1	20	12.065	200	0.81	0.03
435-0384	MT4	MT2	30	17.78	215	1	0.03
435-0385	MT4	MT3	36	23.825	240	1.27	0.03
435-0386	MT4	MT4	48	31.267	265	1.93	0.03
435-0387	MT4	MT5	63	44.399	300	3.18	0.03
435-0388	MT4	MT6	85	63.348	368	6.5	0.05
435-0389	MT5	MT1	20	12.065	232	1.79	0.04
435-0390	MT5	MT2	30	17.78	247	2	0.04
435-0391	MT5	MT3	36	23.825	268	2.27	0.04
435-0392	MT5	MT4	48	31.267	300	2.93	0.04
435-0393	MT5	MT5	63	44.399	335	4.18	0.05
435-0394	MT5	MT6	85	63.348	403	6.7	0.04
435-0395	MT6	MT1	20	12.065	294	4.04	0.04
435-0396	MT6	MT2	30	17.78	309	4.25	0.04
435-0397	MT6	MT3	36	23.825	330	4.52	0.04
435-0398	MT6	MT4	48	31.267	355	5.18	0.04
435-0399	MT6	MT5	63	44.399	390	6.43	0.04



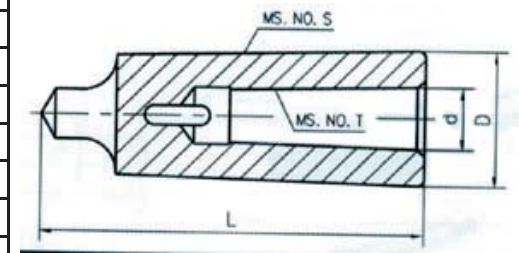
277 MORSE TAPER SLEEVES



Order No.	Outside Taper	Inside Taper	L	L1	D	d	L2	L3
435-0450	MT3	MT1	99	94	23.825	12.065	13.5	19
435-0451	MT3	MT2	112	94	23.825	17.78	5.5	22
435-0452	MT4	MT1	124	117.5	31.267	12.065	12.5	19
435-0453	MT4	MT2	124	117.5	31.267	17.78	16	22
435-0454	MT4	MT3	129.5	117.5	31.267	23.825	24	36
435-0455	ME80	MT5	228	220	80	44.399	22	48
435-0456	ME80	MT6	280	220	80	63.348	22	48

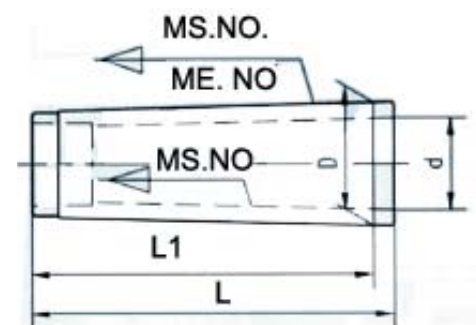
DIN2185 Morse Taper Sleeves

Order No.	Size	D(mm)	d(mm)	L(mm)	Wt(kg)	Accuracy
435-0460	MT1-MT0	13	9.045	80	0.1	0.015
435-0461	MT2-MT1	18.6	12.065	92	0.1	0.015
435-0462	MT3-MT1	24.1	12.065	99	0.24	0.015
435-0463	MT3-MT2	24.7	17.78	112	0.12	0.015
435-0464	MT4-MT1	31.6	12.065	124	0.6	0.015
435-0465	MT4-MT2	31.6	17.78	124	0.5	0.015
435-0466	MT4-MT3	32.4	23.825	140	0.38	0.015
435-0467	MT5-MT1	44.7	12.065	140	1.59	0.02
435-0468	MT5-MT2	44.7	17.78	156	1.49	0.02
435-0469	MT5-MT3	44.7	23.825	156	1.36	0.02
435-0470	MT5-MT4	45.5	31.267	171	0.95	0.02
435-0471	MT6-MT1	63.8	12.065	218	3.84	0.02
435-0472	MT6-MT2	63.8	17.78	218	3.73	0.02
435-0473	MT6-MT3	63.8	23.825	218	3.85	0.02
435-0474	MT6-MT4	63.8	31.267	218	3.12	0.02
435-0475	MT6-MT5	63.8	44.399	218	1.95	0.02



Morse Taper Sleeves

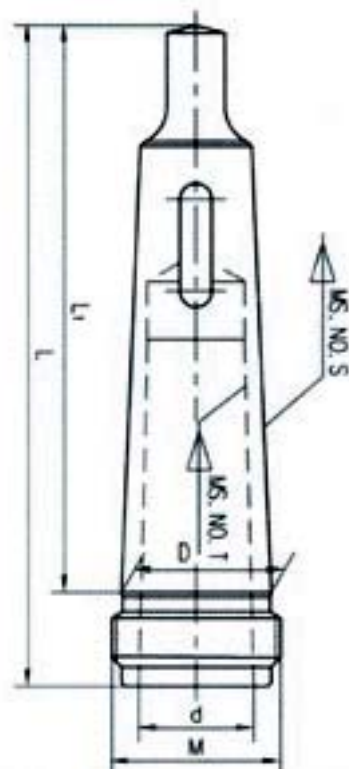
Order No.	Outside Taper	Inside Taper	L (mm)	L1 (mm)	D (mm)	d (mm)
435-0560	MT2	MT1	60	56	17.78	12.065
435-0561	MT3	MT1	70	66	23.825	12.065
435-0562	MT3	MT2	70	66	23.825	17.78
435-0563	MT4	MT2	70	63.5	31.267	17.78
435-0564	MT4	MT3	70	63.5	31.267	23.825
435-0565	MT5	MT2	77	70.5	44.399	17.78
435-0566	MT5	MT3	77	70.5	44.399	23.825
435-0567	MT5	MT4	77	70.5	44.399	31.267
435-0568	MT6	MT3	110	103.5	63.348	23.825
435-0569	MT6	MT4	110	103.5	63.348	31.267
435-0570	MT6	MT5	110	103.5	63.348	44.399
435-0571	ME40	MT3	70	103.5	40	23.825
435-0572	ME40	MT4	70		40	31.267
435-0573	ME50	MT3	86		50	23.825
435-0574	ME50	MT4	86		50	31.267
435-0575	ME50	MT5	86		50	44.399
435-0576	ME60	MT4	100		60	31.267
435-0577	ME60	MT5	100		60	44.399
435-0578	ME70	MT4	110		70	31.267
435-0579	ME70	MT5	110		70	44.399
435-0580	ME80	MT4	110		80	31.267
435-0581	ME80	MT5	110		80	44.399
435-0582	ME80	MT6	110		80	63.348
435-0583	ME90	MT5	120		90	44.399
435-0584	ME90	MT6	120		90	63.348



Morse Taper Sleeve with threads end



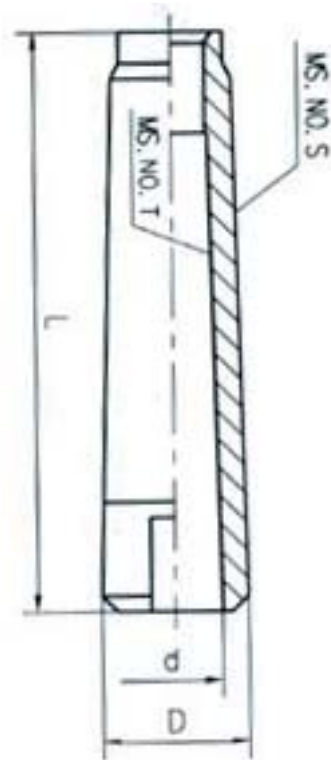
Order No.	Outside Taper	Inside Taper	L	L1	D	d	M	Accuracy
435-0585	MT2	MT1	95	75	17.78	12.065	M22x1.5	0.015
435-0586	MT3	MT1	115	94	23.825	12.065	M28x1.5	0.02
435-0587	MT3	MT2	115	94	23.825	17.78	M28x1.5	0.02
435-0588	MT4	MT1	137	117.5	31.267	12.065	M35x1.5	0.03
435-0589	MT4	MT2	137	117.5	31.267	17.78	M35x1.5	0.03
435-0590	MT4	MT3	137	117.5	31.267	23.825	M35x1.5	0.03
435-0591	MT5	MT2	173	149.5	44.399	17.78	M48x1.5	0.04
435-0592	MT5	MT3	173	149.5	44.399	23.825	M48x1.5	0.04
435-0593	MT5	MT4	173	149.5	44.399	31.267	M48x1.5	0.04
435-0594	MT6	MT3	240	210	63.348	23.825	M68x1.5	0.04
435-0595	MT6	MT4	240	210	63.348	31.267	M68x1.5	0.04
435-0596	MT6	MT5	240	210	63.348	44.399	M68x1.5	0.04



Morse Taper Sleeve



Order No.	M.NO.S	MS.NO.T	D(mm)	d(mm)	L(mm0)	Wt(kg)	Accuracy
435-0600	MT2	MT1	18	12.065	74	0.1	0.015
435-0601	MT3	MT1	24.1	12.65	80	0.24	
435-0602	MT3	MT2	24.1	17.78	80	0.12	
435-0603	MT4	MT1	36.1	12.065	90	0.63	0.02
435-0604	MT4	MT2	36.1	17.78		0.5	
435-0605	MT4	MT3	36.1	23.825		0.38	
435-0606	MT5	MT2	44.7	17.78	110	1.49	
435-0607	MT5	MT3	44.7	23.825		1.36	
435-0608	MT5	MT4	44.7	31.267		0.95	
435-0609	MT6	MT3	63.8	23.825	130	3.58	0.025
435-0610	MT6	MT4	63.8	31.267		3.12	
435-0611	MT6	MT5	63.8	44.399		1.95	
435-0612	MT7	MT5	83.56	44.399	195	1.69	



ISO/ISO ADAPTOR (Through Hole)

Order No.	Outside Taper	Inside Taper	D(mm)	D1 (mm)	d(mm)	L(mm0)
435-0615	ISO40	ISO30	44.45	31.75	16.5	152.4
435-0616	ISO40	ISO40	44.45	44.45	16.5	204.4
435-0617	ISO50	ISO30	69.85	31.75	24.5	185.8
435-0618	ISO50	ISO40	69.85	44.45	24.5	207.8
435-0619	ISO50	ISO50	69.85	69.85	24.5	260.8



ISO/ISO ADAPTOR

Order No.	Outside Taper	Inside Taper	D1(mm)	D(mm)	L(mm)
435-0620	ISO40	ISO30	44.45	31.75	110
435-0621	ISO50	ISO30	69.85	31.75	145
435-0622	ISO50	ISO40	69.85	44.45	145



ISO/R8 ADAPTOR

Order No.	Outside Taper	Inside Taper	D(mm)	D1 (mm)	L(mm0)
435-0623	ISO30	R8	42	31.75	180
435-0624	ISO40	R8	44.5	44.45	167
435-0625	ISO50	R8	44.5	69.85	175



ISO/ISO ADAPTOR (DRAWBAR TYPE)

Order No.	Outside Taper	Inside Taper	D(mm)	d(mm)	L(mm0)
435-0660	ISO40	ISO30	44.45	31.75	152.4
435-0661	ISO50	ISO30	69.85	31.75	185.8
435-0662	ISO50	ISO40	69.85	44.45	207.8



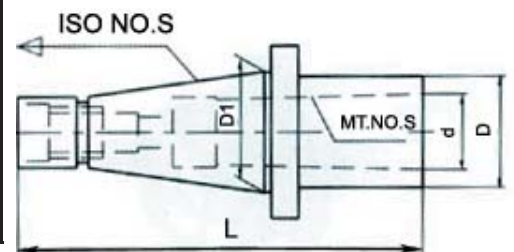
ISO/ISO ADAPTOR (DRAWBAR TYPE)

Order No.	Outside Taper	Inside Taper	D(mm)	D1 (mm)	d (mm)	L(mm0)
435-0695	ISO40	ISO30	44.45	31.75	18	86
435-0696	ISO50	ISO30	69.85	31.75	18	129.5
435-0697	ISO50	ISO40	69.85	44.45	26	129.5



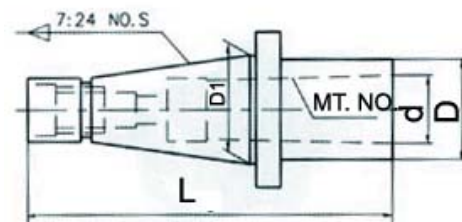
ISO TO MORSE TAPER ADAPTOR (TANG TYPE)

Order No.	Outside Taper	Inside Taper	D(mm)	D1(mm)	d(mm)	L(mm)
435-0665	ISO30	MT1	25	31.75	12.065	118
435-0666	ISO30	MT2	32	31.75	17.78	118
435-0667	ISO30	MT3	40	31.75	23.825	138
435-0668	ISO30	MT4	48	31.75	31.267	212
435-0669	ISO40	MT1	25	44.45	12.065	143
435-0670	ISO40	MT2	32	44.45	17.78	143
435-0671	ISO40	MT3	40	44.45	23.825	158
435-0672	ISO40	MT4	48	44.45	31.267	188
435-0673	ISO40	MT5	61	44.45	44.399	273
435-0674	ISO50	MT1	25	69.85	12.065	172
435-0675	ISO50	MT2	32	69.85	17.78	187
435-0676	ISO50	MT3	40	69.85	23.825	192
435-0677	ISO50	MT4	48	69.85	31.267	197
435-0678	ISO50	MT5	61	69.85	44.399	232



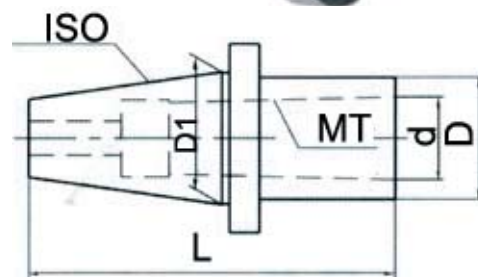
ISO TO MORSE TAPER ADAPTOR (DRAWBAR TYPE)

Order No.	Outside Taper	Inside Taper	D(mm)	D1(mm)	d(mm)	L(mm)
435-0700	ISO30	MT1	25	31.75	12.065	105
435-0701	ISO30	MT2	32	31.75	17.78	118
435-0702	ISO30	MT3	40	31.75	23.825	155
435-0703	ISO40	MT1	25	44.45	12.065	120
435-0704	ISO40	MT2	32	44.45	17.78	120
435-0705	ISO40	MT3	40	44.45	23.825	140
435-0706	ISO40	MT4	48	44.45	31.267	178
435-0707	ISO40	MT5	56	44.45	44.399	238
435-0708	ISO50	MT1	25	69.85	12.065	160
435-0709	ISO50	MT2	32	69.85	17.78	160
435-0711	ISO50	MT3	40	69.85	23.825	160
435-0712	ISO50	MT4	48	69.85	31.267	180
435-0713	ISO50	MT5	61	69.85	44.399	210



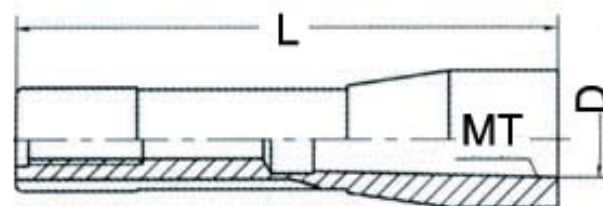
ISO TO MORSE TAPER ADAPTOR (END OPENING TYPE)

Order No.	Outside Taper	Inside Taper	D(mm)	D1(mm)	d(mm)	L(mm)
435-0680	ISO30	MT1	24	31.75	12.065	75
435-0681	ISO30	MT2	30	31.75	17.78	100
435-0682	ISO30	MT3	36	31.75	23.825	130
435-0683	ISO30	MT4	49	31.75	31.267	165
435-0684	ISO40	MT1	24	44.45	12.065	80
435-0685	ISO40	MT2	30	44.45	17.78	85
435-0686	ISO40	MT3	36	44.45	23.825	100
435-0687	ISO40	MT4	48	44.45	31.267	145
435-0688	ISO40	MT5	61	44.45	44.399	225
435-0689	ISO50	MT1	25	69.85	12.065	127
435-0690	ISO50	MT2	32	69.85	17.78	127
435-0691	ISO50	MT3	40	69.85	23.825	127
435-0692	ISO50	MT4	48	69.85	31.267	127
435-0693	ISO50	MT5	61	69.85	44.399	180



R8 TO MORSE TAPER SLEEVES

Order No.	Outside Taper	Inside Taper	D(mm)	L(mm)	Wt(kg)
435-0760	R8	MT1	12.065	102	0.14
435-0761	R8	MT2	17.78	105	0.28
435-0762	R8	MT3	23.825	135	0.34
435-0763	R8	MT4	31.267	218	d
435-0764	R8	MT1	12.065	114	0.382
435-0765	R8	MT2	17.78	127	0.399
435-0766	R8	MT3	23.825	153	0.41
435-0767	R8	MT4	31.267	240	1.68



LATHE MANDRELS, inch

- * 1:2000 taper
- * -0.0005" tolerance for mandrel size from 1/8" to 1"
- * -0.001" tolerance for mandrel size from 1-1/16" to 3".



Order NO.	DiameterxLength	Order NO.	DiameterxLength	Order NO.	DiameterxLength
436-7901	1/8"X2-1/2"	436-7921	3/4"X6"	436-7941	1-3/8"X8-1/2"
436-7902	5/32"X3"	436-7922	25/32"X6-1/4"	436-7942	1-7/16"X8-3/4"
436-7903	3/16"X3"	436-7923	13/16"X6-1/4"	436-7943	1-15/32"X9"
436-7904	7/32"X3-3/4"	436-7924	27/32"X6-1/2"	436-7944	1-1/2"X9"
436-7905	1/4"X3-3/4"	436-7925	7/8"X6-1/2"	436-7945	1-9/16"X9-1/4"
436-7906	9/32"X4"	436-7926	29/32"X6-3/4"	436-7946	1-5/8"X9-1/2"
436-7907	5/16"X4"	436-7927	15/16"X6-3/4"	436-7947	1-11/16"X9-3/4"
436-7908	11/32"X4-1/4"	436-7928	31/32"X7"	436-7948	1-3/4"X10"
436-7909	3/8"X4-1/4"	436-7929	1"X7"	436-7949	1-13/16"X10-1/4"
436-7910	13/32"X4-1/2"	436-7930	1-1/32"X7-1/4"	436-7950	1-7/8"X10-1/2"
436-7911	7/16"X4-1/2"	436-7931	1-1/16"X7-1/4"	436-7951	1-15/16"X10-3/4"
436-7912	15/32"X5"	436-7932	1-3/32"X7-1/2"	436-7952	2"X11"
436-7913	1/2"X5"	436-7933	1-1/8"X7-1/2"	436-7953	2-1/8"X11-1/2"
436-7914	17/32"X5-1/4"	436-7934	1-5/32"X7-3/4"	436-7954	2-1/4"X12"
436-7915	9/16"X5-1/4"	436-7935	1-3/16"X7-3/4"	436-7955	2-3/8"X12"
436-7916	19/32"X5-1/2"	436-7936	1-7/32"X8"	436-7956	2-1/2"X12-1/2"
436-7917	5/8"X5-1/2"	436-7937	1-1/4"X8"	436-7957	2-5/8"X12-1/2"
436-7918	21/32"X5-3/4"	436-7938	1-9/32"X8-1/4"	436-7958	2-3/4"X13"
436-7919	11/16"X5-3/4"	436-7939	1-5/16"X8-1/4"	436-7959	2-7/8"X13"
436-7920	23/32"X6"	436-7940	1-11/32"X8-3/4"	436-7960	3"X13"

LATHE MANDRELS, metric

- * 1:2000 taper
- * -0.0125mm tolerance for mandrel size from 3mm to 25mm
- * -0.025mm tolerance for mandrel size from 26mm to 72mm.



Order No.	DiameterxLength	Order No.	DiameterxLength	Order No.	DiameterxLength
436-7961	3mmx63.5mm	436-7977	19mmx152mm	436-7993	42mmx241mm
436-7962	4mmx76mm	436-7978	20mmx159mm	436-7994	44mmx254mm
436-7963	5mmx95mm	436-7979	21mmx165mm	436-7995	45mmx254mm
436-7964	6mmx95mm	436-7980	22mmx165mm	436-7996	46mmx260mm
436-7965	7mmx102mm	436-7981	23mmx171.5mm	436-7997	48mmx267mm
436-7966	8mmx102mm	436-7982	25mmx178mm	436-7998	50mmx273mm
436-7967	9mmx108mm	436-7983	26mmx184mm	436-7999	51mmx279mm
436-7968	10mmx114mm	436-7984	27mmx184mm	436-8000	55mmx292mm
436-7969	11mmx114mm	436-7985	28mmx190.5mm	436-8001	58mmx305mm
436-7970	12mmx127mm	436-7986	30mmx197mm	436-8002	60mmx305mm
436-7971	13mmx127mm	436-7987	32mmx203mm	436-8003	62mmx317.5mm
436-7972	14mmx133mm	436-7988	34mmx210mm	436-8004	65mmx317.5mm
436-7973	15mmx140mm	436-7989	35mmx216mm	436-8005	70mmx330mm
436-7974	16mmx140mm	436-7990	36mmx222mm	436-8006	72mmx330mm
436-7975	17mmx146mm	436-7991	38mmx229mm		
436-7976	18mmx152mm	436-7992	40mmx235mm		

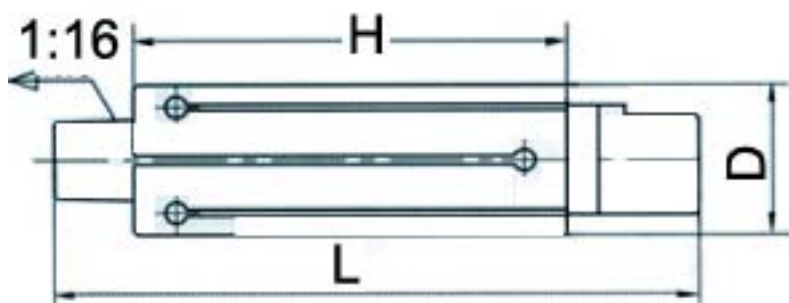
EXPANDING MANDRELS

Order No.	D	L	H	Sleeve No.	Wt(kg)
436-7801	1/2~9/16"	5"	2-1/2"	1	0.1
436-7802	9/16~21/32"	6"	2-3/4"	1	0.15
436-7803	21/32~3/4"	6"	2-3/4"	1	0.22
436-7804	3/4~7/8"	7"	3-1/4"	1	0.3
436-7805	7/8~1"	7"	3-1/2"	1	0.45
436-7806	1~1-1/4"	9"	4"	2	0.7
436-7807	1-1/4~1-1/2"	9"	4"	2	1.2
436-7808	1-1/2~2"	11.5"	5"	2	2.1
436-7809	2~2-3/4"	14"	6"	2	6.25
436-7810	2-3/4~3-3/4"	17"	7"	2	14.54

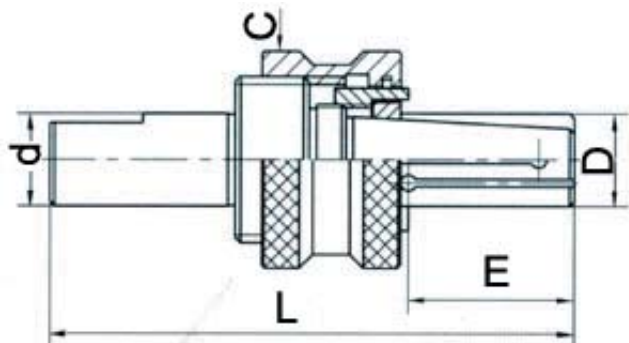


EXPANDING MANDREL SETS

Order No.	D	Mandrel Nos.
436-7811	1/2" to 1"	5
436-7812	1" to 2"	3
436-7813	1/2"	8
436-7814	2-3/4~3-3/4"	5
436-7815	1-1/2" to 3-3/4"	3

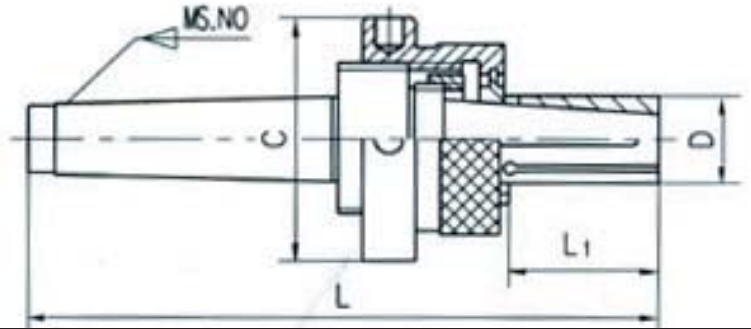


EXPANDING MANDREL



Order No.	D	E	L	d	G	Sleeves	Extensibility
436-7816	5.5-7mm	12	74.5	10	19.5	4	0.5mm
436-7817	7.5-9mm	16	79.5	12	23	4	
436-7818	9.5-11.5mm	20	89.5	12	28	5	
436-7819	12-14.5mm	26	97.5	14	31	6	
436-7820	14.5-19mm	30	102.5	18	38	10	
436-7821	19.5-24.5mm	36	113.5	20	47	11	
436-7822	24.7-28.7mm	42.5	136	25	69	5	1mm
436-7823	29.7-33.7mm	46	144.5	30	72	5	
436-7824	34.7-38.7mm	52.5	156	40	79	5	
436-7825	39.7-43.7mm	58	166.5	40	87	5	
436-7826	44.7-53.7mm	76.5	197	45	96	10	
436-7827	54.7-63.7mm	85	208.5	50	107	10	
436-7828	64.7-78.7mm	96	221.5	50	130	15	

EXPANDING MANDRELS



Order No.	D	C	Shank Taper	L (mm)	L1 (mm)	Sleeves	Extensibility
436-7830	5.5-7mm	19.5mm	MT2	110	12	4	0.5mm
436-7831	5.5-7mm	19.5mm	MT3	127	12		
436-7832	5.5-7mm	19.5mm	MT4	150	12		
436-7833	7.5-9mm	23mm	MT2	118.5	16		
436-7834	7.5-9mm	23mm	MT3	135.5	16		
436-7835	7.5-9mm	23mm	MT4	158.5	16		
436-7836	9.5-11.5mm	28mm	MT2	123.5	20	5	
436-7837	9.5-11.5mm	28mm	MT3	140.5	20		
436-7838	9.5-11.5mm	28mm	MT4	163.5	20		
436-7839	12-14.5mm	31mm	MT2	131.5	26	6	
436-7840	12-14.5mm	31mm	MT3	148.5	26		
436-7841	12-14.5mm	31mm	MT4	171.5	26		
436-7842	14.5-19mm	38mm	MT2	136.5	30	10	
436-7843	14.5-19mm	38mm	MT3	153.5	30		
436-7844	14.5-19mm	38mm	MT4	176.5	30		
436-7845	19.5-24.5mm	47mm	MT3	159.5	36	11	
436-7846	19.5-24.5mm	47mm	MT4	182.5	36		
436-7847	24.7-28.7mm	69mm	MT3	177	42.5	5	1mm
436-7848	24.7-28.7mm	69mm	MT4	200	42.5		
436-7849	29.7-33.7mm	72mm	MT3	180.5	46		
436-7850	29.7-33.7mm	72mm	MT4	203.5	46		
436-7851	34.7-38.7mm	79mm	MT4	210	52.5		
436-7852	39.7-43.7mm	87mm	MT4	215.5	58		
436-7853	44.7-53.7mm	96mm	MT4	239	76.5		
436-7854	54.7-63.7mm	107mm	MT4	250.5	85		
436-7855	64.7-78.7mm	130mm	MT4	263.5	96		

TAPPING CHUCK SET



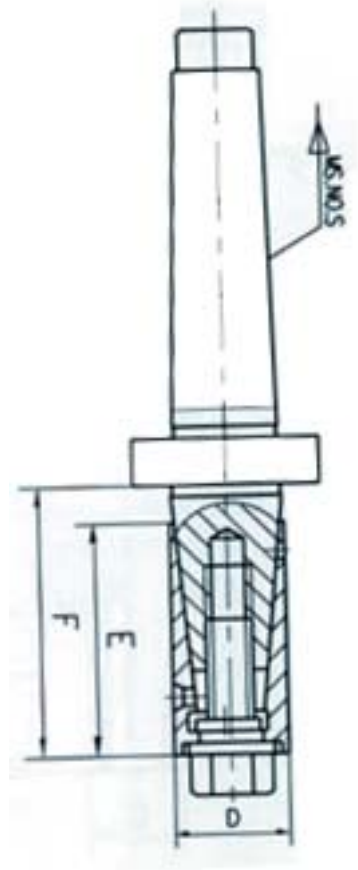
The tapping chuck set includes chuck arbor, drill chuck adaptor, morse taper adaptor sleeves and tapping sleeves. Simply move the locking bush, the drill and tap sleeves can be quickly changed.

Model	Body Dia. (mm)	Adaptor Dia. (mm)	Shank Taper	Tapping range	Morse Taper Adaptors
468-9700	57	25	MT3	M3-M12	MT2
468-9701	57	25	MT4	M3-M16	MT2
468-9702	57	25	MT5	M3-M16	MT2
468-9703	82	40	MT4	M8-M24	MT2,MT3
468-9704	82	40	MT5	M12-M24	MT2,MT3

EXPANDING MANDRELS



Model	D(mm)	Shank Taper	E(mm)	F(mm)	Sleeves	Extensibility
436-7860	14.7-18.7	MT2	35	41.5	5	1mm
436-7861	14.7-18.7	MT3	35	41.5	5	1mm
436-7862	14.7-18.7	MT4	35	41.5	5	1mm
436-7863	19.7-23.7	MT2	40	46.5	5	1mm
436-7864	19.7-23.7	MT3	40	46.5	5	1mm
436-7865	19.7-23.7	MT4	40	46.5	5	1mm
436-7866	24.7-28.7	MT2	46	52.5	5	1mm
436-7867	24.7-28.7	MT3	46	52.5	5	1mm
436-7868	24.7-28.7	MT4	46	52.5	5	1mm
436-7869	24.7-28.7	MT5	46	52.5	5	1mm
436-7870	29.7-33.7	MT3	50	56.5	5	1mm
436-7871	29.7-33.7	MT4	50	56.5	5	1mm
436-7872	29.7-33.7	MT5	50	56.5	5	1mm
436-7873	34.7-38.7	MT3	60	66.5	5	1mm
436-7874	34.7-38.7	MT4	60	66.5	5	1mm
436-7875	34.7-38.7	MT5	60	66.5	5	1mm
436-7876	39.7-43.7	MT3	60	66.5	5	1mm
436-7877	39.7-43.7	MT4	60	66.5	5	1mm
436-7878	39.7-43.7	MT5	60	66.5	5	1mm
436-7879	44.7-52.7	MT3	80	92	5	2mm
436-7880	44.7-52.7	MT4	80	92	5	2mm
436-7881	44.7-52.7	MT5	80	92	5	2mm
436-7882	54.7-62.7	MT3	90	102	5	2mm
436-7883	54.7-62.7	MT4	90	102	5	2mm
436-7884	54.7-62.7	MT5	90	102	5	2mm
436-7885	64.7-80.7	MT4	100	112	9	2mm
436-7886	64.7-80.7	MT5	100	112	9	2mm
436-7887	81.7-99.7	MT4	122	134	10	2mm
436-7888	81.7-99.7	MT5	122	134	10	2mm
436-7889	100.7-118.7	MT5	140	152	10	2mm
436-7890	119.7-139.7	MT5	180	192	11	2mm



F4 UNIVERSAL BORING AND FACING HEAD

The universal boring and facing head is for operations such as facing, external and internal diameter boring, step hole boring, inside and outside grooving on jig boring machines, horizontal boring machines, milling machines, CNC machines etc.. This versatile tool features mechanism of fine manual feed, rapid adjustment, various velocities for automatic radial feed and overload protection.

Shanks for the boring and facing head

- * Boring range: 5-250mm in diameter.
- * Boring bar hole size: Dia. 18mm.
- * Center distance between holes: 23mm.
- * Fine feed per graduation: 0.005mm
- * Offset: +/-15mm

Order No.	Shank Size	Order No.	Shank Size
437-2011	R8, 7/16"-20UNF	437-2022	MT5,tang
437-2012	MT3, M12	437-2023	MT6,tang
437-2013	MT3, 1/2"-13UNC	437-2024	ISO30, M12
437-2014	MT4, M16	437-2025	ISO30, 1/2"-13UNC
437-2015	MT4, 5/8"-11UNC	437-2026	ISO40,M16
437-2016	MT5,M20	437-2027	ISO40,5/8"-11UNC
437-2017	MT5, 3/4"-10UNC	437-2028	ISO50,M24
437-2018	MT6,M24	437-2029	ISO50,1"-8UNC
437-2019	MT6,1"-8UNC	437-2030	BT30,M12
437-2020	MT3,tang	437-2031	BT40,M16
437-2021	MT4,tang	437-2032	BT50,M24



Order No. 437-2010

BORING HEAD



Optional boring bars and shanks.

Order No.	Body Dia.	Overall length	Max offset	Boring bore dia	Graduation	Max Dia of Boring
437-2002	2"	61.6	5/8"	1/2"	0.001"	3/8"-5"
437-2003	3"	80.2	1"	3/4"	0.0005"	1/2"-9"
437-2004	4"	93.2	1-5/8"	1"	0.0005"	5/8"-25"
437-2050	50mm	61.6	16mm	12mm	0.01mm	10-125mm
437-2075	75mm	80.2	25mm	18mm	0.01mm	12-225mm
437-2100	100mm	93.2	41mm	25mm	0.01mm	15-630mm

Shanks with 7/8"-20TPI mounting thread

Order NO.	Taper Shank	Order NO.	Taper Shank
437-2303	MT2 DRAWBAR	437-2601	ISO40
437-2323	MT3 TANG	437-2602	ISO50
437-2306	MT3 DRAWBAR	437-2337	B&S9W
437-2326	MT3 TANG	437-2500	1/2"
437-2309	MT4 DRAWBAR	437-2501	5/8"
437-2329	MT4 TANG	437-2502	3/4"
437-2312	MT5 DRAWBAR	437-2503	7/8"
437-2332	MT5 TANG	437-2504	1"
437-2334	MT6 DRAWBAR	437-2505	1-1/4"
437-2338	MT5 TANG	437-2506	1-1/2"
437-2400	R8	439-2508	1-3/4"
437-2600	ISO30	437-2507	2"

Shanks with 1-1/2"-18TPI mounting thread

Order No	Shank Taper	Order No	Shank Taper
437-2304	MT2 drawbar	437-2605	ISO40
437-2324	MT2 tang	437-2606	ISO50
437-2307	MT3 drawbar	437-2337	B&S9W
437-2327	MT3 tang	437-2510	1/2"
437-2310	MT4 drawbar	437-2511	5/8"
437-2330	MT4 tang	437-2512	3/4"
437-2313	MT5 drawbar	437-2513	7/8"
437-2333	MT5 tang	437-2514	1"
437-2335	MT6 drawbar	437-2515	1-1/4"
437-2339	MTY tang	437-2516	1-1/2"
437-2401	R8	439-2518	1-3/4"
437-2604	ISO30	437-2517	2"

BORING HEAD



Specifications:

Order No.	Body Dia.	Max offset	Boring bore dia	Graduation
437-2410	2-1/8"	5/16"	1/2"	0.001"
437-2411	54mm	8mm	12mm	0.02"

Optional Shanks with 1-5/8"-16tpi thread

Order No.	Shank Size	Order No.	Shank Size	Order No.	Shank Size
437-2415	MT2	437-2418	R8	437-2421	3/4"
437-2416	MT3	437-2419	1/2"	437-2422	7/8"
437-2417	MT4	437-2420	5/8"	437-2423	1"

PRECISION BORING HEAD

Max. Boring diameter: 160mm
 Boring bar hole size: 18mm
 Fine feed per graduation: 0.02mm
 Max. stroke of slide block: 25mm

Optional Shanks

Order No.	Shank Size	Order No.	Shank Size
437-2345	R8-7/16"-20UNF	437-2353	MT4 tang
437-2346	MT3xM12	437-2354	MT5 tang
437-2347	MT3x1/2"-13UNC	437-2355	ISO30xM12
437-2348	MT4xM16	437-2356	ISO30x1/2"-12UNC
437-2349	MT4x5/8"-11UNC	437-2357	ISO40xM16
437-2350	MT5xM20	437-2358	ISO40x5/8"-11UNC
437-2351	MT5x3/4"-10UNC	437-2359	ISO50xM24
437-2352	MT3 tang	437-2360	ISO50x1"-8UNC



Order NO. 437-2341

PRECISION BORING HEAD

Max. Boring diameter: 10 to 150mm
 Boring bar hole size: 12mm
 Fine feed per graduation: 0.025mm



Order NO. 437-2370

Order No.	Shank Size	Order No.	Shank Size
437-2374	R8-7/16"-20UNF	437-2386	ISO30xM12
437-2375	M2xM10	437-2387	ISO30x1/2"-12UNC
437-2376	M2x3/8"-16UNC	437-2388	ISO40xM16
437-2377	MT3xM12	437-2389	ISO40x5/8"-11UNC
437-2378	MT3x1/2"-13UNC	437-2390	ISO50xM24
437-2379	MT4xM16	437-2391	ISO50x1"-8UNC
437-2380	MT4x5/8"-11UNC	437-2392	12mm
437-2381	MT5xM20	437-2393	16mm
437-2382	MT5x3/4"-11UNC	437-2394	20mm
437-2383	MT3 tang	437-2395	25mm
437-2384	MT4 tang	437-2396	32mm
437-2385	MT5 tang	437-2397	40mm



Carbide Tipped boring bars and shanks are all optional. Order separately.

DRILL-TAP FIXTURE

This versatile fixture accommodates 6 tools. Installed to the lathe tailstock, it can be used for drilling, tapping, reaming, center hole drilling and supporting as a live center.



Optional accessories for drill/tap fixture:

1. ER16 collets from 1 to 10mm
2. ER20 collets from 1 to 13mm
3. Drill chuck 13mm
4. Drill chuck 16mm
5. Precision light duty live center MT1 or MT2
6. Tapping collets from M3 to M12, M3 to M16
7. Die holder: M3 to M12 or M3 to M16

Order No.	Diameter of Turrent	Hole Size
437-2430	2-1/2"	5/8"
437-2431	5"	1"
437-2432	63.5mm	16mm
437-2433	127mm	25mm

Shank for 437-2430		Shank for 437-2431		Shank for 437-2432		Shank for 437-2433	
Order No.	Shank Size	Order No.	Shank Size	Order No.	Shank Size	Order No.	Shank Size
437-2435	MT1	437-2444	MT2	437-2451	MT1	437-2460	MT2
437-2436	MT2	437-2445	MT3	437-2452	MT2	437-2461	MT3
437-2437	MT3	437-2446	MT4	437-2453	MT3	437-2462	MT4
437-2438	MT4	437-2447	7/8"	437-2454	MT4	437-2463	22mm
437-2439	1/2"	437-2448	1"	437-2455	12mm	437-2464	25mm
437-2440	5/8"	437-2449	1-1/4"	437-2456	16mm	437-2465	32mm
437-2441	3/4"	437-2450	1-1/2"	437-2457	20mm	437-2466	40mm
437-2442	7/8"			437-2458	22mm		
437-2443	1"			437-2459	25mm		

DRILL RIG

This drill gig is a versatile tool which increase your work efficiency by two or three times. Used on the common drilling machines, it can accomplish drilling, enlarging, reaming, chamfering, tapping etc. You don't need to stop your machines when changing tool positions.



Specifications:
 Max. drill diamter: 13mm
 Tool change accuracy: 0.02mm
 Spindle Taper: B16
 Re-position accuracy: 0.05mm
 Tool Change time: < 3 seconds
 Weight: 3g

Order NO. 437-2470

QUICK CHANGE CHUCKS

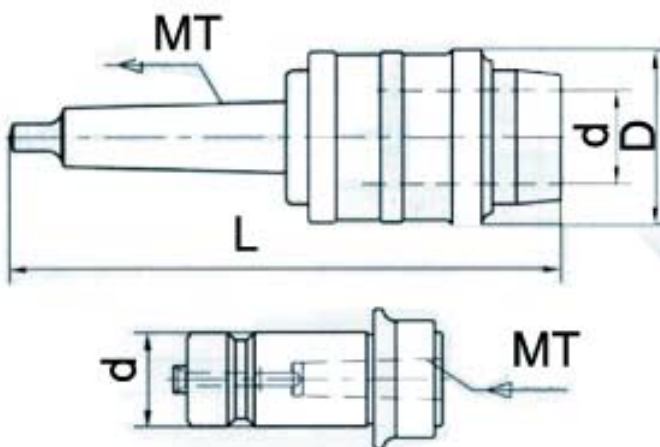
The quick change chuck consists of the chuck body, a few morse taper adaptors and drill chuck arbors. Simple push the locking bush to release and change the morse taper adaptors or drill chuck arbors. It is a versativle tool for for for drilling, reaming on drilling machine, lathe and boring machines.



Order No.	Shank Taper	Morse Taper Sleeves	Drill Chuck Arbor
468-9670	MT3	MT1, MT2, MT3	JT0
			JT1
			JT2S
468-9671	MT4	MT1, MT2, MT3	JT2
			JT3
			JT4
468-9672	MT5	MT1, MT2, MT3	JT5
			JT6
			JT33

QUICK CHANGE CHUCKS

The quick change chuck consists of the chuck body, a few morse taper adaptors. Simple push the locking bush to release and change the morse taper adaptors or drill chuck arbors. It is a versatile tool for for for drilling, reaming on drilling machine, lathe and boring machines.

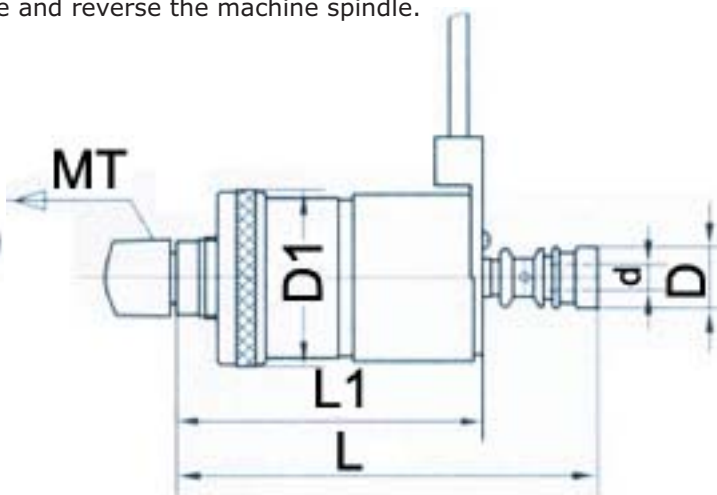


Order No.	Shank Taper	Morse Taper Sleeves	D (mm)	d (mm)	L (mm)	Weight (kg)
468-9673	MT2	MT1, MT2,	52	24	170	1.7
468-9674	MT3	MT1, MT2, MT3,	66	32	197	3.5
468-9675	MT4	MT1, MT2, MT3,MT4	78	42	246.5	5.3
468-9676	MT5	MT2, MT3,MT4, MT5	90	52	308.5	9.8
468-9677	R8	MT1, MT2, MT3,	66	32	203	3.4

REVISIBLE TAPPING CHUCKS

Features:

- * overload protection
- * Adjustable torque
- * Self-reversing with no need to stop the machine and reverse the machine spindle.
- * Quick withdrawal and simple to operate



Order No.	Tapping Range	Morse Taper Adaptors	d (mm)	D (mm)	D1 (mm)	L (mm)	L1 (mm)
468-9680	M2-M7	MT1-JT33, MT3-JT33	2.5-6.5	23	55	135	95
468-9681	M5-M12	MT3-M16, MT4-M16	3.5-10	28	75	164	114.5
468-9682	M8-M20	MT3-M20, MT4-M20	6.3-14	38	90.5	205	135

DRILL AND TAP CHUCK SET

Features:

- * Quickly change the drill or tap collets simply by pushing the nuts.
- * Adjustable tap torque to avoid tap breakage.
- * For use on lathe, milling machines and boring machines etc..
- * Tapping range from M6 to M30.

Each set includes:

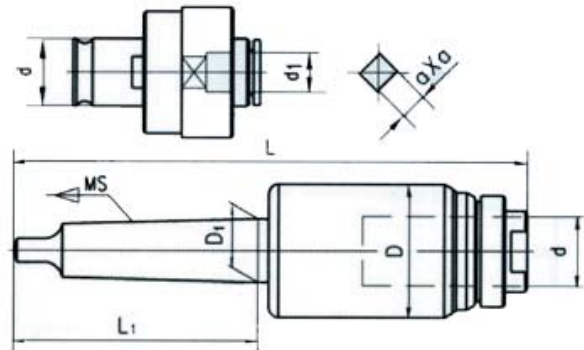
- 1 Morse taper chuck arbor
- 1 drill and tap chuck body
- 1 B16 drill chuck arbor
- 1 Morse taper adaptor
- 7 Tapping bushes
- 7 tapping collets



Order No.	Morse Taper Chuck Arbor
468-9683	MT2
468-9684	MT3
468-9685	MT4
468-9686	MT5

TAP CHUCK SET

The tapping chucks are made with with thread pitch compensation mechanism. The collet chucks have overload torque proection device to prevent tap breakage. To obtain different release torque for different diameter taps, simply adjust the nuts. It is a must for tapping work on drill, lathe, boring machines, milling machines etc.



Order No.	Shank taper	D (mm)	D1 (mm)	d (mm)	L1(mm)	L (mm)	Tapping range	Torque (Nm)	Wt (kg)
468-9687	MT2	46	17.78	19	75	171.5	M3-M12	25	1.08
468-9688	MT3	46	23.825	19	94	191	M3-M12	25	1.28
468-9689	MT4	46	31.267	19	117.5	216	M3-M12	25	3
468-9690	R8	46	31.75	19	101.6	193.6	M3-M16	46.3	1.71
468-9691	MT2	46	17.78	19	75	171.5	M3-M16	46.3	1.08
468-9692	MT3	46	23.825	19	94	191	M3-M16	46.3	1.61
468-9693	MT4	46	31.267	19	117.5	216	M3-M16	46.3	3
468-9694	MT3	66	23.825	30	94	227	M12-M24	150	3.2
468-9695	MT4	66	31.267	30	117.5	252	M12-M24	150	3.6
468-9696	MT5	66	44.399	30	149.5	284	M12-M24	150	4.5

TAPPING CHUCK SET

The tapping chuck set includes chuck arbor, drill chuck adaptor, morse taper adaptor sleeves and tapping sleeves. Simply move the locking bush, the drill and tap sleeves can be quickly changed.



Model	Body Dia. (mm)	Adaptor Dia. (mm)	Shank Taper	Tapping range	Morse Taper Adaptors
468-9700	57	25	MT3	M3-M12	MT2
468-9701	57	25	MT4	M3-M16	MT2
468-9702	57	25	MT5	M3-M16	MT2
468-9703	82	40	MT4	M8-M24	MT2,MT3
468-9704	82	40	MT5	M12-M24	MT2,MT3

Rectangular Magnetic Chuck

- * Magnetic force greater than 115PSI.
- * Securely hold magnetic conductive workpieces for surface grinding applications.

Order No.	Length (mm)	Width (mm)	Order No.	Length (mm)	Width (mm)
116-0530	175	100	116-0536	450	150
116-0531	250	125	116-0537	400	200
116-0532	150	150	116-0538	450	200
116-0533	300	150	116-0539	500	200
116-0534	350	150	116-0540	500	250
116-0535	400	150	116-0541	600	250



Super Dense Rectangular Magnetic Chuck

- * Magnetic force greater than 140PSI.
- * Securely hold magnetic conductive workpieces for surface grinding applications.
- * Fine poles (steel 1.5mm, brass 0.5mm)

Order No.	Length (mm)	Width (mm)	Order No.	Length (mm)	Width (mm)
116-0500	175	100	116-0505	400	150
116-0501	250	125	116-0506	450	150
116-0502	150	150	116-0507	400	200
116-0503	300	150	115-0508	450	200
116-0504	350	150	115-0509	500	200



Round Magnetic Chuck

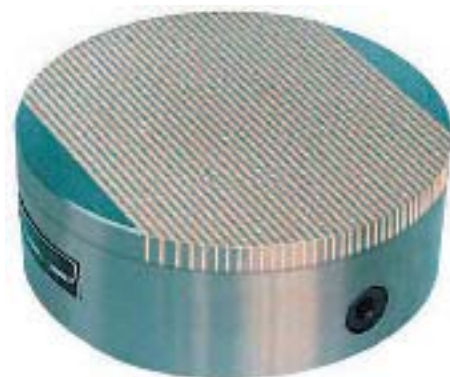
- * Securely hold magnetic conductive workpieces for surface grinding applications.



Order No.	Size (DXH)	Max. Holding Power
116-0410	100x68mm	116PSI
116-0411	160x66mm	
116-0412	200x73mm	
116-0413	250x80mm	174PSI
116-0414	300x94mm	
116-0415	350x97mm	
116-0416	400x100mm	
116-0417	500x110mm	

Super Dense Round Magnetic Chuck

- * Magnetic force greater than 116PSI.
- * Securely hold magnetic conductive workpieces for surface grinding applications.
- * Fine poles.



Order No.	Size (DXH)
116-0400	200x60mm
116-0401	300x60mm
116-0402	400x60mm
116-0403	500x60mm
116-0404	600x60mm

Shockproof Machine Mounts

- * Machines are stationary on floor without anchors. Therefore the cost and time of installation can be greatly saved.
- * It is convenient and quick to adjust the level of machine .
- * The layout of machines can be changed freely according to the modification of manufacturing process. So it is easy to design the flexible production line .
- * Vibration and noise can be reduced and isolated by using this product.
- * It can resist oil and corrosion greatly
- * Metal cutting machine, CNC machines, metalforming machines, rubber and plastic machines, spinning machines and foodprocess machines.

Order No.	Dia.	Thread	Bolt Height	Base Height	Adjustable height	Weight (kg)
400-1400	40mm	M5	30	15	5	0.05
400-1401	80mm	M10	80	25	8	0.3
400-1402	120mm	M12	100	32	12	1.02
400-1403	160mm	M16	120	35	12	2.03
400-1404	185mm	M20	130	39	12	3.07
400-1405	229mm	M24X1.5	180	54	12	7.56
400-1406	317mm	M30X2	200	70	12	17.5



Shockproof Machine Mounts

Light duty metalcutting machine, light industry, textile, foodprocess production line machine.

Order No.	Dia.	Thread	Base Height	Bolt Length	Height adjust	Weight (kg)	Load Per Mount (kgs)
400-1410	63mm	M10	17	90	12	0.2	9-80
400-1411	76mm	M12	20	110	12	0.34	80-135
400-1412	86mm	M12	25	115	14	0.45	135-320
400-1413	110mm	M16	28	135	14	0.93	320-540
400-1414	127mm	M16	30	140	15	1.18	540-890
400-1415	150mm	M16	33	140	18	1.64	890-1500
400-1416	171mm	M20	35	150	20	2.4	1500-2100



Shockproof Machine Mounts

For metal cutting machine, metalforming machine, printing machine, Rubber and plastic machines, spinning machines, light industry machines, food processing machines, generator and pump machine.

Order No.	Dia.	Thread	Base Height	Bolt Length	Height adjust	Weight (kg)	Load Per Mount (kgs)
400-1420	80mm	M10	49	100	10	0.94	80-400
400-1421	120mm	M12	56	120	10	2.38	310-750
400-1422	160mm	M16	67	140	12	4.61	700-1200
400-1423	200mm	M20	80	180	14	9.85	1100-4800



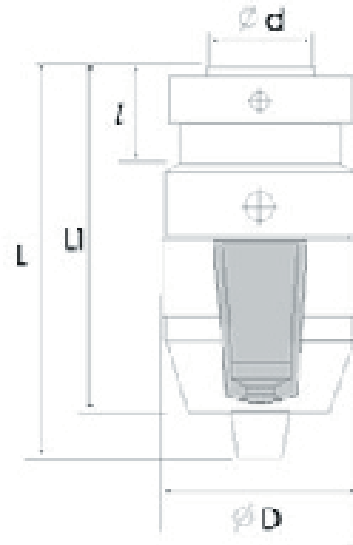
Shockproof Machine Mounts

- * Machines are stationary on floor without anchors.
- * It is convenient and quick to adjust the level of machine.
- * The layout of machines can be changed freely according to the modification of manufacturing process.
- * Vibration and noise can be reduced and isolated by using this product.
- * It can resist oil and corrosion greatly.

Order No.	L*W*H (mm)	Thread (mm)	Adjustable Height (mm)	Weight (kg)	Load Per Mount (kgs)
400-1430	115x80x61	M12	8	2.86	500-750
400-1431	150x75x61	M12	10	3.59	750-1000
400-1432	190x95x65	M16	12	6.3	1000-2000
400-1433	250x115x90	M20	14	15.3	2000-3000



Industrial keyless chuck



Application

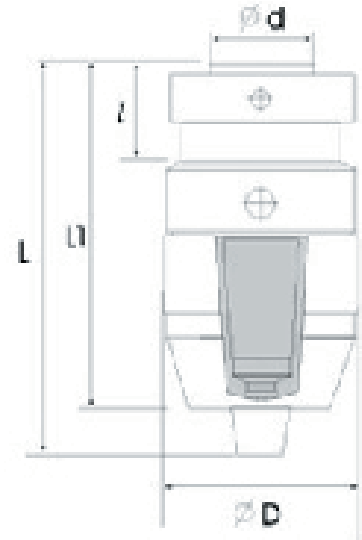
Recommended for CNC machining center.

Features

1. High precision, and high gripping force, high reliability and stability.
2. Flimsy parts are shaped by quenching.
3. Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.

Order NO.	Capacity	Arbor Taper	Taper	d	i	D	L	L1	kg	Check rod		Precision Grade		N.M
				mm	mm	mm	mm	mm		Big	Small	M	P	
436-7684	0.5-6mm	B10	2°51' 26.7"	10.094	14.5	34	71.2	61.4	0.32	6×65	4×45	0.06	0.08	3
436-7685	1/64" -1/4"	JT1	4°24' 53.1"	9.754	16.669									
436-7686	0.5-8mm	B12	2°51' 26.7"	12.065	18.5	34	71.2	61.4	0.5	8×80	4×45	0.06	0.1	4
436-7687	1/64" -5/16"	JT2	4°40' 11.6"	14.199	22.225									
436-7688	1.0-10mm	B12	2°51' 26.7"	12.065	18.5	44	93.4	81	0.7	9×95	5×60	0.06	0.1	6
436-7689	1/32" -3/8"	JT2	4°40' 11.6"	14.199	22.225									
436-7690	1-13mm	B16	2°51' 41.0"	15.733	24	51	106	94	0.96	13×105	6×65	0.06	0.1	12
436-7691	1/32" -1/2"	JT33	3°38' 13.4"	15.85	25.4									
436-7692	1.0-16mm	B18	2°51' 41.0"	17.78	32	54	115.2	102	1.24	16×110	8×80	0.06	0.1	14
436-7693	1/32" -5/8"	JT6	2°58' 24.8"	17.17	25.4									
436-7694	5.0-20mm	B22	2°52' 31.5"	21.793	40.5	57	129.2	115	1.7	20×120	10×95	0.06	0.1	16
436-7695	3/16" -3/4	JT3	3°3' 3"	20.599	30.956									

Industrial keyless chuck



Application

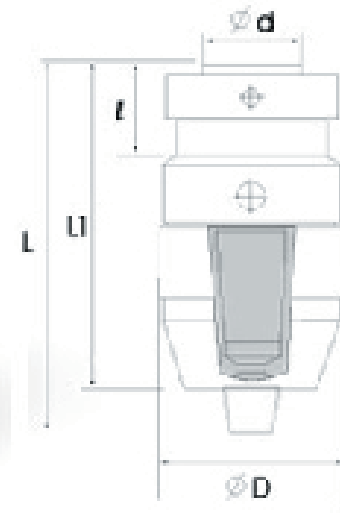
Recommended for CNC machining center.

Features

1. High precision, and high gripping force, high reliability and stability.
2. Flimsy parts are shaped by quenching.
3. Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.

Order No.	Capacity	Arbor Taper	Taper	d	i	D	L	L1	kg	Check rod Size		Precision Grade		N.M
	Number			mm	mm					mm	mm	mm	mm	
436-7696	0.3-4mm 1/64" -5/32"	JTO	2°49' 24.7"	6.35	11.112	29	60.8	55	-	4x45	-	0.05	0.08	1.2
436-7697	0.5-6mm	B10	2°51' 26.7"	10.094	14.5	34	70.6	64	0.32	6x65	4x45	0.05	0.1	3
436-7698	1/64" -1/4"	JT1	4°24' 53.1"	9.754	16.669									
436-7699	0.5-8mm	B12	2°51' 26.7"	12.065	18.5	39	80.4	73	0.5	8x80	4x45			
436-7700	1/64" -5/16"	JT2	4°40' 11.6"	14.199	22.225									
436-7701	1.0-10mm	B12	2°51' 26.7"	12.065	18.5	44	90.2	82	0.7	9x95	5x60			
436-7702	1/32" -3/8"	JT2	4°40' 11.6"	14.199	22.225									
436-7703	1.0-13mm	B16	2°51' 41.0"	15.733	24	49	100.6	91	0.96	13x105	6x65			
436-7704	1/32" -1/2"	JT33	3°38' 13.4"	15.85	25.4									
436-7705	1.0-16mm	B18	2°51' 41.0"	17.78	32	54	112.2	102	1.24	16x110	8x80	0.05	0.1	14
436-7706	1/32" -5/8"	JT6	2°58' 24.8"	17.17	25.4									
436-7707	5.0-20mm	B22	2°52' 31.5"	21.793	40.5	59	124.2	116	1.7	20x120	10x95	0.05	0.1	16
436-7708	3/16" -3/4"	JT3	3°3' 3"	20.599	30.956									

Industrial keyless chuck



Application

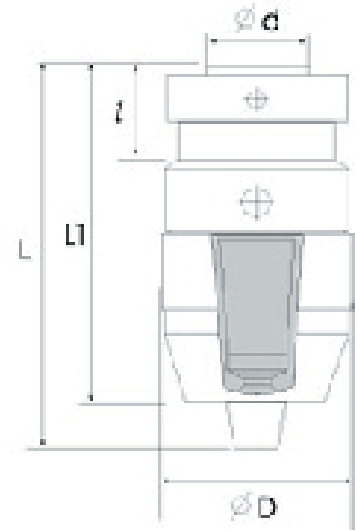
Recommended for CNC machining center.

Features

1. High precision, and high gripping force, high reliability and stability.
2. Flimsy parts are shaped by quenching.
3. Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.

OrderNO.	Capacity	Ta- pering	Taper	d	l	D	L	L1	kg	Check rod Size		Precision Grade		N.M
				mm	mm	mm	mm	mm		Big	Small	M	P	
436-7709	0.3-4mm	JTO	2°49' 24.7"	6.35	11.112	29	60.8	55	-	4×45	-	0.06	0.08	1.2
	1/16"-5/32"													
436-7710	0.5-6mm	B10	2°51' 26.7"	10.094	14.5	34	71.2	64	0.32	6×65	4×45	0.05	0.1	3
436-7711	1/16"-1/4"	JT1	4°24' 53.1"	9.754	16.669									
436-7712	0.5-8mm	B12	2°51' 26.7"	12.065	18.5	34	71.2	73	0.32	8×80	4×45	0.05	0.1	4
436-7713	1/16"-5/16"	JT2	4°40' 11.6"	14.199	22.225									
436-7714	1.0-10mm	B12	2°51' 26.7"	12.065	18.5	44	93.4	82	0.7	10×95	5×60	0.05	0.1	6
436-7715	1/32"-3/8"	JT2	4°40' 11.6"	14.199	22.225									
436-7716	1.0-13mm	B16	2°51' 41.0"	15.733	24	51.5	106	91	0.96	13×105	6×65	0.05	0.1	12
436-7717	1/32"-1/2"	JT33	3°38' 13.4"	15.85	25.4									
436-7718	1.0-16mm	B18	2°51' 41.0"	17.78	32	54	115	102	1.24	16×110	8×80	0.05	0.1	14
436-7719	1/32"-5/8"	JT6	2°58' 24.8"	17.17	25.4									
436-7720	5.0-20mm	B22	2°52' 31.5"	21.793	40.5	57	129.2	116	1.7	20×120	10×95	0.05	0.1	16
436-7721	3/16"-3/4"	JT3	3°3' 3"	20.599	30.956									

Industrial keyless chuck



Application

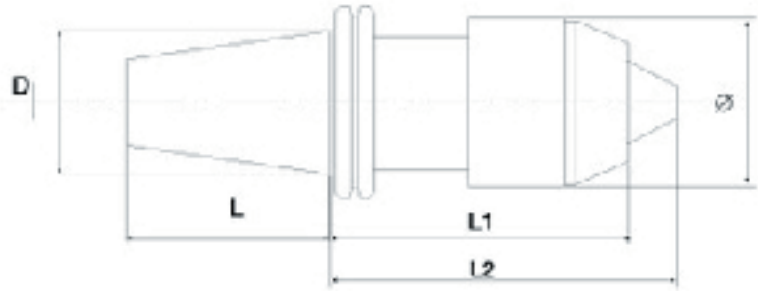
Recommended for CNC machining center.

Features

1. High precision, and high gripping force, high reliability and stability.
2. Flimsy parts are shaped by quenching.
3. Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.

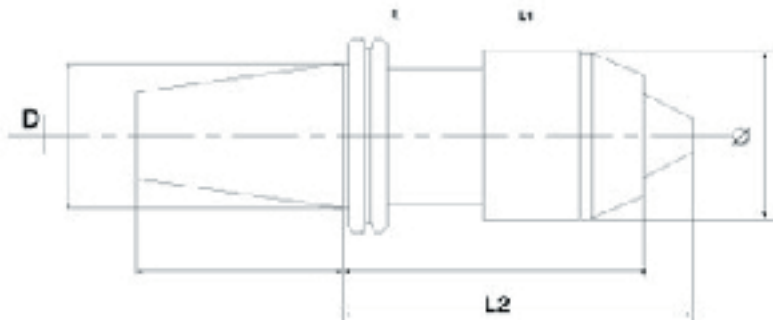
Order No.	Capacity	Tapering Hole	Taper	d	i	D	L	L1	kg	Check rod Size		Run-out (mm)	N.M
				mm	mm					mm	mm		
436-7722	0.5-6mm	B10	2°51' 26.7"	10.094	14.5	34	71.2	61.4	0.32	6×65	4×45	0.08	3
436-7723	1/64" -1/4"	JT1	4°24' 53.1"	9.754	16.669			61.4					
436-7724	0.5-8mm	B12	2°51' 26.7"	12.065	18.5	34	71.2	61.4	0.32	8×80	4×45	0.1	4
436-7725	1/64" -5/16"	JT2	4°40' 11.6"	14.199	22.225			61.4					
436-7726	1.0-10mm	B12	2°51' 26.7"	12.065	18.5	36	78	70	0.7	10×95	5×60	0.1	6
436-7727	1/32" -3/8"	JT2	4°40' 11.6"	14.199	22.25			70					
436-7728	1.0-13mm	B16	2°51' 41.0"	15.733	24	49	94.5	85.2	0.96	13×105	6×65	0.1	12
436-7729	1/32" -1/2"	JT33	3°38' 13.4"	15.85	25.4			44					
436-7730	3.0-16mm	B18	2°51' 41.0"	17.78	32	54	103	93	1.24	16×110	8×80	0.1	14
436-7731	1/32" -5/8"	JT6	2°58' 24.8"	17.17	25.4			50.5					
436-7732	5.0-20mm	B22	2°52' 31.5"	21.793	40.5	59	124.2	116	1.7	20×120	10×95	0.1	16
436-7733	3/16" -3/4"	JT3	3°3' 3"	20.599	30.956			116					

Keyless Chuck With ISO Shank



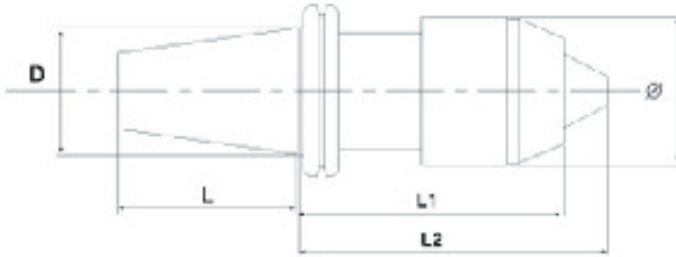
Order No.	Capacity		Arbor Taper	Dimensiones					Thread
	mm	Inch		φ	L1	L2	L	D	
436-7734	0-8mm	0-5/16"	30	38	101	107	48.5	31.75	1/2"-13
436-7735	0-8mm	0-5/16"	40	38	82	88	65.4	44.45	1/2"-13
436-7736	1-13mm	1/32"-1/2"	40	48	115	126	65.4	44.45	5/8"-11
436-7737	1-13mm	1/32"-1/2"	45	48	96	107	82.8	57.15	3/4"-10
436-7738	1-13mm	1/32"-1/2"	50	48	96	107	101.8	69.85	1"-8
436-7739	3-16mm	1/8"-5/8"	40	55	120	131	65.4	44.45	5/8"-11
436-7740	3-16mm	1/8"-5/8"	50	55	94	105	101.8	69.85	1"-8

Keyless Chuck With ISO Shank



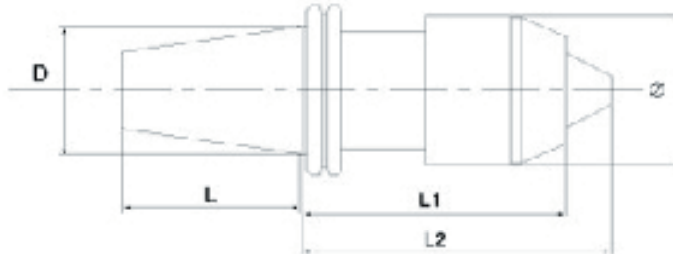
Order NO.	Capacity		Arbor Taper	Dimensiones					Thread
	mm	Inch		φ	L1	L2	L	D	
436-7741	0-8mm	0-5/16"	30	38	101	107	48.5	31.75	1/2"-13
436-7742	0-8mm	0-5/16"	40	38	82	88	65.4	44.45	1/2"-13
436-7743	1-13mm	1/32"-1/2"	40	48	115	126	65.4	44.45	5/8"-11
436-7744	1-13mm	1/32"-1/2"	45	48	96	107	82.8	57.15	3/4"-10
436-7745	1-13mm	1/32"-1/2"	50	48	96	107	101.8	69.85	1"-8
436-7746	3-16mm	1/8"-5/8"	40	55	120	131	65.4	44.45	5/8"-11
436-7747	3-16mm	1/8"-5/8"	50	55	94	105	101.8	69.85	1"-8

Keyless Chuck With Integrated Shank



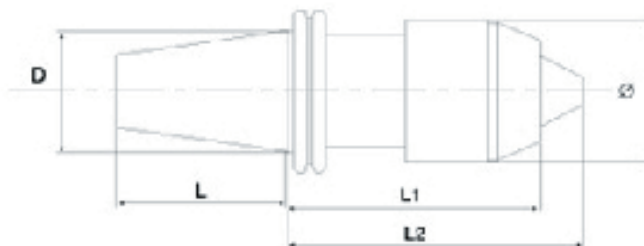
Order NO.	Capacity		Arbor Taper	Dimension					Thread
	mm	Inch		ϕ	L1	L2	L	D	
436-7748	0-8mm	0-5/16"	40	40	90	97	65.4	44.45	M16
436-7749	1-13mm	1/32"-1/2"	40	57	113	125	65.4	44.45	M16
436-7750	1-13mm	1/32-1/2"	50	57	93	105	101.8	69.85	M24
436-7751	3-16mm	1/8"-5/8"	40	57	115	127	65.4	44.45	M16
436-7752	3-16mm	1/8"-5/8"	50	57	96	107	101.8	69.85	M24

Keyless Chuck With ISO Taper Shank



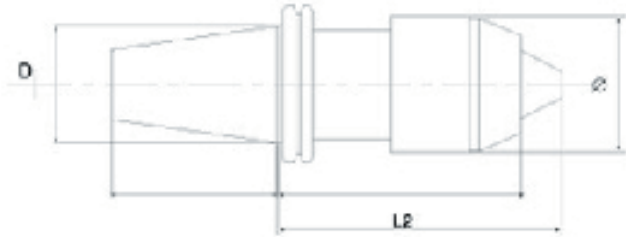
Order No.	Capacity		Arbor Taper	Dimension					Thread
	mm	Inch		ISO	ϕ	L1	L2	L	
436-7753	0-8mm	0-5/16"	40	40	90	97	65.4	44.45	M16
436-7754	1-13mm	1/32"-1/2"	40	57	113	125	65.4	44.45	M16
436-7755	1-13mm	1/32-1/2"	50	57	93	105	101.8	69.85	M24
436-7756	3-16mm	1/8"-5/8"	40	57	115	127	65.4	44.45	M16
436-7757	3-16mm	1/8"-5/8"	50	57	96	107	101.8	69.85	M24

Keyless Chuck With ISO Taper Shank



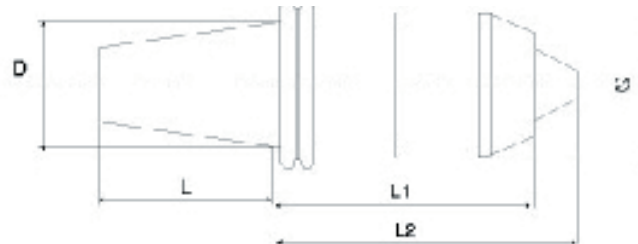
Order No.	Capacity		Arbor Shank	Dimensiones					Thread
	mm	Inch		ϕ	L1	L2	L	D	
436-7758	0-8mm	0-5/16"	40	40	90	97	65.4	44.45	M16
436-7759	1-13mm	1/32"-1/2"	40	57	113	125	65.4	44.45	M16
436-7760	1-13mm	1/32-1/2"	50	57	93	105	101.8	69.85	M24
436-7761	3-16mm	1/8"-5/8"	40	57	115	127	65.4	44.45	M16
436-7762	3-16mm	1/8"-5/8"	50	57	96	107	101.8	69.85	M24

Keyless Chuck With ISO Taper Shank



Order No.	Capacity		Arbor Taper	Dimension					Thread
	mm	Inch		ISO	φ	L1	L2	L	
436-7763	0-8mm	0-5/16"	30	38	101	107	48.5	31.75	1/2"-13
436-7764	0-8mm	0-5/16"	40	38	82	88	65.4	44.45	1/2"-13
436-7765	1-13mm	1/32"-1/2"	40	48	115	126	65.4	44.45	5/8"-11
436-7766	1-13mm	1/32"-1/2"	45	48	96	107	82.8	57.15	3/4"-10
436-7767	1-13mm	1/32"-1/2"	50	48	96	107	101.8	69.85	1"-8
436-7768	3-16mm	1/8"-5/8"	40	55	120	131	65.4	44.45	5/8"-11
436-7769	3-16mm	1/8"-5/8"	50	55	94	105	101.8	69.85	1"-8

Keyless Chuck With ISO Taper Shank



Order NO.	Capacity		Arbor Taper	Dimensions					Thread
	mm	Inch		ISO	φ	L1	L2	L	
436-7770	0-8mm	0-5/16"	40	40	90	97	65.4	44.45	M16
436-7771	1-13mm	1/32"-1/2"	40	57	113	125	65.4	44.45	M16
436-7772	1-13mm	1/32"-1/2"	50	57	93	105	101.8	69.85	M24
436-7773	3-16mm	1/8"-5/8"	40	57	115	127	65.4	44.45	M16
436-7774	3-16mm	1/8"-5/8"	50	57	96	107	101.8	69.85	M24

Keyless Chuck With ISO Taper Shank



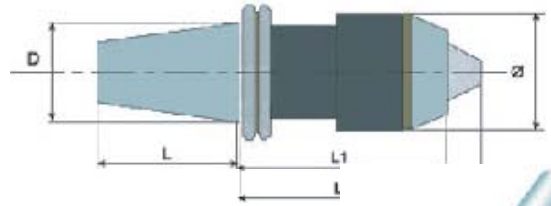
Order NO.	Capacity		Arbor Taper	Dimensions					Thread
	mm	Inch		ISO	φ	L1	L2	L	
436-7775	0-8mm	0-5/16"	40	40	90	97	65.4	44.45	M16
436-7776	1-13mm	1/32"-1/2"	40	57	113	125	65.4	44.45	M16
436-7777	1-13mm	1/32"-1/2"	50	57	93	105	101.8	69.85	M24
436-7778	3-16mm	1/8"-5/8"	40	57	115	127	65.4	44.45	M16
436-7779	3-16mm	1/8"-5/8"	50	57	96	107	101.8	69.85	M24

DRILL CHUCKS

Keyless Chuck With BT Taper Shank

Features:

- * This integrated design makes it impossible for the arbor and the drill chuck to become accidentally separated.
- * High precision and high gripping force, high reliability and stability.
- * Flimsy parts are shaped by quenching.
- * Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.

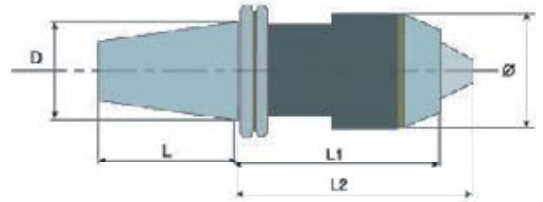


Order No.	Capacity		Drill Chuck Arbor	Dimension					Thread
	mm	Inch		BT	φ	L1	L2	L	
436-7780	0-8mm	0-5/16"	40	40	90	97	65.4	44.45	M16
436-7781	1-13mm	1/32"-1/2"	40	57	113	125	65.4	44.45	M16
436-7782	1-13mm	1/32"-1/2"	50	57	93	105	101.8	69.85	M24
436-7783	3-16mm	1/8"-5/8"	40	57	115	127	65.4	44.45	M16
436-7784	3-16mm	1/8"-5/8"	50	57	96	107	101.8	69.85	M24

Keyless Chuck With BT Taper Shank

Features:

- * This integrated design makes it impossible for the arbor and the drill chuck to become accidentally separated.
- * High precision and high gripping force, high reliability and stability.
- * Flimsy parts are shaped by quenching.
- * Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.



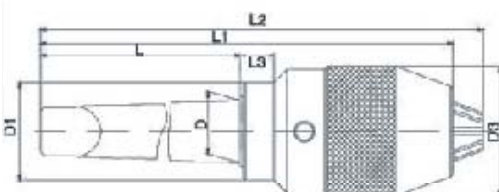
Order NO.	Capacity		Drill chuck Arbor	Dimensions					Thread
	mm	Inch		BT	φ	L1	L2	L	
436-7785	0-8mm	0-5/16"	30	38	101	107	48.5	31.75	1/2"-13
436-7786	0-8mm	0-5/16"	40	38	82	88	65.4	44.45	1/2"-13
436-7787	1-13mm	1/32"-1/2"	40	48	115	126	65.4	44.45	5/8"-11
436-7788	1-13mm	1/32"-1/2"	45	48	96	107	82.8	57.15	3/4"-10
436-7789	1-13mm	1/32"-1/2"	50	48	96	107	101.8	69.85	1"-8
436-7790	3-16mm	1/8"-5/8"	40	55	120	131	65.4	44.45	5/8"-11
436-7791	3-16mm	1/8"-5/8"	50	55	94	105	101.8	69.85	1"-8

Keyless Chuck With Morse Taper Shank

Features:

- * High precision morse taper.
- * This integrated design makes it impossible for the arbor and the drill chuck to become accidentally separated.
- * High precision and high gripping force, high reliability and stability.
- * Flimsy parts are shaped by quenching.
- * Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.

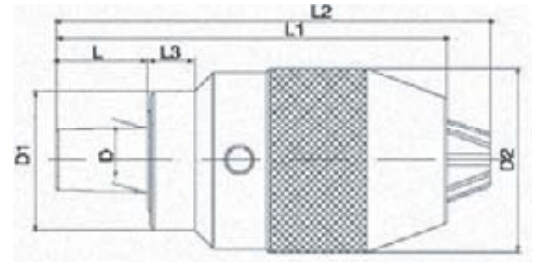
Order NO.	Arbor Taper	Capacity		Dimensions			
		mm	Inch	D1	L1	L2	L
436-7792	MT3	1-13mm	1/32-1/2	51	181	192.5	99.5
436-7793	MT3	1-16mm	1/32-5/8	57	208	219.5	99.5



Keyless Chuck With Morse Taper Shank

Features:

- 1.High precision morse taper.
- 2.This integrated design makes it impossible for the arbor and the drill chuck to become accidentally separated.
- 3.High precision and high gripping force,high reliability and stability.
- 4.Flimsy parts are shaped by quenching.
- 5.Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage



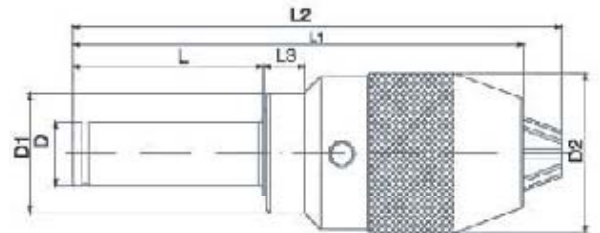
Order No.	Taper Shank	Capacity		Dimension				
		mm	Inch	D1	L1	L2	L	D
436-7794	MT3	1-13mm	1/32-1/2	51	108	119	26.5	23.825
436-7795	MT3	1-16mm	1/32-5/8	57	114.5	126	26.5	23.825



Keyless Chuck With Taper Shank

Features:

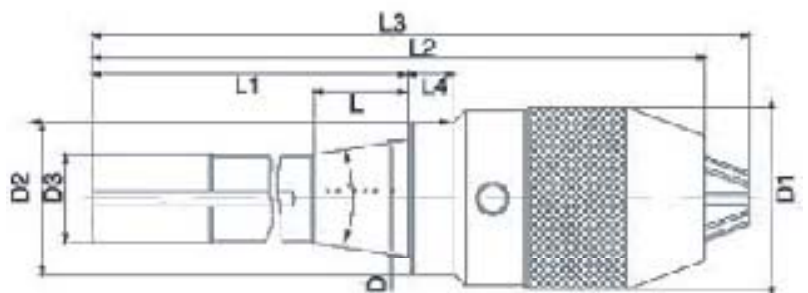
- 1.High precision straight shank.
- 2.This integrated design makes it impossible for the arbor and the drill chuck to become accidentally separated.
- 3.High precision and high gripping force,high reliability and stability.
- 4.Flimsy parts are shaped by quenching.
- 5.Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.



order No.	Shank Taper	Capacity		Dimensione				
		mm	Inch	D1	L1	L2	L	D
436-7796	C20	1-13mm	1/32-1/2	51	141.5	153	60	20
436-7797	C25	1-16mm	1/32-5/8	57	148	180	80	25



Keyless Chuck With R8 Shank



Features:

- 1.Mounts available:Morse tapers, straight shanks and R-8.
- 2.This integrated design makes it impossible for the arbor and the drill chuck to become accidentally separated.
- 3.High precision and high gripping force,high reliability and stability.
- 4.Flimsy parts are shaped by quenching.
- 5.Self-tighting feature automatically increase gripping force proportional to increased torque to prevent tool shank slippage.

Order No.	Shank Taper	Capacity		Dimensione				
		mm	Inch	D1	L1	L2	L	D
436-7798	R8	1-13mm	1/32-1/2	51	102	183	195	31.75
436-7799	R8	1-16mm	1/32-5/8	57	102	210	222	31.75

DRILL CHUCKS

Soft-Grip keyless chuck

- * More comfortable and soft sleeve
- * Positive gripping with easier tightening
- * can apply more input torque, therefore more output torque is applied to the bit.
- * Prevents your hands from being irritated during frequent tightening.
- * Color and style can be made according to the customers' demands.
- * Different colors can be chosen to match different drills.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7534	1.5-13	1/16-1/2	3/8-24UNF	49	62	75
436-7535	1.5-13	1/16-1/2	1/2-20UNF	49	62	75



Soft-Grip keyless chuck

- * More comfortable and soft sleeve
- * Positive gripping with easier tightening can apply more input torque, therefore more output torque is applied to the bit.
- * Prevents your hands from being irritated during frequent tightening.
- * Color and style can be made according to the customers' demands.
- * Different colors can be chosen to match different drills.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-3536	1.5-13	1/16-1/2	3/8-24UNF	49	62	75
436-3537	1.5-13	1/16-1/2	1/2-20UNF	49	62	75

With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7538	1.0-10	1/32-3/8	3/8-24UNF	41	56	66
436-7539	1.0-10	1/32-3/8	1/2-20UNF	41	56	66
436-7540	2.0-13	1/16-1/2	3/8-24UNF	43	67	75
436-7541	2.0-13	1/16-1/2	1/2-20UNF	43	67	75

With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

- * patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
- * By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
- * patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
- * Color and style can be made according to the customer's demands to match different drills.
- * Metal or plastic sleeves can be chosen according to the requirements.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7542	1.0-10	1/32-3/8	3/8-24UNF	41	56	66
436-7543	1.0-10	1/32-3/8	1/2-20UNF	41	56	66
436-7544	2.0-13	1/16-1/2	3/8-24UNF	42.5	67	75
436-7545	2.0-13	1/16-1/2	1/2-20UNF	42.5	67	75

With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

- * patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
- * By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
- * Patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
- * Color and style can be made according to the customer's demands to match different drills.
- * Metal or plastic sleeves can be chosen according to the requirements.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7546	1.0-10	1/32-3/8	3/8-24UNF	41	56	66
436-7547	1.0-10	1/32-3/8	1/2-20UNF	41	56	66
436-7548	2.0-13	1/16-1/2	3/8-24UNF	42.5	67	75
436-7549	2.0-13	1/16-1/2	1/2-20UNF	42.5	67	75

With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

- * Patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
- * By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
- * patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
- * Color and style can be made according to the customer's demands to match different drills.
- * Metal or plastic sleeves can be chosen according to the requirements.



Order No. mm	Capacity Mount		D mm	Body Diameter mm	Length Between Ends mm	Length mm
	mm	mm				
436-7550	1.0-10	1/32-3/8	1/2-20UNF	41	58	64
436-7551	1.0-10	1/32-3/8	3/8-24UNF	41	58	64
436-7552	2.0-13	1/16-1/2	1/2-20UNF	42.5	62	75
436-7553	2.0-13	1/16-1/2	3/8-24UNF	42.5	62	75

DRILL CHUCKS

With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7554	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7555	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7556	2.0-13	1/16-1/2	3/8-24UNF	43	62	75
436-7557	2.0-13	1/16-1/2	1/2-20UNF	43	62	75



With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7558	0.8-10	1/32-3/8	3/8-24UNF	41.5	57	64
436-7559	0.8-10	1/32-3/8	1/2-20UNF	41.5	57	64
436-7560	2.0-13	1/16-1/2	3/8-24UNF	45	67	75
436-7561	2.0-13	1/16-1/2	1/2-20UNF	45	67	75



With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7562	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7563	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7564	2.0-13	1/16-1/2	3/8-24UNF	43	67	75
436-7565	2.0-13	1/16-1/2	1/2-20UNF	43	67	75



With Lock System metal shell chuck

Application: Recommended for impact electric drills up to 800-1200W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7566	1.0-10	1/32-3/8	3/8-24UNF	41	56	66
436-7567	1.0-10	1/32-3/8	1/2-20UNF	41	56	66
436-7568	2.0-13	1/16-1/2	3/8-24UNF	43	67	75
436-7569	2.0-13	1/16-1/2	1/2-20UNF	43	67	75



With Lock System metal shell chuck

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7570	2.0-13	1/16-1/2	3/8-24UNF	43	64	75
436-7571	2.0-13	1/16-1/2	1/2-20UNF	43	64	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7572	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7573	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7574	1.5-13	1/16-1/2	3/8-24UNF	42.5	62	75
436-7575	1.5-13	1/16-1/2	1/2-20UNF	42.5	62	75
436-7576	3.0-16	1/8-5/8	5/8-16UNF	50	71.5	86
436-7577	3.0-16	1/8-5/8	1/2-20UNF	50	71.5	86



DRILL CHUCKS

With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7578	1.5-13	1/16-1/2	3/8-24UNF	42.5	62	75
436-7579	1.5-13	1/16-1/2	1/2-20UNF	42.5	62	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7580	0.8-10	1/16-3/8	3/8-24UNF	41	54	64
436-7581	0.8-10	1/16-3/8	1/2-20UNF	41	54	64
436-7582	1.5-13	1/16-1/2	3/8-24UNF	43	65	75
436-7583	1.5-13	1/16-1/2	1/2-20UNF	43	65	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7584	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7585	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7586	1.5-13	1/16-1/2	3/8-24UNF	43	65	75
436-7587	1.5-13	1/16-1/2	1/2-20UNF	43	65	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7588	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7589	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7590	1.5-13	1/16-1/2	3/8-24UNF	43	65	75
436-7591	1.5-13	1/16-1/2	1/2-20UNF	43	65	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7592	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7593	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7594	1.5-13	1/16-1/2	3/8-24UNF	43	65	75
436-7595	1.5-13	1/16-1/2	1/2-20UNF	43	65	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7596	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7597	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7598	1.5-13	1/16-1/2	3/8-24UNF	43	65	75
436-7599	1.5-13	1/16-1/2	1/2-20UNF	43	65	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features;

- 1.patented appearance with Human-based design,more comtortable and positive gripping can apply more output torque.
- 2.By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
- 3.patented positive lock system with "clack" feature indicating that the chuck is properly tightened,when rotate the front sleeve,which prevents loosening in hammer and other high-vibration applications.
- 4.Color and style can be made according to the customer's demands to match different drills.
- 5.Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7600	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7601	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7602	1.5-13	1/16-1/2	3/8-24UNF	43	65	75
436-7603	1.5-13	1/16-1/2	1/2-20UNF	43	65	75



STYLE A

With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

- 1.patented appearance with Human-based design,more comtortable and positive gripping can apply more output torque.
- 2.By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
- 3.patented positive lock system with "clack" feature indicating that the chuck is properly tightened,when rotate the front sleeve,which prevents loosening in hammer and other high-vibration applications.
- 4.Color and style can be made according to the customer's demands to match different drills.
- 5.Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7604	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7605	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7606	1.5-13	1/16-1/2	3/8-24UNF	43	62	75
436-7607	1.5-13	1/16-1/2	1/2-20UNF	43	62	75



STYLE A

With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

- 1.patented appearance with Human-based design,more comtortable and positive gripping can apply more output torque.
- 2.By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
- 3.patented positive lock system with "clack" feature indicating that the chuck is properly tightened,when rotate the front sleeve,which prevents loosening in hammer and other high-vibration applications.
- 4.Color and style can be made according to the customer's demands to match different drills.
- 5.Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7608	0.8-10	1/32-1/2	3/8-24UNF	41	54	64
436-7609	0.8-10	1/32-1/2	1/2-20UNF	41	54	64
436-7610	1.5-13	1/16-1/2	3/8-24UNF	43	62	75
436-7611	1.5-13	1/16-1/2	1/2-20UNF	43	62	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7612	0.8-10	1/32-3/8	3/8-24UNF	41	54	64
436-7613	0.8-10	1/32-3/8	1/2-20UNF	41	54	64
436-7614	1.5-13	1/16-1/2	3/8-24UNF	43	62	75
436-7615	1.5-13	1/16-1/2	1/2-20UNF	43	62	75



With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



STYLE A



STYLE B

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7616	1.5-13	1/16-1/2	3/8-24UNF	46	69	83
436-7617	1.5-13	1/16-1/2	1/2-20UNF	46	69	83

With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



STYLE B



STYLE A

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7618	1.5-13	1/16-1/2	3/8-24UNF	46	69	83
436-7619	1.5-13	1/16-1/2	1/2-20UNF	46	69	83

With lock system plastic shell chuck

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7620	1.5-13	1/16-1/2	3/8-24UNF	43	68	80
436-7621	1.5-13	1/16-1/2	1/2-20UNF	43	68	80

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7622	1.0-10	1/32-3/8	3/8-24UNF	41	55	64
436-7623	1.0-10	1/32-3/8	1/2-20UNF	41	55	64

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features;

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7624	0.6-6	1/64-1/4	3/8-24UNF	38.5	45.5	54
436-7625	0.8-10	1/32-3/8	3/8-24UNF	38.5	45.5	54

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Feature:

1. Patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. Patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7626	0.8-10	1/32-3/8	3/8-24UNF	43	54	65
436-7627	0.8-10	1/32-3/8	1/2-20UNF	43	54	65
436-7628	1.5-13	1/16-1/2	3/8-24UNF	43	62.3	75.5
436-7629	1.5-13	1/16-1/2	1/2-20UNF	43	62.3	75.5



STYLE B



STYLE A

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. Patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. Patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7630	0.8-10	1/32-3/8	3/8-24UNF	38	51.5	62
436-7631	0.8-10	1/32-3/8	1/2-20UNF	38	51.5	62



Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. Patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. Patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7632	0.8-10	1/32-3/8	3/8-24UNF	45	55	65
436-7633	0.8-10	1/32-3/8	1/2-20UNF	45	55	65



STYLE B



STYLE A

DRILL CHUCKS

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperate with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7634	0.8-10	1/32-3/8	3/8-24UNF	45	55	65
436-7635	0.8-10	1/32-3/8	1/2-20UNF	45	55	65



Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperate with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7636	0.8-10	1/32-3/8	3/8-24UNF	45	55	65
436-7637	0.8-10	1/32-3/8	1/2-20UNF	45	55	65

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperate with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7638	0.8-10	1/32-3/8	3/8-24UNF	39	50	60
436-7639	0.8-10	1/32-3/8	1/2-20UNF	39	50	60
436-7640	1.5-13	1/16-1/2	3/8-24UNF	41	61	74
436-7641	1.5-13	1/16-1/2	1/2-20UNF	41	61	74



Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7642	0.8-10	1/32-3/8	3/8-24UNF	43	54	64.5
436-7643	0.8-10	1/32-3/8	1/2-20UNF	43	54	64.5
436-7644	1.5-13	1/16-1/2	3/8-24UNF	43	62	75
436-7645	1.5-13	1/16-1/2	1/2-20UNF	43	62	75



STYLE A



STYLE A

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7646	0.8-10	1/32-3/8	3/8-24UNF	41	54.5	64
436-7647	0.8-10	1/32-1/8	1/2-20UNF	41	54.5	64
436-7648	1.5-13	1/16-1/2	3/8-24UNF	43	62	74.5
436-7649	1.5-13	1/16-1/2	1/2-20UNF	43	62	74.5



STYLE A



STYLE B

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7650	0.8-10	1/32-3/8	3/8-24UNF	43	54	65
436-7651	0.8-10	1/32-3/8	1/2-20UNF	43	54	65
436-7652	1.5-13	1/16-1/2	3/8-24UNF	45	62	75
436-7653	1.5-13	1/16-1/2	1/2-20UNF	45	62	75
436-7654	0.8-10	1/32-3/8	3/8-24UNF	43	54	65
436-7655	0.8-10	1/32-3/8	1/2-20UNF	43	54	65
436-7656	1.5-13	1/16-1/2	3/8-24UNF	45	62	75
436-7657	1.5-13	1/16-1/2	1/2-20UNF	45	62	75



DRILL CHUCKS

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperate with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.



STYLE A



STYLE B



STYLE C

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7658	0.8-10	1/32-3/8	3/8-24UNF	45	55	65
436-7659	0.8-10	1/32-3/8	1/2-20UNF	45	55	65

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperate with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7660	0.8-10	1/32-3/8	3/8-24UNF	43	54	65
436-7661	0.8-10	1/32-3/8	1/2-20UNF	43	54	65
436-7662	1.5-13	1/16-1/2	3/8-24UNF	45	62	75
436-7663	1.5-13	1/16-1/2	1/2-20UNF	45	62	75
436-7664	0.8-10	1/32-3/8	3/8-24UNF	43	54	65
436-7665	0.8-10	1/32-3/8	1/2-20UNF	43	54	65
436-7666	1.5-13	1/16-1/2	3/8-24UNF	45	62	75
436-7667	1.5-13	1/16-1/2	1/2-20UNF	45	62	75



Keyless chuck Without lock system



STYLE A



STYLE C



STYLE B

Order NO.	Model	Capacity		Mount	Body Diameter	Length Between Ends	Length
		mm	Inch		mm	mm	mm
436-7668	J1510P	0.8-10	1/32-3/8	3/8-24UNF	45	55	65
436-7669	J1510P	0.8-10	1/32-3/8	1/2-20UNF	45	55	65

Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7670	0.8-10	1/32-3/8	3/8-24UNF	43	54	65
436-7671	0.8-10	1/32-3/8	1/2-20UNF	43	54	65
436-7672	1.5-13	1/16-1/2	3/8-24UNF	43	62	75
436-7673	1.5-13	1/16-1/2	1/2-20UNF	43	62	75



Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7674	0.8-10	1/32-3/8	3/8-24UNF	43	54	64.5
436-7675	0.8-10	1/32-3/8	1/2-20UNF	43	54	64.5
436-7676	1.5-13	1/16-1/2	3/8-24UNF	43	62	75
436-7677	1.5-13	1/16-1/2	1/2-20UNF	43	62	75



Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7678	2.0-13	1/16-1/2	3/8-24UNF	43	62	75.4
436-7679	2.0-13	1/16-1/2	1/2-20UNF	43	62	75.4



DRILL CHUCKS

Keyless chuck Without lock system

Application: Recommended for impact electric drills up to 600-950W.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque.
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented positive lock system with "clack" feature indicating that the chuck is properly tightened, when rotate the front sleeve, which prevents loosening in hammer and other high-vibration applications.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order No.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7680	2.0-13	1/16-1/2	1/2-20UNF	43	62	75
436-7681	2.0-13	1/16-1/2	3/8-24UNF	43	62	75



Keyless chuck Without lock system

Application: Recommended for DIY user, Professional AC&DC, Pneumatic drill machines.

Features:

1. patented appearance with Human-based design, more comfortable and positive gripping can apply more output torque
2. By using specialized anti-thrust bearing to convert hand-applied torque into superior gripping force.
3. patented unsmoothly design, front sleeve cooperated with rear sleeve to reduce sleeve shaking.
4. Color and style can be made according to the customer's demands to match different drills.
5. Metal or plastic sleeves can be chosen according to the requirements.

Order NO.	Capacity		Mount	Body Diameter	Length Between Ends	Length
	mm	Inch		mm	mm	mm
436-7682	1.5-13	1/16-1/2	1/2-20UNF	42.5	62	75
436-7683	1.5-13	1/16-1/2	3/8-24UNF	42.5	62	75



Industrial keyed chuck

Features

- * High precision threaded and tapered tightly mounts on the tools.
- * Sleeve, Key hole and key are shaped by quenching.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Sleeve tech and keyholes are shaped by cold pressing.
- * Harvest patented anti-hitting design prevent three holes of the body from damage in the drilling.
- * Super precision and durable.
- * Harvest Patented thumb grip styles with human-based design increase leverage and user comfort.

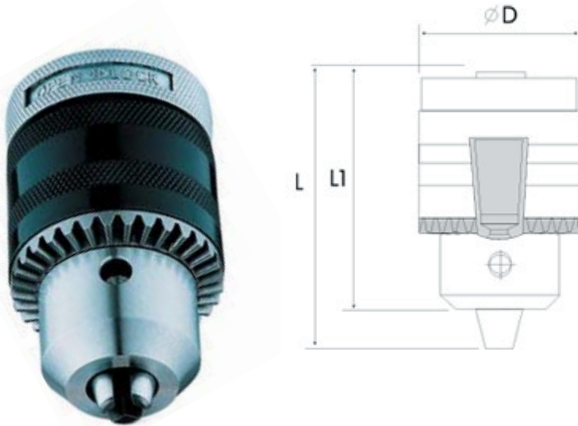


Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7396	0.6-6	1/64-1/4	B10	30.3	39.5	50
436-7397	1.0-10	1/32-3/8	B12	43.4	54	69.7
436-7398	1.0-13	1/32-1/2	B16	53.2	67	86
436-7399	1.0-16	1/32-5/8	B16	57	75	93
436-7400	1.0-16	1/32-5/8	B18	57	75	93
436-7401	5.0-20	3/16-3/4	B22	65.3	82	110
436-7402	0.6-6	1/64-1/4	JT1	30.3	39.5	50
436-7403	1.0-10	1/32-3/8	JT2	43.4	54	69.7
436-7404	1.0-13	1/32-1/2	JT33	53.2	67	86
436-7405	1.0-13	1/32-1/2	JT6	53.2	67	86
436-7406	1.0-16	1/32-5/8	JT3	57	75	93
436-7407	1.0-19	1/32-3/4	JT4	65.3	82	110
436-7408	5.0-20	3/16-3/4	JT3	68	92	120

Keyed chuck with lock system

Features

- * Ideal products for impact drills, featured with pre-tighten function on the rear sleeve with positive lock system.
- * Positive lock system with "clack" feature indicating that the chuck is properly tightened when rotate the rear sleeve, which prevents loosening in hammer and other high-vibration applications.
- * Jaw, nut, and key are specifically engineered for tight tolerance production drilling by quenching, for greater durability and extended life.
- * **Recommended for impact electric drills up to 1100W.**

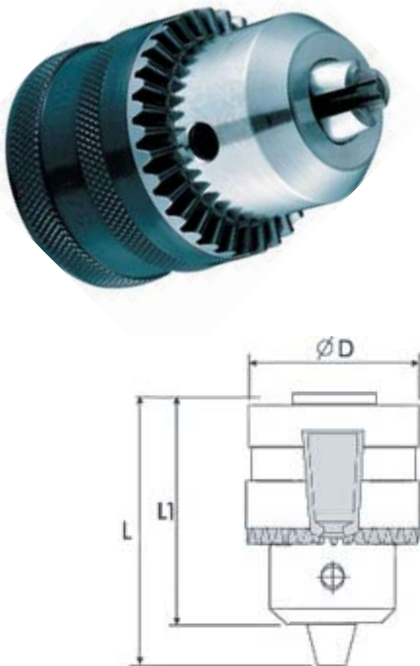


Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7409	1.5-10	1/16-3/8	3/8-24UNF	43.4	65	81
436-7410	1.5-10	1/16-1/2	1/2-20UNF	43.4	65	81
436-7411	1.5-13	1/16-1/2	1/2-20UNF	53.2	78	97
436-7412	1.5-10	1/16-3/8	B12	43.4	65	81
436-7413	1.5-13	1/16-1/2	B16	53.2	78	97
436-7414	3.0-16	1/8-5/8	B16	53.2	78	97
436-7415	3.0-16	1/8-5/8	B18	53.2	78	97
436-7416	1.5-10	1/16-3/8	JT2	43.4	65	81
436-7417	1.5-13	1/16-1/2	JT33	53.2	78	97
436-7418	1.5-13	1/16-1/2	JT6	53.2	78	97
436-7419	3.0-16	1/8-5/8	JT3	53.2	78	97
436-7420	3.0-16	1/8-5/8	JT33	53.2	78	97
436-7421	3.0-16	1/8-5/8	JT6	53.2	78	97

Keyed chuck without lock system

Features:

- * High precision threaded and tapered tightly mounts on the tools.
- * It can be protected from rusting for Cr-coated body and good appearance with sleeve electrophoretic enamelling.
- * By using specialized anti-thrust bearing to convert key-applied torque into superior gripping and anti bounce force.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.
- * Recommended for impact electric drills and kinds of AC&DC electric drill.



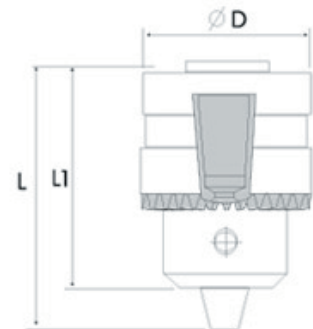
Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7422	0.6-6	1/64-1/4	3/8-24UNF	30.3	40	49
436-7423	1.5-10	1/16-3/8	3/8-24UNF	34	49	58.5
436-7424	1.5-10	1/16-3/8	1/2-20UNF	34	49	58.5
436-7425	1.5-10	1/16-3/8	M10×1.0	34	49	58.5
436-7426	1.5-10	1/16-3/8	M12×1.25	34	49	58.5
436-7427	1.5-13	1/16-1/2	3/8-24UNF	42	59	71.5
436-7428	1.5-13	1/16-1/2	1/2-20UNF	42	59	71.5
436-7429	1.5-13	1/16-1/2	M12×1.0	42	59	71.5
436-7430	1.5-13	1/16-1/2	M12×1.25	42	59	71.5
436-7431	1.5-13	1/16-1/2	M14×1.0	42	59	71.5
436-7432	3.0-16	1/8-5/8	3/8-24UNF	52	67	86
436-7433	3.0-16	1/8-5/8	1/2-20UNF	52	67	86
436-7434	3.0-16	1/8-5/8	5/8-16UNF	52	67	86
436-7435	3.0-16	1/8-5/8	M12×1.25	52	67	86
436-7436	0.6-6	1/64-1/4	B10	30.3	40	49
436-7437	1.5-10	1/16-3/8	B12	34	49	58.5
436-7438	1.5-13	1/16-1/2	B16	42	59	71.5
436-7439	3.0-16	1/8-5/8	B16	52	67	86
436-7440	3.0-16	1/8-5/8	B18	52	67	86

DRILL CHUCKS

Keyed chuck without lock system

Features:

- * High precision threaded and tapered tightly mounts on the tools.
- * Jaw are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.
- * Recommended for impact electric drills and kinds of AC&DC electric drill.



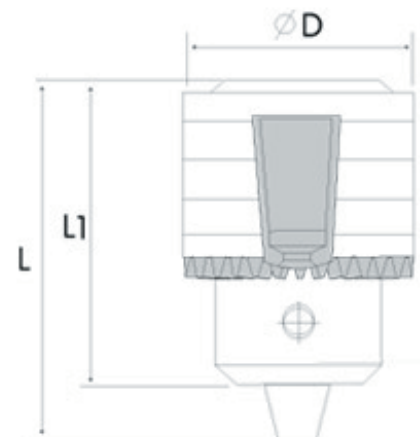
Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7441	0.6-6	1/64-1/4	3/8-24UNF	30.3	40	49
436-7442	1.5-10	1/16-3/8	3/8-24UNF	34	49	58.5
436-7443	1.5-10	1/16-3/8	1/2-20UNF	34	49	58.5
436-7444	1.5-10	1/16-3/8	M10X1.0	34	49	58.5
436-7445	1.5-10	1/16-3/8	M12X1.25	34	49	58.5
436-7446	0.6-6	1/64-1/4	B10	30.3	49	49
436-7447	1.5-10	1/16-3/8	B12	34	49	58.5
436-7448	0.6-6	1/64-1/4	JT1	30.3	40	49
436-7449	1.5-10	1/16-3/8	JT2	34	49	58.5

Keyed chuck without lock system

Application: Recommended for impact electric drills and kinds of AC&DC electric drill.

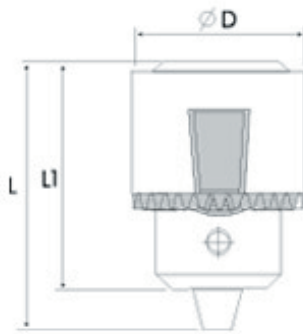
Features;

- * High precision threaded and tapered tightly mounts on the tools.
- * Jaw are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.



Order NO.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7450	1.5-13	1/16-1/2	3/8-24UNF	42	59	71.5
436-7451	1.5-13	1/16-1/2	1/2-20UNF	42	59	71.5
436-7452	1.5-13	1/16-1/2	M12X1.0	42	59	71.5
436-7453	1.5-13	1/16-1/2	M12X1.25	42	59	71.5
436-7454	1.5-13	1/16-1/2	M14X1.0	42	59	71.5
436-7455	3.0-16	1/8-5/8	3/8-24UNF	52	67	86
436-7456	3.0-16	1/8-5/8	1/2-20UNF	52	67	86
436-7457	3.0-16	1/8-5/8	5/8-16UNF	52	67	86
436-7458	3.0-16	1/8-5/8	M12X1.25	52	67	86
436-7459	1.5-13	1/16-1/2	B16	42	59	71.5
436-7460	3.0-6	1/8-5/8	B16	52	67	86
436-7461	3.0-6	1/8-5/8	B18	52	67	86
436-7462	1.5-13	1/16-1/2	JT33	42	59	71.5

Keyed chuck without lock system



Order No.	Capacity		Mount	D mm	L1 mm	L mm
	mm	Inch				
436-7463	0.4-6	1/64-1/4	B10	30	40	49
436-7464	0.3-4	1/88-1/6	JT0	20	30	36

Application: Suitable for super electric grinder, engraving machine and precision machine lathe

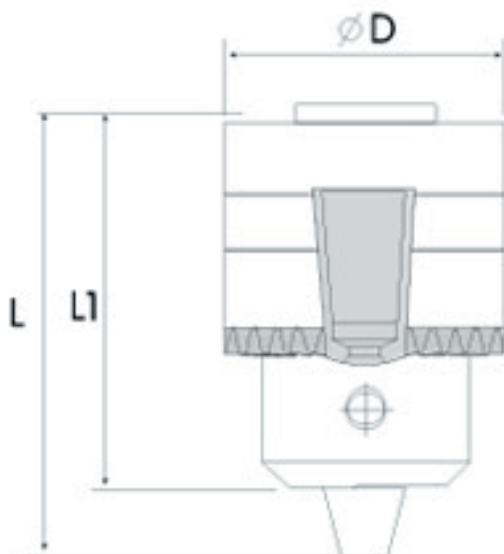
Keyed chuck without lock system

Application

Recommended for impact electric drills and kinds of AC&DC electric drill.

Features

- * High precision threaded and tapered tightly mounts on the tools.
- * This product is designed according to the DIN 6349.
- * By using specialized anti-thrust bearing to convert key-applied torque into superior gripping and anti bounce force.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.



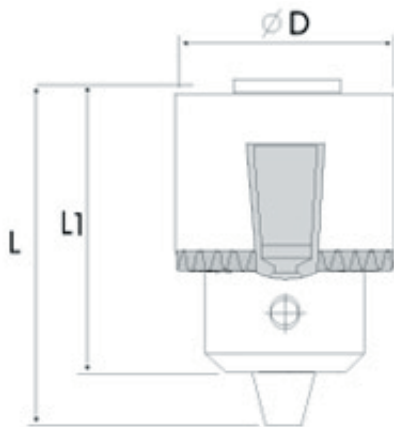
Order No.	Capacity		Mount	D mm	L1 mm	L mm
	mm	Inch				
436-7465	0.6-6	1/64-1/4	3/8-24UNF	30.3	40	49
436-7466	1.5-10	1/16-3/8	3/8-24UNF	34	49	58.5
436-7467	1.5-10	1/16-3/8	1/2-20UNF	34	49	58.5
436-7468	1.5-10	1/16-3/8	M10×1.0	34	49	58.5
436-7469	1.5-10	1/16-3/8	M12×1.25	34	49	58.5
436-7470	1.5-13	1/16-1/2	3/8-24UNF	42	59	71.5
436-7471	1.5-13	1/16-1/2	1/2-20UNF	42	59	71.5
436-7472	1.5-13	1/16-1/2	M12×1.0	42	59	71.5
436-7473	1.5-13	1/16-1/2	M12×1.25	42	59	71.5
436-7474	1.5-13	1/16-1/2	M14×1.0	42	59	71.5
436-7475	3.0-16	1/8-5/8	3/8-24UNF	52	67	86
436-7476	3.0-16	1/8-5/8	1/2-20UNF	52	67	86
436-7477	3.0-16	1/8-5/8	5/8-16UNF	52	67	86
436-7478	3.0-16	1/8-5/8	M12×1.25	52	67	86
436-7479	0.6-6	1/64-1/4	B10	30.3	40	49
436-7480	1.5-10	1/16-3/8	B12	34	49	58.5
436-7481	1.5-13	1/16-1/2	B16	42	59	71.5
436-7482	3.0-16	1/8-5/8	B16	52	67	86
436-7483	3.0-16	1/8-5/8	B18	52	67	86
436-7479	0.6-6	1/64-1/4	B10	30.3	40	49
436-7480	1.5-10	1/16-3/8	B12	34	49	58.5
436-7481	1.5-13	1/16-1/2	B16	42	59	71.5
436-7482	3.0-16	1/8-5/8	B16	52	67	86
436-7483	3.0-16	1/8-5/8	B18	52	67	86
436-7484	0.6-6	1/64-1/4	JT1	30.3	40	49
436-7485	1.5-10	1/16-3/8	JT2	34	49	58.5
436-7486	1.5-13					

Keyed chuck without lock system

Application: Recommended for impact electric drills and kinds of AC&DC electric drill.

Features:

- * High precision threaded and tapered tightly mounts on the tools.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.



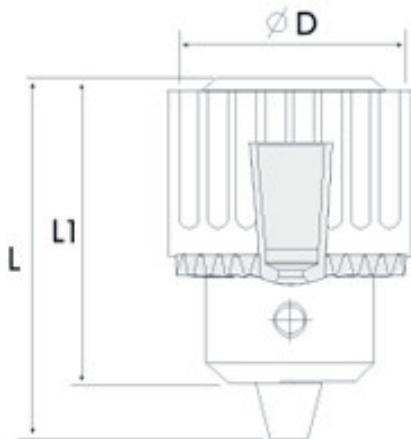
Art.No	Capacity		Mount	D	L1	L
	mm	Inch				
436-7487	0.6-6	1/16-1/4	3/8-24UNF	30.3	49	49
436-7488	1.5-10	1/16-3/8	3/8-24UNF	34	49	58.5
436-7489	1.5-10	1/16-3/8	1/2-20UNF	34	49	58.5
436-7490	1.5-10	1/16-3/8	M10×1.0	34	49	58.5
436-7491	1.5-10	1/16-3/8	M12×1.25	34	49	58.5
436-7492	1.5-13	1/16-1/2	3/8-24UNF	42	59	71.5
436-7493	1.5-13	1/16-1/2	1/2-20UNF	42	59	71.5
436-7494	1.5-13	1/16-1/2	M12×1.0	42	59	71.5
436-7495	1.5-13	1/16-1/2	M12×1.25	42	59	71.5
436-7496	1.5-13	1/16-1/2	M14×1.0	42	59	71.5
436-7497	3.0-16	1/8-5/8	3/8-24UNF	52	67	86
436-7498	3.0-16	1/8-5/8	1/2-20UNF	52	67	86
436-7499	3.0-16	1/8-5/8	5/8-16UNF	52	67	86
436-7500	3.0-16	1/8-5/8	M12×1.25	52	67	86
436-7501	0.6-6	1/64-1/4	B10	30.3	40	49
436-7502	1.5-10	1/16-3/8	B12	34	49	58.5
436-7503	1.5-13	1/16-1/2	B16	42	59	71.5
436-7504	3.0-16	1/8-5/8	B16	52	67	86
436-7505	3.0-10	1/8-5/8	B18	52	67	86
436-7506	0.6-6	1/64-1/4	JT1	30.3	40	49
436-7507	1.5-10	1/16-3/8	JT2	34	49	58.5
436-7508	1.5-13	1/16-1/2	JT33	42	59	71.5

Keyed chuck without lock system

Application; Recommended for impact electric drills and kinds of AC&DC electric drill.

Features:

- * High precision threaded and tapered tightly mounts on the tools.
- * Jaw are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.



Order NO.	Capacity		Mount	D	L1	L
	mm	Inch				
436-7509	1.5-10	1/16-3/8	1/2-20UNF	39	49	59.6
436-7510	1.5-10	1/16-3/8	3/8-24UNF	39	49	59.6
436-7511	1.5-13	1/16-1/2	3/8-24UNF	43	62	75
436-7512	1.5-13	1/16-1/2	1/2-20UNF	43	62	75

Threaded chuck without lock system

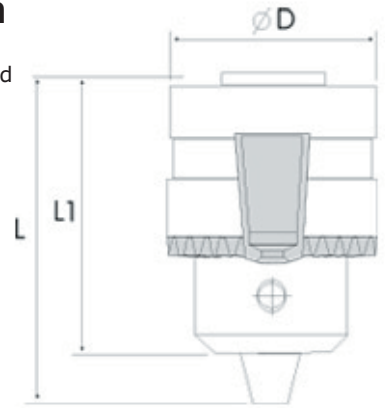


STYLE A

Application: Recommended for impact electric drills and kinds of AC&DC electric drill.

Features:

- * High precision threaded and tapered tightly mounts on the tools.
- * It can be protected from rusting for Cr-coated body and good appearance with sleeve electrophoretic enamelling.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.



STYLE B

Order NO.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7513	0.6-6	1/64-1/4	3/8-24UNF	30.3	40	49
436-7514	1.5-10	1/16-3/8	3/8-24UNF	34	49	58.5
436-7515	1.5-10	1/16-3/8	1/2-20UNF	34	49	58.5
436-7516	1.5-10	1/16-3/8	M12X1.25	34	49	58.5
436-7517	1.5-13	1/16-1/2	3/8-24UNF	42	59	71.5
436-7518	1.5-13	1/16-1/2	1/2-20UNF	42	59	71.5
436-7519	1.5-13	1/16-1/2	M12X1.25	42	59	71.5

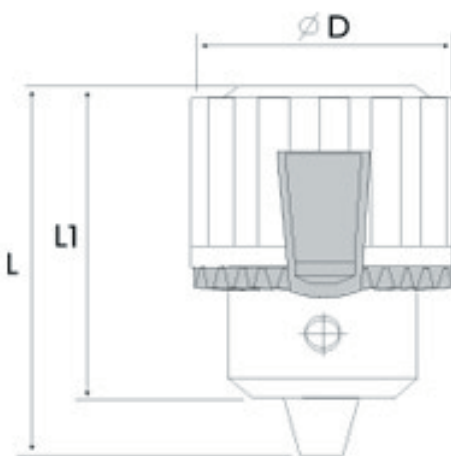
Keyed chuck without lock system



Application: Recommended for impact electric drills and kinds of AC&DC electric drill.

Features:

- * High precision threaded and tapered tightly mounts on the tools.
- * It can be protected from rusting for Cr-coated body and good appearance with sleeve electrophoretic enamelling.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Super precision and durable.



Order NO.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7520	0.6-6	1/64-1/4	3/8-24UNF	30.3	40	49
436-7521	1.0-10	1/32-3/8	3/8-24UNF	32.4	51	60.5
436-7522	1.0-10	1/32-3/8	1/2-20UNF	32.4	51	60.5
436-7523	1.0-13	1/32-1/2	3/8-24UNF	45	62	76
436-7524	1.0-13	1/32-1/2	1/2-20UNF	45	62	76
436-7525	1.0-16	1/32-5/8	5/8-16UNF	57	74	93
436-7526	0.6-6	1/64-1/4	B10	30.3	40	49
436-7527	1.0-10	1/32-3/8	B12	34	49	58.5
436-7528	1.0-13	1/32-1/2	B16	45	62	76
436-7529	1.0-16	1/32-5/8	B18	57	74	93
436-7530	0.6-6	1/64-1/4	JT1	30.3	40	49
436-7531	1.0-10	1/32-3/8	JT2	34	49	58.5
436-7532	1.0-13	1/32-1/2	JT33	45	62	76
436-7533	1.0-16	1/32-5/8	JT3	57	74	93

DRILL CHUCKS

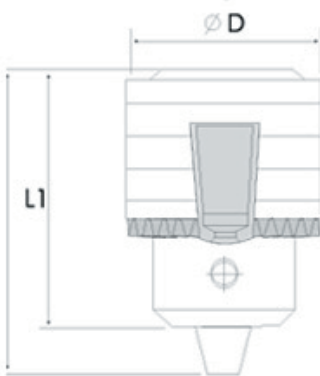
Industrial keyed chuck

Application

Recommended for Light , Medium and Heavy-Duty portable bench or floor mounted power tools.

Features

- * High precision threaded and tapered tightly mounts on the tools.
- * Sleeve ,key hole and key are shaped by quenching.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Sleeve teeth and keyholes are shaped by cold pressing.
- * Super precision and durable.



Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7300	1.0-10	1/32-3/8	3/8-24UNF	43.4	54	69.7
436-7301	1.0-10	1/32-3/8	1/2-20UNF	43.4	54	69.7
436-7302	1.0-13	1/32-1/2	1/2-20UNF	53.2	67	86
436-7303	1.0-10	1/32-3/8	B12	43.4	54	69.7
436-7304	1.0-13	1/32-1/2	B16	53.2	67	86
436-7305	3.0-16	1/8-5/8	B16	53.2	67	86
436-7306	3.0-16	1/8-5/8	B18	53.2	67	86
436-7307	1.0-16	1/32-5/8	B16	57	75	93
436-7308	1.0-16	1/32-5/8	B18	57	75	93
436-7309	5.0-20	3/16-3/4	B22	65.3	82	110
436-7310	1.0-10	1/32-3/8	JT2	43.4	54	69.7
436-7311	1.0-13	1/32-1/2	JT33	53.2	67	86
436-7312	1.0-13	1/32-1/2	JT6	53.2	67	86
436-7313	3.0-16	1/8-5/8	JT3	53.2	67	86
436-7314	3.0-16	1/8-5/8	JT33	53.2	67	86
436-7315	3.0-16	1/8-5/8	JT6	53.2	67	86
436-7316	1.0-16	1/32-5/8	JT3	57	75	93
436-7317	5.0-20	3/16-3/4	JT3	65.3	82	110

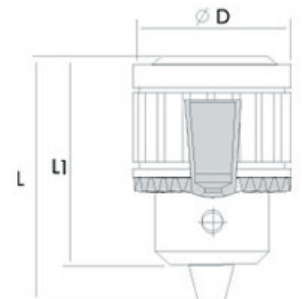
Industrial keyed chuck

Application

Recommended for Light , Medium and Heavy-Duty portable bench or floor mounted power tools.

Features

- * High precision threaded and tapered tightly mounts on the tools.
- * Sleeve ,key hole and key are shaped by quenching.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Sleeve teeth and keyholes are shaped by cold pressing.
- * Super precision and durable.



Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7318	0.6-6.5	1/64-1/4	B10	32	39.5	50
436-7319	0.5-10	1/64-3/8	B12	41.5	51	64
436-7320	0.5-13	1/64-1/2	B16	55.5	69	88.5
436-7321	1.0-16	1/32-5/8	B18	59	75.5	94.3
436-7322	5.0-20	3/16-3/4	B22	74	92	126
436-7323	5.0-25	3/16-1	B24	93.3	112	146
436-7324	0.6-6	1/64-1/4	JT1	32	50	39.5
436-7325	0.5-10	1/64-3/8	JT2	41.5	64	51
436-7326	0.5-13	1/64-1/2	JT33	55.5	88.5	69
436-7327	0.5-13	1/64-1/2	JT6	55.5	88.5	69
436-7328	1.0-16	1/32-5/8	JT3	59	94.3	75.5
436-7329	5.0-20	3/16-3/4	JT4	74	126	92
436-7330	5.0-25	3/16-1	JT5	93.3	146	112

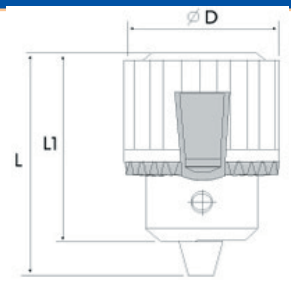
Industrial keyed chuck

Application

Recommended for Light , Medium and Heavy-Duty portable bench or floor mounted power tools.

Features

1. High precision threaded and tapered tightly mounts on the tools.
2. Sleeve ,key hole and key are shaped by quenching.
3. Jaws are specifically engineered for tight tolerance production drilling.
4. Sleeve teeth and keyholesare are shaped by cold pressing.
5. Super precision and durable.



STYLE A



STYLE B

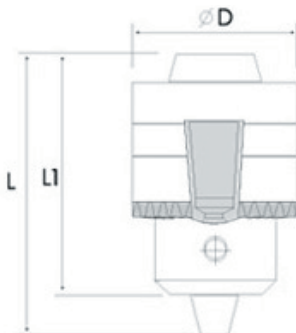
Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7331	0.6-6	1/64-1/4	3/8-24UNF	30.3	40	49
436-7332	1.0-10	1/32-3/8	3/8-24UNF	32.4	51	60.5
436-7333	1.0-10	1/32-3/8	1/2-20UNF	32.4	51	60.5
436-7334	1.0-13	1/32-1/2	3/8-24UNF	45	62	79
436-7335	1.0-16	1/32-5/8	5/8-16UNF	53	74	93
436-7336	0.6-6	1/64-1/4	B10	30.3	40	49
436-7337	1.0-10	1/32-3/8	B12	32.4	51	60.5
436-7338	1.0-13	1/32-1/2	B16	45	64	79
436-7339	1.0-16	1/32-5/8	B18	53	74	93
436-7340	0.6-6	1/64-1/4	JT1	30.3	40	49
436-7341	1.0-13	1/32-3/8	JT33	34	49	58.5
436-7342	1.0-13	1/32-1/2	JT6	42	59	71.5
436-7343	1.0-16	1/32-5/8	JT33	53	74	93
436-7344	1.0-19	1/32-3/4	JT4	67	97	120.5

Industrial keyed chuck

Application: Recommended for Light, Medium and Heavy-Duty portable bench or floor mounted power tools.

Features:

- * High precision threaded and tapered tightly mounts on the tools.
- * Sleeve, key hole and key are shaped by quenching.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Sleeve teeth and keyholes are shaped by cold pressing.
- * Super precision and durable.



Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7345	1.0-10	1/16-3/8	3/8-24UNF	31	46	55.5
436-7346	1.0-10	1/16-3/8	1/2-20UNF	31	46	55.5
436-7347	1.5-13	1/16-1/2	3/8-24UNF	42	58.5	73
436-7348	1.5-13	1/16-1/2	1/2-20UNF	42	58.5	73
436-7349	1.0-13	1/32-1/2	B16	52	69	86
436-7350	3.0-16	1/8-5/8	B16	49.5	75	94
436-7351	3.0-16	1/8-5/8	B18	49.5	75	94
436-7352	1.0-16	1/32-5/8	B16	52	69	86
436-7353	1.0-16	1/32-5/8	B18	56	80	101
436-7354	5.0-20	3/16-3/4	B22	65	92	114
436-7355	5.0-25	3/16-1	B24	80	119	147
436-7356	1.0-13	1/32-1/2	JT33	52	69	86
436-7357	1.0-13	1/32-1/2	JT6	52	69	86
436-7358	1.0-16	1/32-5/8	JT3	52	69	86
436-7359	1.0-16	1/32-5/8	JT33	56	80	101
436-7360	5.0-20	3/16-3/4	JT3	65	92	114
436-7361	5.0-25	3/16-1	JT4	80	119	147

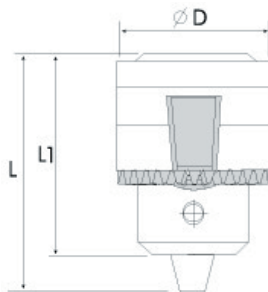
Industrial keyed chuck

Application

Recommended for Light , Medium and Heavy-Duty portable bench or floor mounted power tools.

Features

- * High precision threaded and tapered tightly mounts on the tools.
- * Sleeve ,key hole and key are shaped by quenching.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Sleeve teeth and keyholesare are shaped by cold pressing.
- * Super precision and durable.

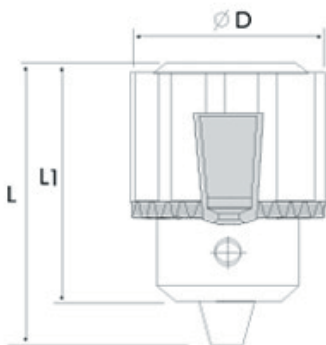


Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7362	0.6-6	1/64-1/4	3/8-24UNF	30.3	40	49
436-7363	1.0-10	1/32-3/8	3/8-24UNF	32.4	51	60.5
436-7364	1.0-10	1/32-3/8	1/2-20UNF	32.4	51	60.5
436-7365	1.0-13	1/32-1/2	3/8-24UNF	45	62	76
436-7366	1.0-13	1/32-1/2	1/2-20UNF	45	62	76
436-7367	1.0-13	1/32-1/2	5/8-16UNF	45	62	76
436-7368	1.0-16	1/32-5/8	5/8-16UNF	57	74	93
436-7369	0.6-6	1/64-1/4	B10	30.3	40	49
436-7370	1.0-10	1/32-3/8	B12	34	49	58.5
436-7371	1.0-13	1/32-1/2	B16	45	62	76
436-7372	1.0-16	1/32-5/8	B18	57	74	93
436-7373	0.6-6	1/64-1/4	JT10	30.3	40	49
436-7374	1.0-10	1/32-3/8	JT33	34	49	58.5
436-7375	1.0-13	1/32-1/2	JT6	45	62	76
436-7376	1.0-16	1/32-5/8	JT33	57	74	93
436-7377	1.0-19	1/32-3/4	JT4	67	97	120.5

Industrial keyed chuck

Features

- * High precision threaded and tapered tightly mounts on the tools.
- * Sleeve ,key hole and key are shaped by quenching.
- * Jaws are specifically engineered for tight tolerance production drilling.
- * Sleeve teeth and keyholesare are shaped by cold pressing.
- * Super precision and durable.



Order No.	Capacity		Mount	D	L1	L
	mm	Inch		mm	mm	mm
436-7378	0.6-6	1/64-1/4	B10	30.3	39.5	50
436-7379	1.0-10	1/32-3/8	B12	43.4	54	69.7
436-7380	1.0-13	1/32-1/2	B16	53.2	67	86
436-7381	3.0-16	1/8-5/8	B16	53.2	67	86
436-7382	3.0-16	1/8-5/8	B18	53.2	67	86
436-7383	1.0-16	1/32-5/8	B16	57	75	93
436-7384	1.0-16	1/32-5/8	B18	57	75	93
436-7385	5.0-20	3/16-3/4	B22	65.3	82	110
436-7386	0.6-6	1/64-1/4	JT1	30.3	39.5	50
436-7387	1.0-10	1/32-3/8	JT2	43.4	54	69.7
436-7388	1.0-13	1/32-1/2	JT33	53.2	67	86
436-7389	1.0-13	1/32-1/2	JT6	53.2	67	86
436-7390	3.0-16	1/8-5/8	JT3	53.2	67	86
436-7391	3.0-16	1/8-5/8	JT33	53.2	67	86
436-7392	3.0-16	1/8-5/8	JT6	53.2	67	86
436-7393	1.0-16	1/32-5/8	JT3	57	75	93
436-7394	1.0-19	1/32-3/4	JT4	65.3	82	110
436-7395	5.0-20	3/16-3/4	JT3	68	92	120

FLY CUTTERS, STRAIGHT SHANK

Set comes with wooden stand

Order No.	Shank Size	Head Dia.	Tool Bit Size	Piece/Set
202-0020	1/2"	3/4"	3/16"	3pcs
	1/2"	1-1/8"	1/4"	
	1/2"	1-3/8"	5/16"	
202-0021	3/4"	1-1/2"	5/16"	3pcs
	3/4"	2"	5/16"	
	3/4"	2-1/2"	5/16"	
202-0022	1/2"	3/4"	3/16"	5pcs
	1/2"	1-1/8"	1/4"	
	1/2"	1-3/8"	5/16"	
	1/2"	2"	3/8"	
	5/8"	2-1/2"	1/2"	
202-0023	1/2"	3/4"	3/16"	6pcs
	1/2"	1-1/8"	1/4"	
	1/2"	1-3/8"	5/16"	
	3/4"	1-1/2"	5/16"	
	3/4"	2"	5/16"	
	3/4"	2-1/2"	5/16"	



Individual Size

Order No.	Shank Size	Head Dia.	Tool Bit Size
202-0001	1/2"	7/8"	3/16"
202-0002	1/2"	3/4"	3/16"
202-0003	1/2"	1-1/8"	1/4"
202-0004	1/2"	1-3/8"	5/16"
202-0005	1/2"	1-1/2"	5/16"
202-0006	1/2"	2"	3/8"
202-0007	5/8"	2-1/2"	1/2"
202-0008	3/4"	1-1/2"	5/16"
202-0009	3/4"	2"	5/16"
202-0010	3/4"	2-1/2"	5/16"

R8 FACE MILL CUTTER



Order No.	Milling Capacity	Shank	Weight
202-0050	63mm	R8	1.3kg
202-0051	80mm	R8	2kg

R8 SHANK FACE MILL CUTTER J TYPE



Order No.	Milling Capacity	Shank	Weight
202-0052	63mm	R8	1kg
202-0053	80mm	R8	1.2kg

MORSE TAPER SHANK FACE MILL CUTTER

Order No.	Milling Capacity	Shank	Weight
202-0054	50mm	MT2	0.5kg
202-0055	63mm	MT3	1.1kg
202-0056	80mm	MT3	1.8kg



MORSE TAPER SHANK FACE MILL CUTTER J TYPE

Order No.	Milling Capacity	Shank	Weight
202-0057	63mm	MT2	1kg
202-0058	80mm	MT3	1.6kg

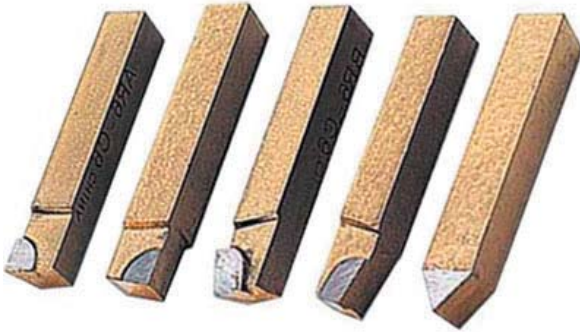


ISO SHANK FACE MILL CUTTER

Order No.	Milling Capacity	Shank	Weight
202-0059	63mm	ISO 30	2kg
202-0060	63mm	ISO 40	2kg
202-0061	80mm	ISO 40	2.2kg
202-0062	80mm	ISO 50	2.2kg



CARBIDE TIPPED TOOL BITS SET



C2- General Purpose			
Order No.	One each of	Tool	Length
208-2001	AR4,AL4, BR4, BL4,E4	1/4"	2"
208-2002	AR5,AL5, BR5, BL5,E5	5/16"	2-1/4"
208-2003	AR6,AL6, BR6, BL6,E6	3/8"	2-1/2"
208-2004	AR7,AL7,BR7,BL7,E7	7/16"	3"
208-2005	AR8,AL8,BR8,BL8,E8	1/2"	3-1/2"
208-2006	AR10,AL10,BR10,BL10,E10	5/8"	4"
208-2007	AR12,AL12,BR12,BL12,E12	3/4"	4-1/2"
208-2008	AR16,AL16,BR16,BL16,E16	1"	6"
C6- For Steel			
Order No.	One each of	Tool	Length
208-2011	AR4,AL4, BR4, BL4,E4	1/4"	2"
208-2012	AR5,AL5, BR5, BL5,E5	5/16"	2-1/4"
208-2013	AR6,AL6, BR6, BL6,E6	3/8"	2-1/2"
208-2014	AR7,AL7,BR7,BL7,E7	7/16"	3"
208-2015	AR8,AL8,BR8,BL8,E8	1/2"	3-1/2"
208-2016	AR10,AL10,BR10,BL10,E10	5/8"	4"
208-2017	AR12,AL12,BR12,BL12,E12	3/4"	4-1/2"
208-2018	AR16,AL16,BR16,BL16,E16	1"	6"

CARBIDE TIPPED TOOL BITS-BR



C2- General Purpose			
Order No.	Size	Tool	Length
208-2301	BR4	1/4"	2"
208-2302	BR5	5/16"	2-1/4"
208-2303	BR6	3/8"	2-1/2"
208-2304	BR7	7/16"	3"
208-2305	BR8	1/2"	3-1/2"
208-2306	BR10	5/8"	4"
208-2307	BR12	3/4"	4-1/2"
208-2308	BR16	1"	6"
C6-For Steel			
Order No.	Size	Tool	Length
208-2311	BR4	1/4"	2"
208-2312	BR5	5/16"	2-1/4"
208-2313	BR6	3/8"	2-1/2"
208-2314	BR7	7/16"	3"
208-2315	BR8	1/2"	3-1/2"
208-2316	BR10	5/8"	4"
208-2317	BR12	3/4"	4-1/2"
208-2318	BR16	1"	6"

CARBIDE TIPPED TOOL BITS-BL



C2- General Purpose			
Order No.	Size	Tool	Length
208-2401	BL4	1/4"	2"
208-2402	BL5	5/16"	2-1/4"
208-2403	BL6	3/8"	2-1/2"
208-2404	BL7	7/16"	3"
208-2405	BL8	1/2"	3-1/2"
208-2406	BL10	5/8"	4"
208-2407	BL12	3/4"	4-1/2"
208-2408	BL16	1"	6"
C6-For Steel			
Order No.	Size	Tool	Length
208-2411	BL4	1/4"	2"
208-2412	BL5	5/16"	2-1/4"
208-2413	BL6	3/8"	2-1/2"
208-2414	BL7	7/16"	3"
208-2415	BL8	1/2"	3-1/2"
208-2416	BL10	5/8"	4"
208-2417	BL12	3/4"	4-1/2"
208-2418	BL16	1"	6"

CARBIDE TIPPED TOOL BITS-AR



C2- General Purpose			
Order No.	Size	Tool	Length
208-2101	AR4	1/4"	2"
208-2102	AR5	5/16"	2-1/4"
208-2103	AR6	3/8"	2-1/2"
208-2104	AR7	7/16"	3"
208-2105	AR8	1/2"	3-1/2"
208-2106	AR10	5/8"	4"
208-2107	AR12	3/4"	4-1/2"
208-2108	AR16	1"	6"
C6-For Steel			
Order No.	Size	Tool	Length
208-2111	AR4	1/4"	2"
208-2112	AR5	5/16"	2-1/4"
208-2113	AR6	3/8"	2-1/2"
208-2114	AR7	7/16"	3"
208-2115	AR8	1/2"	3-1/2"
208-2116	AR10	5/8"	4"
208-2117	AR12	3/4"	4-1/2"
208-2118	AR16	1"	6"

CARBIDE TIPPED TOOL BITS-AL



C2- General Purpose			
Order No.	Size	Tool	Length
208-2202	AL4	1/4"	2"
208-2202	AL5	5/16"	2-1/4"
208-2203	AL6	3/8"	2-1/2"
208-2204	AL7	7/16"	3"
208-2205	AL8	1/2"	3-1/2"
208-2206	AL10	5/8"	4"
208-2207	AL12	3/4"	4-1/2"
208-2208	AL16	1"	6"
C6-For Steel			
Order No.	Size	Tool	Length
208-2211	AL4	1/4"	2"
208-2212	AL5	5/16"	2-1/4"
208-2213	AL6	3/8"	2-1/2"
208-2214	AL7	7/16"	3"
208-2215	AL8	1/2"	3-1/2"
208-2216	AL10	5/8"	4"
208-2217	AL12	3/4"	4-1/2"
208-2218	AL16	1"	6"

CARBIDE TIPPED TOOL BITS-E



C2- General Purpose			
Order No.	Size	Tool	Length
208-2501	E4	1/4"	2"
208-2502	E5	5/16"	2-1/4"
208-2503	E6	3/8"	2-1/2"
208-2504	E7	7/16"	3"
208-2505	E8	1/2"	3-1/2"
208-2506	E10	5/8"	4"
208-2507	E12	3/4"	4-1/2"
208-2508	E16	1"	6"

C6- For Steel			
Order No.	Size	Tool	Length
208-2511	E4	1/4"	2"
208-2512	E5	5/16"	2-1/4"
208-2513	E6	3/8"	2-1/2"
208-2514	E7	7/16"	3"
208-2515	E8	1/2"	3-1/2"
208-2516	E10	5/8"	4"
208-2517	E12	3/4"	4-1/2"
208-2518	E16	1"	6"

INDEXABLE CARBIDE TIPPED TURNING TOOLS

Order No.	Shank Size	Insert I.C.	Bit Sizes
208-1001	1/4"	7/32"	AR-4,AR-4,BR-4,BL-4,E-4
208-1002	3/8"	1/4"	AR-6,AR-6,BR-6,BL-6,E-6
208-1003	1/2"	3/8"	AR-8,AR-8,BR-8,BL-8,E-8
208-1004	5/8"	3/8"	AR-10,AR-10,BR-10,BL-10,E-10
208-1005	3/4"	3/8"	AR-12,AR-12,BR-12,BL-12,E-12
204-1006	1"	1/2"	AR-16,AR-16,BR-16,BL-16,E-16



END MILL SET, M2



Order No.	Size Range
211-0001	2F & 4F each of 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
211-0002	2F each of 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
211-0003	4F each of 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
211-0004	2F & 4F each of 1/4", 3/8", 1/2", 5/8", 3/4"
211-0005	2F & 4F each of 3,4,5,6,8,10,12,14,18,20mm
211-0006	2F each of 3,4,5,6,8,10,12,14,18,20mm
211-0007	4F each of 3,4,5,6,8,10,12,14,18,20mm

SINGLE END MILL SET M2, TINCOATED



Order No.	Size Range
211-0008	2F & 4F each of 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
211-0009	2F each of 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
211-0010	4F each of 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
211-0011	2F & 4F each of 1/4", 3/8", 1/2", 5/8", 3/4"
211-0012	2F & 4F each of 3,4,5,6,8,10,12,14,18,20mm
211-0013	2F each of 3,4,5,6,8,10,12,14,18,20mm
211-0014	4F each of 3,4,5,6,8,10,12,14,18,20mm

2 FLUTE SINGLE END MILL-M2



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-1001	1/8"	3/8"	3/8"	2-5/16"
211-1002	9/64"	3/8"	3/8"	2-5/16"
211-1003	5/32"	3/8"	7/16"	2-5/16"
211-1004	11/64"	3/8"	7/16"	2-5/16"
211-1005	3/16"	3/8"	7/16"	2-5/16"
211-1006	13/64"	3/8"	7/16"	2-5/16"
211-1007	7/32"	3/8"	1/2"	2-5/16"
211-1008	7/32"	3/8"	1/2"	2-3/8"
211-1009	15/64"	3/8"	1/2"	2-3/8"
211-1010	1/4"	3/8"	3/8"	2-1/4"
211-1011	1/4"	3/8"	1/2"	2-5/16"
211-1012	17/64"	3/8"	9/16"	2-3/8"
211-1013	9/32"	3/8"	1/2"	2-5/16"
211-1014	9/32"	3/8"	9/16"	2-3/8"
211-1015	19/64"	3/8"	9/16"	2-3/8"
211-1016	5/16"	3/8"	9/16"	2-5/16"
211-1017	21/64"	3/8"	9/16"	2-3/8"
211-1018	11/32"	3/8"	9/16"	2-5/16"
211-1019	11/32"	3/8"	9/16"	2-3/8"
211-1020	23/64"	3/8"	9/16"	2-3/8"
211-1021	3/8"	3/8"	9/16"	2-5/16"
211-1022	13/32"	3/8"	13/16"	2-1/2"
211-1023	7/16"	3/8"	13/16"	2-1/2"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-1024	15/32"	3/8"	13/16"	2-1/2"
211-1025	15/32"	1/2"	7/8"	2-1/2"
211-1026	15/32"	1/2"	1"	3"
211-1027	1/2"	3/8"	13/16"	2-1/2"
211-1028	1/2"	3/8"	1"	3"
211-1029	1/2"	1/2"	1"	3"
211-1030	1/2"	1/2"	1-1/8"	3-1/8"
211-1031	17/32"	1/2"	1-1/8"	3-1/8"
211-1032	9/16"	1/2"	1-1/8"	3-1/8"
211-1033	19/32"	1/2"	1-1/8"	3-1/8"
211-1034	5/8"	1/2"	1-1/8"	3-1/8"
211-1035	5/8"	5/8"	1-5/16"	3-7/16"
211-1036	21/32"	1/2"	1-5/16"	3-5/16"
211-1037	11/16"	1/2"	1-5/16"	3-5/16"
211-1038	11/16"	5/8"	1-5/16"	3-7/16"
211-1039	23/32"	1/2"	1-5/16"	3-5/16"
211-1040	3/4"	1/2"	1-5/16"	3-5/16"
211-1041	3/4"	5/8"	1-5/16"	3-7/16"
211-1042	3/4"	3/4"	1-5/16"	3-7/16"
211-1043	3/4"	3/4"	1-5/16"	3-9/16"
211-1044	3/4"	3/4"	1-3/4"	4"
211-1045	25/32"	1/2"	1-1/2"	3-1/2"
211-1046	13/16"	1/2"	1-1/2"	3-5/16"
211-1047	13/16"	1/2"	1-1/2"	3-5/8"
211-1048	13/16"	5/8"	1-1/2"	3-5/8"
211-1049	13/16"	3/4"	1-1/2"	3-3/4"
211-1050	27/32"	1/2"	1-1/2"	3-1/2"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-1051	7/8"	1/2"	1-1/2"	3-1/2"
211-1052	7/8"	1/2"	1-1/2"	3-5/8"
211-1053	7/8"	5/8"	1-1/2"	3-5/8"
211-1054	7/8"	3/4"	1-1/2"	3-3/4"
211-1055	7/8"	7/8"	1-1/2"	3-3/4"
211-1056	29/32"	1/2"	1-1/2"	3-1/2"
211-1057	15/16"	1/2"	1-1/2"	3-5/8"
211-1058	15/16"	5/8"	1-1/2"	3-5/8"
211-1059	15/16"	3/4"	1-1/2"	3-3/4"
211-1060	15/16"	7/8"	1-1/2"	3-3/4"
211-1061	31/32"	1/2"	1-1/2"	3-1/2"
211-1062	1"	1/2"	1-1/2"	3-1/2"
211-1063	1"	1/2"	1-1/2"	3-5/8"
211-1064	1"	5/8"	1-1/2"	3-5/8"
211-1065	1"	3/4"	1-1/2"	3-3/4"
211-1066	1"	7/8"	1-1/2"	3-3/4"
211-1067	1"	1"	1-5/8"	4-1/8"
211-1068	1-1/16"	3/4"	1-5/8"	3-3/4"
211-1069	1-1/16"	5/8"	1-5/8"	3-7/8"
211-1070	1-1/16"	3/4"	1-5/8"	3-7/8"
211-1071	1-1/16"	7/8"	1-5/8"	3-7/8"
211-1072	1-1/8"	3/4"	1-5/8"	3-7/8"
211-1073	1-1/8"	7/8"	1-5/8"	3-7/8"
211-1074	1-1/8"	1"	1-5/8"	4-1/8"
211-1075	1-3/16"	3/4"	1-5/8"	3-7/8"
211-1076	1-3/16"	1"	1-5/8"	4-1/8"
211-1077	1-3/16"	1"	1-5/8"	4-1/8"
211-1078	1-1/4"	3/4"	1-5/8"	3-7/8"
211-1079	1-1/4"	7/8"	1-5/8"	3-7/8"
211-1080	1-1/4"	1"	1-5/8"	4-1/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-1081	1-1/4"	1-1/4"	1-5/8"	4-1/8"
211-1082	1-5/16"	3/4"	1-5/8"	3-7/8"
211-1083	1-3/8"	3/4"	1-5/8"	3-7/8"
211-1084	1-3/8"	1"	1-5/8"	4-1/8"
211-1085	1-7/16"	3/4"	1-5/8"	3-7/8"
211-1086	1-1/2"	3/4"	1-5/8"	3-7/8"
211-1087	1-1/2"	3/4"	1-5/8"	4-1/8"
211-1088	1-1/2"	1"	1-5/8"	4-1/8"
211-1089	1-1/2"	1-1/4"	1-5/8"	4-1/8"
211-1090	1-5/8"	3/4"	1-5/8"	3-7/8"
211-1091	1-5/8"	3/4"	1-5/8"	4-1/8"
211-1092	1-5/8"	1-1/4"	1-5/8"	4-1/8"
211-1093	1-3/4"	3/4"	1-5/8"	3-7/8"
211-1094	1-3/4"	3/4"	1-5/8"	4-1/8"
211-1095	1-3/4"	1-1/4"	1-5/8"	4-1/8"
211-1096	1-7/8"	3/4"	1-5/8"	3-7/8"
211-1097	1-7/8"	1-1/4"	1-5/8"	4-1/8"
211-1098	2"	3/4"	1-5/8"	3-7/8"
211-1099	2"	3/4"	1-5/8"	4-1/8"
211-1100	2"	1-1/4"	1-5/8"	4-1/8"
211-1101	2"	1-1/4"	2-1/2"	5"
211-1102	2"	2"	2"	5-3/4"
211-1103	2"	2"	3"	6-3/4"
211-1104	2"	2"	4"	7-3/4"
211-1105	2-1/4"	1-1/4"	1-5/8"	4-1/8"
211-1106	2-1/2"	2"	4"	7-5/8"
211-1107	2-1/2"	2"	4"	7-3/4"
211-1108	2-1/2"	2"	6"	9-5/8"
211-1109	2-1/2"	2"	6"	9-3/4"
211-1110	3"	2-1/2"	4"	7-3/4"

2 FLUTE SINGLE END MILL-M2 AL



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-2001	1/8"	3/8"	3/8"	2-5/16"
211-2002	9/64"	3/8"	3/8"	2-5/16"
211-2003	5/32"	3/8"	7/16"	2-5/16"
211-2004	11/64"	3/8"	7/16"	2-5/16"
211-2005	3/16"	3/8"	7/16"	2-5/16"
211-2006	13/64"	3/8"	7/16"	2-5/16"
211-2007	7/32"	3/8"	1/2"	2-5/16"
211-2008	7/32"	3/8"	1/2"	2-3/8"
211-2009	15/64"	3/8"	1/2"	2-3/8"
211-2010	1/4"	3/8"	3/8"	2-1/4"
211-2011	1/4"	3/8"	1/2"	2-5/16"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-2012	17/64"	3/8"	9/16"	2-3/8"
211-2013	9/32"	3/8"	1/2"	2-5/16"
211-2014	9/32"	3/8"	9/16"	2-3/8"
211-2015	19/64"	3/8"	9/16"	2-3/8"
211-2016	5/16"	3/8"	9/16"	2-5/16"
211-2017	21/64"	3/8"	9/16"	2-3/8"
211-2018	11/32"	3/8"	9/16"	2-5/16"
211-2019	11/32"	3/8"	9/16"	2-3/8"
211-2020	23/64"	3/8"	9/16"	2-3/8"
211-2021	3/8"	3/8"	9/16"	2-5/16"
211-2022	13/32"	3/8"	13/16"	2-1/2"
211-2023	7/16"	3/8"	13/16"	2-1/2"
211-2024	15/32"	3/8"	13/16"	2-1/2"
211-2025	15/32"	1/2"	7/8"	2-1/2"
211-2026	15/32"	1/2"	1"	3"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-2027	1/2"	3/8"	13/16"	2-1/2"
211-2028	1/2"	3/8"	1"	3"
211-2029	1/2"	1/2"	1"	3"
211-2030	1/2"	1/2"	1-1/8"	3-1/8"
211-2031	17/32"	1/2"	1-1/8"	3-1/8"
211-2032	9/16"	1/2"	1-1/8"	3-1/8"
211-2033	19/32"	1/2"	1-1/8"	3-1/8"
211-2034	5/8"	1/2"	1-1/8"	3-1/8"
211-2035	5/8"	5/8"	1-5/16"	3-7/16"
211-2036	21/32"	1/2"	1-5/16"	3-5/16"
211-2037	11/16"	1/2"	1-5/16"	3-5/16"
211-2038	11/16"	5/8"	1-5/16"	3-7/16"
211-2039	23/32"	1/2"	1-5/16"	3-5/16"
211-2040	3/4"	1/2"	1-5/16"	3-5/16"
211-2041	3/4"	5/8"	1-5/16"	3-7/16"
211-2042	3/4"	3/4"	1-5/16"	3-7/16"
211-2043	3/4"	3/4"	1-5/16"	3-9/16"
211-2044	3/4"	3/4"	1-3/4"	4"
211-2045	25/32"	1/2"	1-1/2"	3-1/2"
211-2046	13/16"	1/2"	1-1/2"	3-5/16"
211-2047	13/16"	1/2"	1-1/2"	3-5/8"
211-2048	13/16"	5/8"	1-1/2"	3-5/8"
211-2049	13/16"	3/4"	1-1/2"	3-3/4"
211-2050	27/32"	1/2"	1-1/2"	3-1/2"
211-2051	7/8"	1/2"	1-1/2"	3-1/2"
211-2052	7/8"	1/2"	1-1/2"	3-5/8"
211-2053	7/8"	5/8"	1-1/2"	3-5/8"
211-2054	7/8"	3/4"	1-1/2"	3-3/4"
211-2055	7/8"	7/8"	1-1/2"	3-3/4"
211-2056	29/32"	1/2"	1-1/2"	3-1/2"
211-2057	15/16"	1/2"	1-1/2"	3-5/8"
211-2058	15/16"	5/8"	1-1/2"	3-5/8"
211-2059	15/16"	3/4"	1-1/2"	3-3/4"
211-2060	15/16"	7/8"	1-1/2"	3-3/4"
211-2061	31/32"	1/2"	1-1/2"	3-1/2"
211-2062	1"	1/2"	1-1/2"	3-1/2"
211-2063	1"	1/2"	1-1/2"	3-5/8"
211-2064	1"	5/8"	1-1/2"	3-5/8"
211-2065	1"	3/4"	1-1/2"	3-3/4"
211-2066	1"	7/8"	1-1/2"	3-3/4"
211-2067	1"	1"	1-5/8"	4-1/8"
211-2068	1-1/16"	3/4"	1-5/8"	3-3/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-2069	1-1/16"	5/8"	1-5/8"	3-7/8"
211-2070	1-1/16"	3/4"	1-5/8"	3-7/8"
211-2071	1-1/16"	7/8"	1-5/8"	3-7/8"
211-2072	1-1/8"	3/4"	1-5/8"	3-7/8"
211-2073	1-1/8"	7/8"	1-5/8"	3-7/8"
211-2074	1-1/8"	1"	1-5/8"	4-1/8"
211-2075	1-3/16"	3/4"	1-5/8"	3-7/8"
211-2076	1-3/16"	1"	1-5/8"	4-1/8"
211-2077	1-3/16"	1"	1-5/8"	4-1/8"
211-2078	1-1/4"	3/4"	1-5/8"	3-7/8"
211-2079	1-1/4"	7/8"	1-5/8"	3-7/8"
211-2080	1-1/4"	1"	1-5/8"	4-1/8"
211-2081	1-1/4"	1-1/4"	1-5/8"	4-1/8"
211-2082	1-5/16"	3/4"	1-5/8"	3-7/8"
211-2083	1-3/8"	3/4"	1-5/8"	3-7/8"
211-2084	1-3/8"	1"	1-5/8"	4-1/8"
211-2085	1-7/16"	3/4"	1-5/8"	3-7/8"
211-2086	1-1/2"	3/4"	1-5/8"	3-7/8"
211-2087	1-1/2"	3/4"	1-5/8"	4-1/8"
211-2088	1-1/2"	1"	1-5/8"	4-1/8"
211-2089	1-1/2"	1-1/4"	1-5/8"	4-1/8"
211-2090	1-5/8"	3/4"	1-5/8"	3-7/8"
211-2091	1-5/8"	3/4"	1-5/8"	4-1/8"
211-2092	1-5/8"	1-1/4"	1-5/8"	4-1/8"
211-2093	1-3/4"	3/4"	1-5/8"	3-7/8"
211-2094	1-3/4"	3/4"	1-5/8"	4-1/8"
211-2095	1-3/4"	1-1/4"	1-5/8"	4-1/8"
211-2096	1-7/8"	3/4"	1-5/8"	3-7/8"
211-2097	1-7/8"	1-1/4"	1-5/8"	4-1/8"
211-2098	2"	3/4"	1-5/8"	3-7/8"
211-2099	2"	3/4"	1-5/8"	4-1/8"
211-2100	2"	1-1/4"	1-5/8"	4-1/8"
211-2101	2"	1-1/4"	2-1/2"	5"
211-2102	2"	2"	2"	5-3/4"
211-2103	2"	2"	3"	6-3/4"
211-2104	2"	2"	4"	7-3/4"
211-2105	2-1/4"	1-1/4"	1-5/8"	4-1/8"
211-2106	2-1/2"	2"	4"	7-5/8"
211-2107	2-1/2"	2"	4"	7-3/4"
211-2108	2-1/2"	2"	6"	9-5/8"
211-2109	2-1/2"	2"	6"	9-3/4"
211-2110	3"	2-1/2"	4"	7-3/4"

2 FLUTE SINGLE END MILL-TIN COATED



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-3001	1/8"	3/8"	3/8"	2-5/16"
211-3002	9/64"	3/8"	3/8"	2-5/16"
211-3003	5/32"	3/8"	7/16"	2-5/16"
211-3004	11/64"	3/8"	7/16"	2-5/16"
211-3005	3/16"	3/8"	7/16"	2-5/16"
211-3006	13/64"	3/8"	7/16"	2-5/16"
211-3007	7/32"	3/8"	1/2"	2-5/16"
211-3008	7/32"	3/8"	1/2"	2-3/8"
211-3009	15/64"	3/8"	1/2"	2-3/8"
211-3010	1/4"	3/8"	3/8"	2-1/4"
211-3011	1/4"	3/8"	1/2"	2-5/16"
211-3012	17/64"	3/8"	9/16"	2-3/8"
211-3013	9/32"	3/8"	1/2"	2-5/16"
211-3014	9/32"	3/8"	9/16"	2-3/8"
211-3015	19/64"	3/8"	9/16"	2-3/8"
211-3016	5/16"	3/8"	9/16"	2-5/16"
211-3017	21/64"	3/8"	9/16"	2-3/8"
211-3018	11/32"	3/8"	9/16"	2-5/16"
211-3019	11/32"	3/8"	9/16"	2-3/8"
211-3020	23/64"	3/8"	9/16"	2-3/8"
211-3021	3/8"	3/8"	9/16"	2-5/16"
211-3022	13/32"	3/8"	13/16"	2-1/2"
211-3023	7/16"	3/8"	13/16"	2-1/2"
211-3024	15/32"	3/8"	13/16"	2-1/2"
211-3025	15/32"	1/2"	7/8"	2-1/2"
211-3026	15/32"	1/2"	1"	3"
211-3027	1/2"	3/8"	13/16"	2-1/2"
211-3028	1/2"	3/8"	1"	3"
211-3029	1/2"	1/2"	1"	3"
211-3030	1/2"	1/2"	1-1/8"	3-1/8"
211-3031	17/32"	1/2"	1-1/8"	3-1/8"
211-3032	9/16"	1/2"	1-1/8"	3-1/8"
211-3033	19/32"	1/2"	1-1/8"	3-1/8"
211-3034	5/8"	1/2"	1-1/8"	3-1/8"
211-3035	5/8"	5/8"	1-5/16"	3-7/16"
211-3036	21/32"	1/2"	1-5/16"	3-5/16"
211-3037	11/16"	1/2"	1-5/16"	3-5/16"
211-3038	11/16"	5/8"	1-5/16"	3-7/16"
211-3039	23/32"	1/2"	1-5/16"	3-5/16"
211-3040	3/4"	1/2"	1-5/16"	3-5/16"
211-3041	3/4"	5/8"	1-5/16"	3-7/16"
211-3042	3/4"	3/4"	1-5/16"	3-7/16"
211-3043	3/4"	3/4"	1-5/16"	3-9/16"
211-3044	3/4"	3/4"	1-3/4"	4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-3045	25/32"	1/2"	1-1/2"	3-1/2"
211-3046	13/16"	1/2"	1-1/2"	3-5/16"
211-3047	13/16"	1/2"	1-1/2"	3-5/8"
211-3048	13/16"	5/8"	1-1/2"	3-5/8"
211-3049	13/16"	3/4"	1-1/2"	3-3/4"
211-3050	27/32"	1/2"	1-1/2"	3-1/2"
211-3051	7/8"	1/2"	1-1/2"	3-1/2"
211-3052	7/8"	1/2"	1-1/2"	3-5/8"
211-3053	7/8"	5/8"	1-1/2"	3-5/8"
211-3054	7/8"	3/4"	1-1/2"	3-3/4"
211-3055	7/8"	7/8"	1-1/2"	3-3/4"
211-3056	29/32"	1/2"	1-1/2"	3-1/2"
211-3057	15/16"	1/2"	1-1/2"	3-5/8"
211-3058	15/16"	5/8"	1-1/2"	3-5/8"
211-3059	15/16"	3/4"	1-1/2"	3-3/4"
211-3060	15/16"	7/8"	1-1/2"	3-3/4"
211-3061	31/32"	1/2"	1-1/2"	3-1/2"
211-3062	1"	1/2"	1-1/2"	3-1/2"
211-3063	1"	1/2"	1-1/2"	3-5/8"
211-3064	1"	5/8"	1-1/2"	3-5/8"
211-3065	1"	3/4"	1-1/2"	3-3/4"
211-3066	1"	7/8"	1-1/2"	3-3/4"
211-3067	1"	1"	1-5/8"	4-1/8"
211-3068	1-1/16"	3/4"	1-5/8"	3-3/4"
211-3069	1-1/16"	5/8"	1-5/8"	3-7/8"
211-3070	1-1/16"	3/4"	1-5/8"	3-7/8"
211-3071	1-1/16"	7/8"	1-5/8"	3-7/8"
211-3072	1-1/8"	3/4"	1-5/8"	3-7/8"
211-3073	1-1/8"	7/8"	1-5/8"	3-7/8"
211-3074	1-1/8"	1"	1-5/8"	4-1/8"
211-3075	1-3/16"	3/4"	1-5/8"	3-7/8"
211-3076	1-3/16"	1"	1-5/8"	4-1/8"
211-3077	1-3/16"	1"	1-5/8"	4-1/8"
211-3078	1-1/4"	3/4"	1-5/8"	3-7/8"
211-3079	1-1/4"	7/8"	1-5/8"	3-7/8"
211-3080	1-1/4"	1"	1-5/8"	4-1/8"
211-3081	1-1/4"	1-1/4"	1-5/8"	4-1/8"
211-3082	1-5/16"	3/4"	1-5/8"	3-7/8"
211-3083	1-3/8"	3/4"	1-5/8"	3-7/8"
211-3084	1-3/8"	1"	1-5/8"	4-1/8"
211-3085	1-7/16"	3/4"	1-5/8"	3-7/8"
211-3086	1-1/2"	3/4"	1-5/8"	3-7/8"
211-3087	1-1/2"	3/4"	1-5/8"	4-1/8"
211-3088	1-1/2"	1"	1-5/8"	4-1/8"
211-3089	1-1/2"	1-1/4"	1-5/8"	4-1/8"
211-3090	1-5/8"	3/4"	1-5/8"	3-7/8"
211-3091	1-5/8"	3/4"	1-5/8"	4-1/8"
211-3092	1-5/8"	1-1/4"	1-5/8"	4-1/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-3093	1-3/4"	3/4"	1-5/8"	3-7/8"
211-3094	1-3/4"	3/4"	1-5/8"	4-1/8"
211-3095	1-3/4"	1-1/4"	1-5/8"	4-1/8"
211-3096	1-7/8"	3/4"	1-5/8"	3-7/8"
211-3097	1-7/8"	1-1/4"	1-5/8"	4-1/8"
211-3098	2"	3/4"	1-5/8"	3-7/8"
211-3099	2"	3/4"	1-5/8"	4-1/8"
211-3100	2"	1-1/4"	1-5/8"	4-1/8"
211-3101	2"	1-1/4"	2-1/2"	5"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-3102	2"	2"	2"	5-3/4"
211-3103	2"	2"	3"	6-3/4"
211-3104	2"	2"	4"	7-3/4"
211-3105	2-1/4"	1-1/4"	1-5/8"	4-1/8"
211-3106	2-1/2"	2"	4"	7-5/8"
211-3107	2-1/2"	2"	4"	7-3/4"
211-3108	2-1/2"	2"	6"	9-5/8"
211-3109	2-1/2"	2"	6"	9-3/4"
211-3110	3"	2-1/2"	4"	7-3/4"

2 FLUTE EXTENDED SHANK SINGLE END MILL-M2



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-4001	1/8"	3/8"	3/8"	2-3/8"
211-4002	3/16"	3/8"	1/2"	2-11/16"
211-4003	3/16"	3/8"	5/8"	3-1/16"
211-4004	1/4"	3/8"	5/8"	3-1/16"
211-4005	1/4"	3/8"	5/8"	3-1/16"
211-4006	5/16"	3/8"	3/4"	3-5/16"
211-4007	5/16"	3/8"	3/4"	3-1/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-4008	3/8"	3/8"	3/4"	3-5/16"
211-4009	3/8"	3/8"	1-7/8"	3-5/16"
211-4010	1/2"	1/2"	1"	1"
211-4011	1/2"	1/2"	1-7/8"	4"
211-4012	5/8"	1/2"	1-3/8"	4-5/8"
211-4013	5/8"	5/8"	1-3/8"	4-5/8"
211-4014	5/8"	5/8"	2"	4-5/8"
211-4015	3/4"	1/2"	1-5/8"	5-3/8"
211-4016	3/4"	3/4"	1-5/8"	5-3/8"
211-4017	7/8"	7/8"	2"	6"
211-4018	1"	1"	2-1/2"	7-1/4"
211-4019	1-1/4"	1-1/4"	3"	7-1/4"

2 FLUTE EXTENDED SHANK SINGLE END MILL-M2 AL

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-4101	1/8"	3/8"	3/8"	2-3/8"
211-4102	3/16"	3/8"	1/2"	2-11/16"
211-4103	3/16"	3/8"	5/8"	3-1/16"
211-4104	1/4"	3/8"	5/8"	3-1/16"
211-4105	1/4"	3/8"	5/8"	3-1/16"
211-4106	5/16"	3/8"	3/4"	3-5/16"
211-4107	5/16"	3/8"	3/4"	3-1/4"
211-4108	3/8"	3/8"	3/4"	3-5/16"
211-4109	3/8"	3/8"	1-7/8"	3-5/16"
211-4110	1/2"	1/2"	1"	1"
211-4111	1/2"	1/2"	1-7/8"	4"
211-4112	5/8"	1/2"	1-3/8"	4-5/8"
211-4113	5/8"	5/8"	1-3/8"	4-5/8"
211-4114	5/8"	5/8"	2"	4-5/8"
211-4115	3/4"	1/2"	1-5/8"	5-3/8"
211-4116	3/4"	3/4"	1-5/8"	5-3/8"
211-4117	7/8"	7/8"	2"	6"
211-4118	1"	1"	2-1/2"	7-1/4"
211-4119	1-1/4"	1-1/4"	3"	7-1/4"

2 FLUTE EXTENDED SHANK SINGLE END MILL-TIN COATED

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-4201	1/8"	3/8"	3/8"	2-3/8"
211-4202	3/16"	3/8"	1/2"	2-11/16"
211-4203	3/16"	3/8"	5/8"	3-1/16"
211-4204	1/4"	3/8"	5/8"	3-1/16"
211-4205	1/4"	3/8"	5/8"	3-1/16"
211-4206	5/16"	3/8"	3/4"	3-5/16"
211-4207	5/16"	3/8"	3/4"	3-1/4"
211-4208	3/8"	3/8"	3/4"	3-5/16"
211-4209	3/8"	3/8"	1-7/8"	3-5/16"
211-4210	1/2"	1/2"	1"	1"
211-4211	1/2"	1/2"	1-7/8"	4"
211-4212	5/8"	1/2"	1-3/8"	4-5/8"
211-4213	5/8"	5/8"	1-3/8"	4-5/8"
211-4214	5/8"	5/8"	2"	4-5/8"
211-4215	3/4"	1/2"	1-5/8"	5-3/8"
211-4216	3/4"	3/4"	1-5/8"	5-3/8"
211-4217	7/8"	7/8"	2"	6"
211-4218	1"	1"	2-1/2"	7-1/4"
211-4219	1-1/4"	1-1/4"	3"	7-1/4"

2 FLUTE SINGLE END MILL-LONG HELIX-M2



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5001	3/16"	3/8"	3/4"	2-5/8"
211-5002	7/32"	3/8"	1-1/4"	3-1/8"
211-5003	1/4"	3/8"	1"	2-3/4"
211-5004	1/4"	3/8"	1"	3-1/16"
211-5005	1/4"	3/8"	1-1/4"	3-1/8"
211-5006	9/32"	3/8"	1-3/8"	3-1/8"
211-5007	5/16"	3/8"	1-1/4"	3"
211-5008	5/16"	3/8"	1-1/4"	3-5/16"
211-5009	5/16"	3/8"	1-3/8"	3-1/8"
211-5010	11/32"	3/8"	1-1/2"	3-1/4"
211-5011	3/8"	3/8"	1"	2-3/4"
211-5012	3/8"	3/8"	1-1/2"	3-1/4"
211-5013	7/16"	1/2"	1-3/4"	3-3/4"
211-5014	1/2"	1/2"	1-1/2"	3-1/2"
211-5015	1/2"	1/2"	2"	4"
211-5016	1/2"	1/2"	3"	5"
211-5017	5/8"	5/8"	1-5/8"	3-3/4"
211-5018	5/8"	5/8"	2"	4-1/8"
211-5019	5/8"	5/8"	2-3/8"	4-1/2"
211-5020	5/8"	5/8"	2-1/2"	4-5/8"
211-5021	5/8"	5/8"	3"	5-1/8"
211-5022	5/8"	5/8"	4"	6-1/8"
211-5023	3/4"	3/4"	1-3/4"	4"
211-5024	3/4"	3/4"	2-1/4"	4-1/2"
211-5025	3/4"	3/4i ⁻	2-1/2"	4-3/4"
211-5026	3/4"	3/4"	3"	5-1/4"
211-5027	3/4"	3/4"	3-1/2"	5-3/4"
211-5028	3/4"	3/4"	4"	6-1/4"
211-5029	7/8"	7/8"	2"	4-1/4"
211-5030	7/8"	7/8"	2-1/2"	4-3/4"
211-5031	7/8"	7/8"	3-1/2"	5-3/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5032	1"	1"	2"	4-1/2"
211-5033	1"	1"	2-1/4"	4-3/4"
211-5034	1"	1"	2-1/2"	5"
211-5035	1"	1"	3"	5-1/2"
211-5036	1"	1"	3-1/2"	6"
211-5037	1"	1"	4"	6-1/2"
211-5038	1"	1"	4-5/8"	7"
211-5039	1-1/8"	1"	2-1/4"	4-3/4"
211-5040	1-1/8"	1"	3"	4-3/4"
211-5041	1-1/8"	1"	3"	5-1/2"
211-5042	1-1/4"	1"	2-1/4"	4-3/4"
211-5043	1-1/4"	1-1/4"	2-1/4"	5-1/2"
211-5044	1-1/4"	1"	3"	5-1/2"
211-5045	1-1/4"	1-1/4"	3"	5-1/2"
211-5046	1-1/4"	1-1/4"	3-1/2"	6"
211-5047	1-1/4"	1-1/4"	4-3/4"	7-1/4"
211-5048	1-3/8"	1"	2-1/4"	4-3/4"
211-5049	1-3/8"	1"	3"	5-1/2"
211-5050	1-1/2"	1-1/4"	6"	8-1/2"
211-5051	1-1/2"	1-1/4"	2-1/4"	4-3/4"
211-5052	1-1/2"	1-1/4"	3"	5-1/2"
211-5053	1-1/2"	1-1/4"	4"	6-1/2"
211-5054	1-5/8"	1-1/4"	2-1/4"	4-3/4"
211-5055	1-5/8"	1-1/4"	3"	5-1/2"
211-5056	1-3/4"	1-1/4"	2-1/4"	4-3/4"
211-5057	1-3/4"	1-1/4"	3"	5-1/2"
211-5058	1-7/8"	1-1/4"	2-1/4"	4-3/4"
211-5059	1-7/8"	1-1/4"	3"	5-1/2"
211-5060	2"	1-1/4"	2-1/4"	4-3/4"
211-5061	2"	1-1/4"	3"	5-1/2"
211-5062	2"	1-1/4"	4"	6-1/2"

2 FLUTE SINGLE END MILL-LONG HELIX-M2 AL

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5101	3/16"	3/8"	3/4"	2-5/8"
211-5102	7/32"	3/8"	1-1/4"	3-1/8"
211-5103	1/4"	3/8"	1"	2-3/4"
211-5104	1/4"	3/8"	1"	3-1/16"
211-5105	1/4"	3/8"	1-1/4"	3-1/8"
211-5106	9/32"	3/8"	1-3/8"	3-1/8"
211-5107	5/16"	3/8"	1-1/4"	3"
211-5108	5/16"	3/8"	1-1/4"	3-5/16"
211-5109	5/16"	3/8"	1-3/8"	3-1/8"
211-5110	11/32"	3/8"	1-1/2"	3-1/4"
211-5111	3/8"	3/8"	1"	2-3/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5112	3/8"	3/8"	1-1/2"	3-1/4"
211-5113	7/16"	1/2"	1-3/4"	3-3/4"
211-5114	1/2"	1/2"	1-1/2"	3-1/2"
211-5115	1/2"	1/2"	2"	4"
211-5116	1/2"	1/2"	3"	5"
211-5117	5/8"	5/8"	1-5/8"	3-3/4"
211-5118	5/8"	5/8"	2"	4-1/8"
211-5119	5/8"	5/8"	2-3/8"	4-1/2"
211-5120	5/8"	5/8"	2-1/2"	4-5/8"
211-5121	5/8"	5/8"	3"	5-1/8"
211-5122	5/8"	5/8"	4"	6-1/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5123	3/4"	3/4"	1-3/4"	4"
211-5124	3/4"	3/4"	2-1/4"	4-1/2"
211-5125	3/4"	3/4i ⁻	2-1/2"	4-3/4"
211-5126	3/4"	3/4"	3"	5-1/4"
211-5127	3/4"	3/4"	3-1/2"	5-3/4"
211-5128	3/4"	3/4"	4"	6-1/4"
211-5129	7/8"	7/8"	2"	4-1/4"
211-5130	7/8"	7/8"	2-1/2"	4-3/4"
211-5131	7/8"	7/8"	3-1/2"	5-3/4"
211-5132	1"	1"	2"	4-1/2"
211-5133	1"	1"	2-1/4"	4-3/4"
211-5134	1"	1"	2-1/2"	5"
211-5135	1"	1"	3"	5-1/2"
211-5136	1"	1"	3-1/2"	6"
211-5137	1"	1"	4"	6-1/2"
211-5138	1"	1"	4-5/8"	7"
211-5139	1-1/8"	1"	2-1/4"	4-3/4"
211-5140	1-1/8"	1"	3"	4-3/4"
211-5141	1-1/8"	1"	3"	5-1/2"
211-5142	1-1/4"	1"	2-1/4"	4-3/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5143	1-1/4"	1-1/4"	2-1/4"	5-1/2"
211-5144	1-1/4"	1"	3"	5-1/2"
211-5145	1-1/4"	1-1/4"	3"	5-1/2"
211-5146	1-1/4"	1-1/4"	3-1/2"	6"
211-5147	1-1/4"	1-1/4"	4-3/4"	7-1/4"
211-5148	1-3/8"	1"	2-1/4"	4-3/4"
211-5149	1-3/8"	1"	3"	5-1/2"
211-5150	1-1/2"	1-1/4"	6"	8-1/2"
211-5151	1-1/2"	1-1/4"	2-1/4"	4-3/4"
211-5152	1-1/2"	1-1/4"	3"	5-1/2"
211-5153	1-1/2"	1-1/4"	4"	6-1/2"
211-5154	1-5/8"	1-1/4"	2-1/4"	4-3/4"
211-5155	1-5/8"	1-1/4"	3"	5-1/2"
211-5156	1-3/4"	1-1/4"	2-1/4"	4-3/4"
211-5157	1-3/4"	1-1/4"	3"	5-1/2"
211-5158	1-7/8"	1-1/4"	2-1/4"	4-3/4"
211-5159	1-7/8"	1-1/4"	3"	5-1/2"
211-5160	2"	1-1/4"	2-1/4"	4-3/4"
211-5161	2"	1-1/4"	3"	5-1/2"
211-5162	2"	1-1/4"	4"	6-1/2"

2 FLUTE END MILL-LONG HELIX-TIN COATED

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5201	3/16"	3/8"	3/4"	2-5/8"
211-5202	7/32"	3/8"	1-1/4"	3-1/8"
211-5203	1/4"	3/8"	1"	2-3/4"
211-5204	1/4"	3/8"	1"	3-1/16"
211-5205	1/4"	3/8"	1-1/4"	3-1/8"
211-5206	9/32"	3/8"	1-3/8"	3-1/8"
211-5207	5/16"	3/8"	1-1/4"	3"
211-5208	5/16"	3/8"	1-1/4"	3-5/16"
211-5209	5/16"	3/8"	1-3/8"	3-1/8"
211-5210	11/32"	3/8"	1-1/2"	3-1/4"
211-5211	3/8"	3/8"	1"	2-3/4"
211-5212	3/8"	3/8"	1-1/2"	3-1/4"
211-5213	7/16"	1/2"	1-3/4"	3-3/4"
211-5214	1/2"	1/2"	1-1/2"	3-1/2"
211-5215	1/2"	1/2"	2"	4"
211-5216	1/2"	1/2"	3"	5"
211-5217	5/8"	5/8"	1-5/8"	3-3/4"
211-5218	5/8"	5/8"	2"	4-1/8"
211-5219	5/8"	5/8"	2-3/8"	4-1/2"
211-5220	5/8"	5/8"	2-1/2"	4-5/8"
211-5221	5/8"	5/8"	3"	5-1/8"
211-5222	5/8"	5/8"	4"	6-1/8"
211-5223	3/4"	3/4"	1-3/4"	4"
211-5224	3/4"	3/4"	2-1/4"	4-1/2"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5225	3/4"	3/4i ⁻	2-1/2"	4-3/4"
211-5226	3/4"	3/4"	3"	5-1/4"
211-5227	3/4"	3/4"	3-1/2"	5-3/4"
211-5228	3/4"	3/4"	4"	6-1/4"
211-5229	7/8"	7/8"	2"	4-1/4"
211-5230	7/8"	7/8"	2-1/2"	4-3/4"
211-5231	7/8"	7/8"	3-1/2"	5-3/4"
211-5232	1"	1"	2"	4-1/2"
211-5233	1"	1"	2-1/4"	4-3/4"
211-5234	1"	1"	2-1/2"	5"
211-5235	1"	1"	3"	5-1/2"
211-5236	1"	1"	3-1/2"	6"
211-5237	1"	1"	4"	6-1/2"
211-5238	1"	1"	4-5/8"	7"
211-5239	1-1/8"	1"	2-1/4"	4-3/4"
211-5240	1-1/8"	1"	3"	4-3/4"
211-5241	1-1/8"	1"	3"	5-1/2"
211-5242	1-1/4"	1"	2-1/4"	4-3/4"
211-5243	1-1/4"	1-1/4"	2-1/4"	5-1/2"
211-5244	1-1/4"	1"	3"	5-1/2"
211-5245	1-1/4"	1-1/4"	3"	5-1/2"
211-5246	1-1/4"	1-1/4"	3-1/2"	6"
211-5247	1-1/4"	1-1/4"	4-3/4"	7-1/4"
211-5248	1-3/8"	1"	2-1/4"	4-3/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5249	1-3/8"	1"	3"	5-1/2"
211-5250	1-1/2"	1-1/4"	6"	8-1/2"
211-5251	1-1/2"	1-1/4"	2-1/4"	4-3/4"
211-5252	1-1/2"	1-1/4"	3"	5-1/2"
211-5253	1-1/2"	1-1/4"	4"	6-1/2"
211-5254	1-5/8"	1-1/4"	2-1/4"	4-3/4"
211-5255	1-5/8"	1-1/4"	3"	5-1/2"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-5256	1-3/4"	1-1/4"	2-1/4"	4-3/4"
211-5257	1-3/4"	1-1/4"	3"	5-1/2"
211-5258	1-7/8"	1-1/4"	2-1/4"	4-3/4"
211-5259	1-7/8"	1-1/4"	3"	5-1/2"
211-5260	2"	1-1/4"	2-1/4"	4-3/4"
211-5261	2"	1-1/4"	3"	5-1/2"
211-5262	2"	1-1/4"	4"	6-1/2"

2 FLUTE SINGLE END MILL -FOR ALUMINUM-M2 AL



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6101	1/4"	3/8"	5/8"	2-1/2"
211-6102	1/4"	3/8"	1-1/4"	3-1/8"
211-6103	1/4"	3/8"	1-3/4"	3-1/2"
211-6104	5/16"	3/8"	3/4"	2-1/2"
211-6105	5/16"	3/8"	1-3/8"	3-1/8"
211-6106	5/16"	3/8"	2"	3-3/4"
211-6107	3/8"	3/8"	3/4"	2-1/2"
211-6108	3/8"	3/8"	1-1/2"	3-1/4"
211-6109	3/8"	3/8"	2-1/2"	4-1/4"
211-6110	7/16"	3/8"	1"	2-11/16"
211-6111	7/16"	1/2"	1-3/4"	3-3/4"
211-6112	7/16"	1/2"	2-3/4"	4-3/4"
211-6113	1/2"	1/2"	1"	3-1/4"
211-6114	1/2"	1/2"	2"	4"
211-6115	1/2"	1/2"	3"	5"
211-6116	5/8"	1/2"	1-3/8"	3-3/8"
211-6117	5/8"	5/8"	1-5/8"	3-3/4"
211-6118	5/8"	5/8"	2-1/2"	4-5/8"
211-6119	5/8"	5/8"	4"	6-1/8"
211-6120	3/4"	1/2"	1-5/8"	3-5/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6121	3/4"	3/4"	1-5/8"	3-7/8"
211-6122	3/4"	3/4"	3"	5-1/4"
211-6123	3/4"	3/4"	4"	6-1/4"
211-6124	7/8"	7/8"	1-7/8"	4-1/8"
211-6125	7/8"	7/8"	3-1/2"	5-3/4"
211-6126	7/8"	7/8"	5"	7-1/4"
211-6127	1"	3/4"	1-7/8"	4-1/8"
211-6128	1"	1"	2"	4-1/2"
211-6129	1"	1"	4"	6-1/2"
211-6130	1"	1"	6"	8-1/2"
211-6131	1-1/4"	1-1/4"	2"	4-1/2"
211-6132	1-1/4"	1-1/4"	4"	6-1/2"
211-6133	1-1/4"	1-1/4"	6"	8-1/2"
211-6134	1-1/2"	1-1/4"	2"	4-1/2"
211-6135	1-1/2"	1-1/4"	4"	6-1/2"
211-6136	1-1/2"	1-1/4"	8"	10-1/2"
211-6137	1-3/4"	1-1/4"	2"	4-1/2"
211-6138	1-3/4"	1-1/4"	4"	6-1/2"
211-6139	2"	1-1/4"	2"	4-1/2"
211-6140	2"	1-1/4"	4"	6-1/2"

2 FLUTE SINGLE END MILL-FOR ALUMINUM-M2

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6001	1/4"	3/8"	5/8"	2-1/2"
211-6002	1/4"	3/8"	1-1/4"	3-1/8"
211-6003	1/4"	3/8"	1-3/4"	3-1/2"
211-6004	5/16"	3/8"	3/4"	2-1/2"
211-6005	5/16"	3/8"	1-3/8"	3-1/8"
211-6006	5/16"	3/8"	2"	3-3/4"
211-6007	3/8"	3/8"	3/4"	2-1/2"
211-6008	3/8"	3/8"	1-1/2"	3-1/4"
211-6009	3/8"	3/8"	2-1/2"	4-1/4"
211-6010	7/16"	3/8"	1"	2-11/16"
211-6011	7/16"	1/2"	1-3/4"	3-3/4"
211-6012	7/16"	1/2"	2-3/4"	4-3/4"
211-6013	1/2"	1/2"	1"	3-1/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6014	1/2"	1/2"	2"	4"
211-6015	1/2"	1/2"	3"	5"
211-6016	5/8"	1/2"	1-3/8"	3-3/8"
211-6017	5/8"	5/8"	1-5/8"	3-3/4"
211-6018	5/8"	5/8"	2-1/2"	4-5/8"
211-6019	5/8"	5/8"	4"	6-1/8"
211-6020	3/4"	1/2"	1-5/8"	3-5/8"
211-6021	3/4"	3/4"	1-5/8"	3-7/8"
211-6022	3/4"	3/4"	3"	5-1/4"
211-6023	3/4"	3/4"	4"	6-1/4"
211-6024	7/8"	7/8"	1-7/8"	4-1/8"
211-6025	7/8"	7/8"	3-1/2"	5-3/4"
211-6026	7/8"	7/8"	5"	7-1/4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6027	1"	3/4"	1-7/8"	4-1/8"
211-6028	1"	1"	2"	4-1/2"
211-6029	1"	1"	4"	6-1/2"
211-6030	1"	1"	6"	8-1/2"
211-6031	1-1/4"	1-1/4"	2"	4-1/2"
211-6032	1-1/4"	1-1/4"	4"	6-1/2"
211-6033	1-1/4"	1-1/4"	6"	8-1/2"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6034	1-1/2"	1-1/4"	2"	4-1/2"
211-6035	1-1/2"	1-1/4"	4"	6-1/2"
211-6036	1-1/2"	1-1/4"	8"	10-1/2"
211-6037	1-3/4"	1-1/4"	2"	4-1/2"
211-6038	1-3/4"	1-1/4"	4"	6-1/2"
211-6039	2"	1-1/4"	2"	4-1/2"
211-6040	2"	1-1/4"	4"	6-1/2"

2 FLUTE SINGLE END MILL-FOR ALUMINUM-TIN COATED

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6201	1/4"	3/8"	5/8"	2-1/2"
211-6202	1/4"	3/8"	1-1/4"	3-1/8"
211-6203	1/4"	3/8"	1-3/4"	3-1/2"
211-6204	5/16"	3/8"	3/4"	2-1/2"
211-6205	5/16"	3/8"	1-3/8"	3-1/8"
211-6206	5/16"	3/8"	2"	3-3/4"
211-6207	3/8"	3/8"	3/4"	2-1/2"
211-6208	3/8"	3/8"	1-1/2"	3-1/4"
211-6209	3/8"	3/8"	2-1/2"	4-1/4"
211-6210	7/16"	3/8"	1"	2-11/16"
211-6211	7/16"	1/2"	1-3/4"	3-3/4"
211-6212	7/16"	1/2"	2-3/4"	4-3/4"
211-6213	1/2"	1/2"	1"	3-1/4"
211-6214	1/2"	1/2"	2"	4"
211-6215	1/2"	1/2"	3"	5"
211-6216	5/8"	1/2"	1-3/8"	3-3/8"
211-6217	5/8"	5/8"	1-5/8"	3-3/4"
211-6218	5/8"	5/8"	2-1/2"	4-5/8"
211-6219	5/8"	5/8"	4"	6-1/8"
211-6220	3/4"	1/2"	1-5/8"	3-5/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-6221	3/4"	3/4"	1-5/8"	3-7/8"
211-6222	3/4"	3/4"	3"	5-1/4"
211-6223	3/4"	3/4"	4"	6-1/4"
211-6224	7/8"	7/8"	1-7/8"	4-1/8"
211-6225	7/8"	7/8"	3-1/2"	5-3/4"
211-6226	7/8"	7/8"	5"	7-1/4"
211-6227	1"	3/4"	1-7/8"	4-1/8"
211-6228	1"	1"	2"	4-1/2"
211-6229	1"	1"	4"	6-1/2"
211-6230	1"	1"	6"	8-1/2"
211-6231	1-1/4"	1-1/4"	2"	4-1/2"
211-6232	1-1/4"	1-1/4"	4"	6-1/2"
211-6233	1-1/4"	1-1/4"	6"	8-1/2"
211-6234	1-1/2"	1-1/4"	2"	4-1/2"
211-6235	1-1/2"	1-1/4"	4"	6-1/2"
211-6236	1-1/2"	1-1/4"	8"	10-1/2"
211-6237	1-3/4"	1-1/4"	2"	4-1/2"
211-6238	1-3/4"	1-1/4"	4"	6-1/2"
211-6239	2"	1-1/4"	2"	4-1/2"
211-6240	2"	1-1/4"	4"	6-1/2"

3 FLUTE SINGLE END MILL-M2



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7001	3/32"	3/8"	5/16"	2-5/16"
211-7002	1/8"	3/8"	3/8"	2-5/16"
211-7003	3/16"	3/8"	1/2"	2-3/8"
211-7004	1/4"	3/8"	5/8"	2-7/16"
211-7005	5/16"	3/8"	3/4"	2-1/2"
211-7006	3/8"	3/8"	3/4"	2-1/2"
211-7007	7/16"	3/8"	1"	2-11/16"
211-7008	7/16"	1/2"	1"	2-15/16"
211-7009	1/2"	3/8"	1"	2-11/16"
211-7010	1/2"	1/2"	1-1/4"	3-1/4"
211-7011	9/16"	1/2"	1-3/8"	3-3/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7012	5/8"	1/2"	1-3/8"	3-3/8"
211-7013	5/8"	5/8"	1-5/8"	3-3/4"
211-7014	11/16"	1/2"	1-5/8"	3-5/8"
211-7015	11/16"	5/8"	1-5/8"	3-3/4"
211-7016	3/4"	5/8"	1-5/8"	3-3/4"
211-7017	3/4"	1/2"	1-5/8"	3-5/8"
211-7018	3/4"	3/4"	1-5/8"	3-7/8"
211-7019	13/16"	5/8"	1-5/8"	3-3/4"
211-7020	13/16"	3/4"	1-5/8"	3-7/8"
211-7021	7/8"	5/8"	1-7/8"	4"
211-7022	7/8"	3/4"	1-7/8"	4-1/8"
211-7023	7/8"	7/8"	1-7/8"	4-7/8"
211-7024	7/8"	1/2"	1-5/8"	3-5/8"
211-7025	15/16"	7/8"	1-7/8"	4-1/8"
211-7026	15/16"	5/8"	1-7/8"	4"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7027	1"	5/8"	1-7/8"	4"
211-7028	1"	3/4"	1-7/8"	4-1/8"
211-7029	1"	7/8"	1-7/8"	4-1/8"
211-7030	1"	1"	2"	4-1/2"
211-7031	1-1/8"	1"	2"	4-1/2"
211-7032	1-1/4"	1"	2"	4-1/2"
211-7033	1-1/4"	1-1/4"	2"	4-1/2"
211-7034	1-3/8"	1"	2"	4-1/2"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7035	1-3/8"	1-1/4"	2"	4-1/2"
211-7036	1-1/2"	1"	2"	4-1/2"
211-7037	1-1/2"	1-1/4"	2"	4-1/2"
211-7038	1-3/4"	1-1/4"	2"	4-1/2"
211-7039	2"	1-1/4"	2"	4-1/2"
211-7040	2"	2"	3"	5-3/4"
211-7041	2-1/2"	2"	4"	7-5/8"
211-7042	2-1/2"	2-1/2"	4"	8"

3 FLUTE SINGLE END MILL-M2 AL

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7101	3/32"	3/8"	5/16"	2-5/16"
211-7102	1/8"	3/8"	3/8"	2-5/16"
211-7103	3/16"	3/8"	1/2"	2-3/8"
211-7104	1/4"	3/8"	5/8"	2-7/16"
211-7105	5/16"	3/8"	3/4"	2-1/2"
211-7106	3/8"	3/8"	3/4"	2-1/2"
211-7107	7/16"	3/8"	1"	2-11/16"
211-7108	7/16"	1/2"	1"	2-15/16"
211-7109	1/2"	3/8"	1"	2-11/16"
211-7110	1/2"	1/2"	1-1/4"	3-1/4"
211-7111	9/16"	1/2"	1-3/8"	3-3/8"
211-7112	5/8"	1/2"	1-3/8"	3-3/8"
211-7113	5/8"	5/8"	1-5/8"	3-3/4"
211-7114	11/16"	1/2"	1-5/8"	3-5/8"
211-7115	11/16"	5/8"	1-5/8"	3-3/4"
211-7116	3/4"	5/8"	1-5/8"	3-3/4"
211-7117	3/4"	1/2"	1-5/8"	3-5/8"
211-7118	3/4"	3/4"	1-5/8"	3-7/8"
211-7119	13/16"	5/8"	1-5/8"	3-3/4"
211-7120	13/16"	3/4"	1-5/8"	3-7/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7121	7/8"	5/8"	1-7/8"	4"
211-7122	7/8"	3/4"	1-7/8"	4-1/8"
211-7123	7/8"	7/8"	1-7/8"	4-7/8"
211-7124	7/8"	1/2"	1-5/8"	3-5/8"
211-7125	15/16"	7/8"	1-7/8"	4-1/8"
211-7126	15/16"	5/8"	1-7/8"	4"
211-7127	1"	5/8"	1-7/8"	4"
211-7128	1"	3/4"	1-7/8"	4-1/8"
211-7129	1"	7/8"	1-7/8"	4-1/8"
211-7130	1"	1"	2"	4-1/2"
211-7131	1-1/8"	1"	2"	4-1/2"
211-7132	1-1/4"	1"	2"	4-1/2"
211-7133	1-1/4"	1-1/4"	2"	4-1/2"
211-7134	1-3/8"	1"	2"	4-1/2"
211-7135	1-3/8"	1-1/4"	2"	4-1/2"
211-7136	1-1/2"	1"	2"	4-1/2"
211-7137	1-1/2"	1-1/4"	2"	4-1/2"
211-7138	1-3/4"	1-1/4"	2"	4-1/2"
211-7139	2"	1-1/4"	2"	4-1/2"
211-7140	2"	2"	3"	5-3/4"
211-7141	2-1/2"	2"	4"	7-5/8"
211-7142	2-1/2"	2-1/2"	4"	8"

3 FLUTE SINGLE END MILL-TIN COATED



Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7201	3/32"	3/8"	5/16"	2-5/16"
211-7202	1/8"	3/8"	3/8"	2-5/16"
211-7203	3/16"	3/8"	1/2"	2-3/8"
211-7204	1/4"	3/8"	5/8"	2-7/16"
211-7205	5/16"	3/8"	3/4"	2-1/2"
211-7206	3/8"	3/8"	3/4"	2-1/2"
211-7207	7/16"	3/8"	1"	2-11/16"
211-7208	7/16"	1/2"	1"	2-15/16"
211-7209	1/2"	3/8"	1"	2-11/16"
211-7210	1/2"	1/2"	1-1/4"	3-1/4"
211-7211	9/16"	1/2"	1-3/8"	3-3/8"
211-7212	5/8"	1/2"	1-3/8"	3-3/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7213	5/8"	5/8"	1-5/8"	3-3/4"
211-7214	11/16"	1/2"	1-5/8"	3-5/8"
211-7215	11/16"	5/8"	1-5/8"	3-3/4"
211-7216	3/4"	5/8"	1-5/8"	3-3/4"
211-7217	3/4"	1/2"	1-5/8"	3-5/8"
211-7218	3/4"	3/4"	1-5/8"	3-7/8"
211-7219	13/16"	5/8"	1-5/8"	3-3/4"
211-7220	13/16"	3/4"	1-5/8"	3-7/8"
211-7221	7/8"	5/8"	1-7/8"	4"
211-7222	7/8"	3/4"	1-7/8"	4-1/8"
211-7223	7/8"	7/8"	1-7/8"	4-7/8"
211-7224	7/8"	1/2"	1-5/8"	3-5/8"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7225	15/16"	7/8"	1-7/8"	4-1/8"
211-7226	15/16"	5/8"	1-7/8"	4"
211-7227	1"	5/8"	1-7/8"	4"
211-7228	1"	3/4"	1-7/8"	4-1/8"
211-7229	1"	7/8"	1-7/8"	4-1/8"
211-7230	1"	1"	2"	4-1/2"
211-7231	1-1/8"	1"	2"	4-1/2"
211-7232	1-1/4"	1"	2"	4-1/2"
211-7233	1-1/4"	1-1/4"	2"	4-1/2"

Order No.	Size	Shank Dia.	Flute Length	Overall Length
211-7234	1-3/8"	1"	2"	4-1/2"
211-7235	1-3/8"	1-1/4"	2"	4-1/2"
211-7236	1-1/2"	1"	2"	4-1/2"
211-7237	1-1/2"	1-1/4"	2"	4-1/2"
211-7238	1-3/4"	1-1/4"	2"	4-1/2"
211-7239	2"	1-1/4"	2"	4-1/2"
211-7240	2"	2"	3"	5-3/4"
211-7241	2-1/2"	2"	4"	7-5/8"
211-7242	2-1/2"	2-1/2"	4"	8"

3/16" SHANK 2 FLUTE DOUBLE END MILL-M2 STEEL



Order No.	Size	Flute Length	Overall Length
210-0002	1/32"	3/32"	2-1/4"
210-0003	3/64"	9/64"	2-1/4"
210-0004	1/16"	3/16"	2-1/4"
210-0005	5/64"	15/64"	2-1/4"
210-0006	3/32"	9/32"	2-1/4"

Order No.	Size	Flute Length	Overall Length
210-0007	7/64"	21/64"	2-1/4"
210-0008	1/8"	3/8"	2-1/4"
210-0009	9/64"	13/32"	2-1/4"
210-0010	5/32"	7/16"	2-1/4"
210-0011	11/64"	1/2"	2-1/4"
210-0012	3/16"	1/2"	2-1/4"

3/16" SHANK 2 FLUTE DOUBLE END MILL-M2AL STEEL

Order No.	Size	Flute Length	Overall Length
210-0102	1/32"	3/32"	2-1/4"
210-0103	3/64"	9/64"	2-1/4"
210-0104	1/16"	3/16"	2-1/4"
210-0105	5/64"	15/64"	2-1/4"
210-0106	3/32"	9/32"	2-1/4"

210-0107	7/64"	21/64"	2-1/4"
210-0108	1/8"	3/8"	2-1/4"
210-0109	9/64"	13/32"	2-1/4"
210-0110	5/32"	7/16"	2-1/4"
210-0111	11/64"	1/2"	2-1/4"
210-0112	3/16"	1/2"	2-1/4"

3/16" 2 SHANK FLUTE DOUBLE END MILL-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-0202	1/32"	3/32"	2-1/4"
210-0203	3/64"	9/64"	2-1/4"
210-0204	1/16"	3/16"	2-1/4"
210-0205	5/64"	15/64"	2-1/4"
210-0206	3/32"	9/32"	2-1/4"

210-0207	7/64"	21/64"	2-1/4"
210-0208	1/8"	3/8"	2-1/4"
210-0209	9/64"	13/32"	2-1/4"
210-0210	5/32"	7/16"	2-1/4"
210-0211	11/64"	1/2"	2-1/4"
210-0212	3/16"	1/2"	2-1/4"

3/16" SHANK 2 FLUTE DOUBLE END MILL-STUB LENGTH-M2 STEEL

Order No.	Size	Flute Length	Overall Length
210-0302	1/32"	3/64"	2"
210-0303	3/64"	1/16"	2"
210-0304	1/16"	3/32"	2"
210-0305	5/64"	1/8"	2"
210-0306	3/32"	9/64"	2"

210-0307	7/64"	5/32"	2"
210-0308	1/8"	3/16"	2"
210-0309	9/64"	7/32"	2"
210-0310	5/32"	15/64"	2"
210-0311	11/64"	1/4"	2"
210-0312	3/16"	9/32"	2"

3/16" SHANK 2 FLUTE DOUBLE END MILL-STUB LENGTH-M2AL STEEL

Order No.	Size	Flute Length	Overall Length
210-0402	1/32"	3/64"	2"
210-0403	3/64"	1/16"	2"
210-0404	1/16"	3/32"	2"
210-0405	5/64"	1/8"	2"
210-0406	3/32"	9/64"	2"

210-0407	7/64"	5/32"	2"
210-0408	1/8"	3/16"	2"
210-0409	9/64"	7/32"	2"
210-0410	5/32"	15/64"	2"
210-0411	11/64"	1/4"	2"
210-0412	3/16"	9/32"	2"

3/16" SHANK 2 FLUTE DOUBLE END MILL-STUB LENGTH-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-0502	1/32"	3/64"	2"
210-0503	3/64"	1/16"	2"
210-0504	1/16"	3/32"	2"
210-0505	5/64"	1/8"	2"
210-0506	3/32"	9/64"	2"

210-0507	7/64"	5/32"	2"
210-0508	1/8"	3/16"	2"
210-0509	9/64"	7/32"	2"
210-0510	5/32"	15/64"	2"
210-0511	11/64"	1/4"	2"
210-0512	3/16"	9/32"	2"

3/16" SHANK 2 FLUTE DOUBLE END MILL-LONG LENGTH-M2 STEEL

Order No.	Size	Flute Length	Overall Length
210-0604	1/16"	7/32"	2-1/2"
210-0605	5/64"	1/4"	2-1/2"
210-0606	3/32"	9/32"	2-5/8"
210-0607	7/64"	9/32"	2-5/8"

210-0608	1/8"	3/4"	3-1/8"
210-0609	9/64"	3/4"	3-1/8"
210-0610	5/32"	7/8"	3-1/4"
210-0611	11/64"	7/8"	3-1/4"
210-0612	3/16"	1"	3-3/8"

3/16" SHANK 2 FLUTE DOUBLE END MILL-LONG LENGTH-M2 AL STEEL

Order No.	Size	Flute Length	Overall Length
210-0704	1/16"	3/8"	2-1/2"
210-0705	5/64"	3/8"	2-1/2"
210-0706	3/32"	1/2"	2-5/8"
210-0707	7/64"	1/2"	2-5/8"

210-0708	1/8"	3/4"	3-1/8"
210-0709	9/64"	3/4"	3-1/8"
210-0710	5/32"	7/8"	3-1/4"
210-0711	11/64"	7/8"	3-1/4"
210-0712	3/16"	1"	3-3/8"

3/16" SHANK 2 FLUTE DOUBLE END MILL-LONG LENGTH-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-0804	1/16"	3/8"	2-1/2"
210-0805	5/64"	3/8"	2-1/2"
210-0806	3/32"	1/2"	2-5/8"
210-0807	7/64"	1/2"	2-5/8"

210-0808	1/8"	3/4"	3-1/8"
210-0809	9/64"	3/4"	3-1/8"
210-0810	5/32"	7/8"	3-1/4"
210-0811	11/64"	7/8"	3-1/4"
210-0812	3/16"	1"	3-3/8"

3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL-M2 STEEL



Order No.	Size	Flute Length	Overall Length
210-1002	1/32"	3/32"	2-1/4"
210-1003	3/64"	9/64"	2-1/4"
210-1004	1/16"	3/16"	2-1/4"
210-1005	5/64"	15/64"	2-1/4"
210-1006	3/32"	9/32"	2-1/4"

Order No.	Size	Flute Length	Overall Length
210-1007	7/64"	21/64"	2-1/4"
210-1008	1/8"	3/8"	2-1/4"
210-1009	9/64"	13/32"	2-1/4"
210-1010	5/32"	7/16"	2-1/4"
210-1011	11/64"	1/2"	2-1/4"
210-1012	3/16"	1/2"	2-1/4"

3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL-M2AL STEEL

Order No.	Size	Flute Length	Overall Length
210-1102	1/32"	3/32"	2-1/4"
210-1103	3/64"	9/64"	2-1/4"
210-1104	1/16"	3/16"	2-1/4"
210-1105	5/64"	15/64"	2-1/4"
210-1106	3/32"	9/32"	2-1/4"

210-1107	7/64"	21/64"	2-1/4"
210-1108	1/8"	3/8"	2-1/4"
210-1109	9/64"	13/32"	2-1/4"
210-1110	5/32"	7/16"	2-1/4"
210-1111	11/64"	1/2"	2-1/4"
210-1112	3/16"	1/2"	2-1/4"

3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-1202	1/32"	3/32"	2-1/4"
210-1203	3/64"	9/64"	2-1/4"
210-1204	1/16"	3/16"	2-1/4"
210-1205	5/64"	15/64"	2-1/4"
210-1206	3/32"	9/32"	2-1/4"

210-1207	7/64"	21/64"	2-1/4"
210-1208	1/8"	3/8"	2-1/4"
210-1209	9/64"	13/32"	2-1/4"
210-1210	5/32"	7/16"	2-1/4"
210-1211	11/64"	1/2"	2-1/4"
210-1212	3/16"	1/2"	2-1/4"

3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL-STUB LENGTH-M2 STEEL

Order No.	Size	Flute Length	Overall Length
210-1302	1/32"	3/64"	2"
210-1303	3/64"	1/16"	2"
210-1304	1/16"	3/32"	2"
210-1305	5/64"	1/8"	2"
210-1306	3/32"	9/64"	2"

210-1307	7/64"	5/32"	2"
210-1308	1/8"	3/16"	2"
210-1309	9/64"	7/32"	2"
210-1310	5/32"	15/64"	2"
210-1311	11/64"	1/4"	2"
210-1312	3/16"	9/32"	2"

3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL-STUB LENGTH-M2AL STEEL

Order No.	Size	Flute Length	Overall Length
210-1402	1/32"	3/64"	2"
210-1403	3/64"	1/16"	2"
210-1404	1/16"	3/32"	2"
210-1405	5/64"	1/8"	2"
210-1406	3/32"	9/64"	2"

210-1407	7/64"	5/32"	2"
210-1408	1/8"	3/16"	2"
210-1409	9/64"	7/32"	2"
210-1410	5/32"	15/64"	2"
210-1411	11/64"	1/4"	2"
210-1412	3/16"	9/32"	2"

3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL-STUB LENGTH-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-1502	1/32"	3/64"	2"
210-1503	3/64"	1/16"	2"
210-1504	1/16"	3/32"	2"
210-1505	5/64"	1/8"	2"
210-1506	3/32"	9/64"	2"

210-1507	7/64"	5/32"	2"
210-1508	1/8"	3/16"	2"
210-1509	9/64"	7/32"	2"
210-1510	5/32"	15/64"	2"
210-1511	11/64"	1/4"	2"
210-1512	3/16"	9/32"	2"

3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL-LONG LENGTH-M2 STEEL

Order No.	Size	Flute Length	Overall Length
210-1604	1/16"	7/32"	2-1/2"
210-1605	5/64"	1/4"	2-1/2"
210-1606	3/32"	9/32"	2-5/8"
210-1607	7/64"	9/32"	2-5/8"

210-1608	1/8"	3/4"	3-1/8"
210-1609	9/64"	3/4"	3-1/8"
210-1610	5/32"	7/8"	3-1/4"
210-1611	11/64"	7/8"	3-1/4"
210-1612	3/16"	1"	3-3/8"

**3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL
-LONG LENGTH-M2AL STEEL**

Order No.	Size	Flute Length	Overall Length
210-1704	1/16"	3/8"	2-1/2"
210-1705	5/64"	3/8"	2-1/2"
210-1706	3/32"	1/2"	2-5/8"
210-1707	7/64"	1/2"	2-5/8"

210-1708	1/8"	3/4"	3-1/8"
210-1709	9/64"	3/4"	3-1/8"
210-1710	5/32"	7/8"	3-1/4"
210-1711	11/64"	7/8"	3-1/4"
210-1712	3/16"	1"	3-3/8"

**3/16" SHANK 2 FLUTE BALL NOSE DOUBLE END MILL
-LONG LENGTH-TIN COATED**

Order No.	Size	Flute Length	Overall Length
210-1804	1/16"	3/8"	2-1/2"
210-1805	5/64"	3/8"	2-1/2"
210-1806	3/32"	1/2"	2-5/8"
210-1807	7/64"	1/2"	2-5/8"

210-1808	1/8"	3/4"	3-1/8"
210-1809	9/64"	3/4"	3-1/8"
210-1810	5/32"	7/8"	3-1/4"
210-1811	11/64"	7/8"	3-1/4"
210-1812	3/16"	1"	3-3/8"

3/16" SHANK 4 FLUTE DOUBLE END MILL-M2 STEEL



Order No.	Size	Flute Length	Overall Length
210-2004	1/16"	3/16"	2-1/4"
210-2005	5/64"	15/64"	2-1/4"
210-2006	3/32"	9/32"	2-1/4"
210-2007	7/64"	21/64"	2-1/4"

210-2008	1/8"	3/8"	2-1/4"
210-2009	9/64"	13/32"	2-1/4"
210-2010	5/32"	7/16"	2-1/4"
210-2011	11/64"	1/2"	2-1/4"
210-2012	3/16"	1/2"	2-1/4"

3/16" SHANK 4 FLUTE DOUBLE END MILL-M2AL STEEL

Order No.	Size	Flute Length	Overall Length
210-2104	1/16"	3/16"	2-1/4"
210-2105	5/64"	15/64"	2-1/4"
210-2106	3/32"	9/32"	2-1/4"
210-2107	7/64"	21/64"	2-1/4"

210-2108	1/8"	3/8"	2-1/4"
210-2109	9/64"	13/32"	2-1/4"
210-2110	5/32"	7/16"	2-1/4"
210-2111	11/64"	1/2"	2-1/4"
210-2112	3/16"	1/2"	2-1/4"

3/16" SHANK 4 FLUTE DOUBLE END MILL-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-2204	1/16"	3/16"	2-1/4"
210-2205	5/64"	15/64"	2-1/4"
210-2206	3/32"	9/32"	2-1/4"
210-2207	7/64"	21/64"	2-1/4"

210-2208	1/8"	3/8"	2-1/4"
210-2209	9/64"	13/32"	2-1/4"
210-2210	5/32"	7/16"	2-1/4"
210-2211	11/64"	1/2"	2-1/4"
210-2212	3/16"	1/2"	2-1/4"

3/16" SHANK 4 FLUTE DOUBLE END MILL-STUB LENGTH-M2 STEEL

Order No.	Size	Flute Length	Overall Length
210-2304	1/16"	3/32"	2"
210-2305	5/64"	1/8"	2"
210-2306	3/32"	9/64"	2"
210-2307	7/64"	5/32"	2"

210-2308	1/8"	3/16"	2"
210-2309	9/64"	7/32"	2"
210-2310	5/32"	15/64"	2"
210-2311	11/64"	1/4"	2"
210-2312	3/16"	9/32"	2"

3/16" SHANK 4 FLUTE DOUBLE END MILL-STUB LENGTH-M2AL STEEL

Order No.	Size	Flute Length	Overall Length
210-2404	1/16"	3/32"	2"
210-2405	5/64"	1/8"	2"
210-2406	3/32"	9/64"	2"
210-2407	7/64"	5/32"	2"

210-2408	1/8"	3/16"	2"
210-2409	9/64"	7/32"	2"
210-2410	5/32"	15/64"	2"
210-2411	11/64"	1/4"	2"
210-2412	3/16"	9/32"	2"

3/16" SHANK 4 FLUTE DOUBLE END MILL-STUB LENGTH-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-2504	1/16"	3/32"	2"
210-2505	5/64"	1/8"	2"
210-2506	3/32"	9/64"	2"
210-2507	7/64"	5/32"	2"

210-2508	1/8"	3/16"	2"
210-2509	9/64"	7/32"	2"
210-2510	5/32"	15/64"	2"
210-2511	11/64"	1/4"	2"
210-2512	3/16"	9/32"	2"

3/16" SHANK 4 FLUTE DOUBLE END MILL-LONG LENGTH-M2 STEEL

Order No.	Size	Flute Length	Overall Length
210-2604	1/16"	7/32"	2-1/2"
210-2605	5/64"	1/4"	2-1/2"
210-2606	3/32"	9/32"	2-5/8"
210-2607	7/64"	9/32"	2-5/8"

210-2608	1/8"	3/4"	3-1/8"
210-2609	9/64"	3/4"	3-1/8"
210-2610	5/32"	7/8"	3-1/4"
210-2611	11/64"	7/8"	3-1/4"
210-2612	3/16"	1"	3-3/8"

3/16" SHANK 4 FLUTE DOUBLE END MILL-LONG LENGTH-M2AL STEEL

Order No.	Size	Flute Length	Overall Length
210-2704	1/16"	3/8"	2-1/2"
210-2705	5/64"	3/8"	2-1/2"
210-2706	3/32"	1/2"	2-5/8"
210-2707	7/64"	1/2"	2-5/8"

210-2708	1/8"	3/4"	3-1/8"
210-2709	9/64"	3/4"	3-1/8"
210-2710	5/32"	7/8"	3-1/4"
210-2711	11/64"	7/8"	3-1/4"
210-2712	3/16"	1"	3-3/8"

3/16" SHANK 4 FLUTE DOUBLE END MILL-LONG LENGTH-TIN COATED

Order No.	Size	Flute Length	Overall Length
210-2804	1/16"	3/8"	2-1/2"
210-2805	5/64"	3/8"	2-1/2"
210-2806	3/32"	1/2"	2-5/8"
210-2807	7/64"	1/2"	2-5/8"

210-2808	1/8"	3/4"	3-1/8"
210-2809	9/64"	3/4"	3-1/8"
210-2810	5/32"	7/8"	3-1/4"
210-2811	11/64"	7/8"	3-1/4"
210-2812	3/16"	1"	3-3/8"

3-IN-1 115PCS INCH DRILL SET



*1/16" to 1/2" by 64th,
A to Z, #1 to #60.
*Metal box

Order NO.	Drill Finish
203-1000	Tin-Coated and Ground
203-2000	Bright and Ground
203-3000	Milled and Polished
203-4000	Rolled and Polished
203-5000	Rolled and Black Oxide
203-6000	Rolled and Tin Coated

29PCS INCH DRILL SET



*1/16" to 1/2"
by 64th,
*Metal box

Order NO.	Drill Finish
203-1001	Tin-Coated and Ground
203-2001	Bright and Ground
203-3001	Milled and Polished
203-4001	Rolled and Polished
203-5001	Rolled and Black Oxide
203-6001	Rolled and Tin Coated

SILVER AND DEMING DRILL



Order No.	Shank Dia.	Piece/Set	Drills
204-0001	1/2"	5	17/32", 9/16", 5/8", 3/4", 1"
204-0002	1/2"	5	9/16", 5/8", 3/4", 7/8", 1"
204-0003	1/2"	8	9/16" to 1" by 16th
204-0004	1/2"	8	1-1/16" to 1-1/2" by 16th
204-0005	1/2"	10	9/16" to 1" by 16th, 1-1/8", 1-1/4"
204-0006	1/2"	12	9/16" to 1-1/4" by 16th
204-0007	1/2"	16	17/32" to 1" by 32nd
204-0008	1/2"	17	17/32" to 1-1/32" by 32nd
204-0009	1/2"	32	33/64" to 1" by 64th
204-0010	1/2"	40	33/64" to 1" by 64th, 1-1/16" to 1-1/2" by 16th
204-0011	3/4"	5	1" to 1-1/2" by 8th

INDIVIDUAL SIZE C2 AND C6

Order No.	Shank Dia.	Length	Bore Depth	Min.bore
201-0101	3/8"	2"	3/4"	5/16"
201-0102	3/8"	2-3/8"	1-1/8"	5/16"
201-0103	3/8"	2-3/4"	1-1/2"	5/16"
201-0104	3/8"	2-3/16"	15/16"	3/8"
201-0105	3/8"	2-21/32"	1-13/32"	3/8"
201-0106	3/8"	3-1/8"	1-7/8"	3/8"
201-0107	3/8"	2-3/8"	1-1/8"	7/16"
201-0108	3/8"	3-15/16"	1-11/16"	7/16"
201-0109	3/8"	3-1/2"	2-1/4"	7/16"
201-0201	1/2"	2-1/4"	3/4"	5/16"
201-0202	1/2"	2-5/8"	1-1/8"	5/16"
201-0203	1/2"	3"	1-1/2"	5/16"
201-0204	1/2"	2-5/8"	1-1/8"	7/16"
201-0205	1/2"	3-3/16"	1-11/16"	7/16"
201-0206	1/2"	3-3/4"	2-1/4"	7/16"
201-0207	1/2"	3"	1-1/2"	9/16"
201-0208	1/2"	3-3/4"	2-1/4"	9/16"
201-0209	1/2"	4-1/2"	3"	9/16"
201-0301	5/8"	2-1/4"	3/4"	5/16"
201-0302	5/8"	2-5/8"	1-1/8"	5/16"
202-0303	5/8"	3"	1-1/2"	5/16"
201-0304	5/8"	2-5/8"	1-1/8"	7/16"
201-0305	5/8"	3-3/16"	1-11/16"	7/16"
201-0306	5/8"	3-3/4"	2-1/4"	7/16"
201-0307	5/8"	3"	1-1/2"	9/16"
201-0308	5/8"	3-3/4"	2-1/4"	9/16"
201-0309	5/8"	4-1/2"	3"	9/16"
201-0310	5/8"	3-3/8"	1-7/8"	11/16"
201-0311	5/8"	4-5/16"	2-13/16"	11/16"
201-0312	5/8"	5-1/4"	3-3/4"	11/16"
201-0401	3/4"	3-1/8"	1-1/8"	7/16"
201-0402	3/4"	3-11/16"	1-11/16"	7/16"
201-0403	3/4"	4-1/4"	2-1/4"	7/16"
201-0404	3/4"	3-1/2"	1-1/2"	9/16"
201-0405	3/4"	4-1/4"	2-1/4"	9/16"
201-0406	3/4"	5"	3"	9/16"
201-0407	3/4"	3-7/8"	1-7/8"	11/16"
201-0408	3/4"	4-13/16"	2-13/16"	11/16"
201-0409	3/4"	5-3/4"	3-3/4"	11/16"
201-0410	3/4"	4-1/4"	2-1/4"	13/16"
201-0411	3/4"	5-3/8"	3-3/8"	13/16"
201-0412	3/4"	6-1/2"	4-1/2"	13/16"
201-0501	1"	5.0"	3.0"	9/16"
201-0502	1"	5-3/4"	3-3/4"	11/16"
201-0503	1"	6-1/2"	4-1/2"	7/8"
201-0504	1"	6-1/2"	4-1/2"	1-1/16"
201-0505	1"	7-3/4"	5-3/4"	1-1/4"
201-0506	1"	8-1/4"	6-1/4"	1-1/2"
201-0507	1"	9-1/2"	7-1/2"	1-5/8"

Order No.	Shank Dia.	Length	Bore Depth	Min.bore
201-1101	3/8"	2"	3/4"	5/16"
201-1102	3/8"	2-3/8"	1-1/8"	5/16"
201-1103	3/8"	2-3/4"	1-1/2"	5/16"
201-1104	3/8"	2-3/16"	15/16"	3/8"
201-1105	3/8"	2-21/32"	1-13/32"	3/8"
201-1106	3/8"	3-1/8"	1-7/8"	3/8"
201-1107	3/8"	2-3/8"	1-1/8"	7/16"
201-1108	3/8"	3-15/16"	1-11/16"	7/16"
201-1109	3/8"	3-1/2"	2-1/4"	7/16"
201-1201	1/2"	2-1/4"	3/4"	5/16"
201-1202	1/2"	2-5/8"	1-1/8"	5/16"
201-1203	1/2"	3"	1-1/2"	5/16"
201-1204	1/2"	2-5/8"	1-1/8"	7/16"
201-1205	1/2"	3-3/16"	1-11/16"	7/16"
201-1206	1/2"	3-3/4"	2-1/4"	7/16"
201-1207	1/2"	3"	1-1/2"	9/16"
201-1208	1/2"	3-3/4"	2-1/4"	9/16"
201-1209	1/2"	4-1/2"	3"	9/16"
201-1301	5/8"	2-1/4"	3/4"	5/16"
201-1302	5/8"	2-5/8"	1-1/8"	5/16"
202-1303	5/8"	3"	1-1/2"	5/16"
201-1304	5/8"	2-5/8"	1-1/8"	7/16"
201-1305	5/8"	3-3/16"	1-11/16"	7/16"
201-1306	5/8"	3-3/4"	2-1/4"	7/16"
201-1307	5/8"	3"	1-1/2"	9/16"
201-1308	5/8"	3-3/4"	2-1/4"	9/16"
201-1309	5/8"	4-1/2"	3"	9/16"
201-1310	5/8"	3-3/8"	1-7/8"	11/16"
201-1311	5/8"	4-5/16"	2-13/16"	11/16"
201-1312	5/8"	5-1/4"	3-3/4"	11/16"
201-1401	3/4"	3-1/8"	1-1/8"	7/16"
201-1402	3/4"	3-11/16"	1-11/16"	7/16"
201-1403	3/4"	4-1/4"	2-1/4"	7/16"
201-1404	3/4"	3-1/2"	1-1/2"	9/16"
201-1405	3/4"	4-1/4"	2-1/4"	9/16"
201-1406	3/4"	5"	3"	9/16"
201-1407	3/4"	3-7/8"	1-7/8"	11/16"
201-1408	3/4"	4-13/16"	2-13/16"	11/16"
201-1409	3/4"	5-3/4"	3-3/4"	11/16"
201-1410	3/4"	4-1/4"	2-1/4"	13/16"
201-1411	3/4"	5-3/8"	3-3/8"	13/16"
201-1412	3/4"	6-1/2"	4-1/2"	13/16"
201-1501	1"	5.0"	3.0"	9/16"
201-1502	1"	5-3/4"	3-3/4"	11/16"
201-1503	1"	6-1/2"	4-1/2"	7/8"
201-1504	1"	6-1/2"	4-1/2"	1-1/16"
201-1505	1"	7-3/4"	5-3/4"	1-1/4"
201-1506	1"	8-1/4"	6-1/4"	1-1/2"
201-1507	1"	9-1/2"	7-1/2"	1-5/8"

DOUBLE END BORING BAR



*Double end boring bars 90° and 45°.
*Broached holes for standard HSS, carbide tool bits.
*Black oxide finished. *Bits not included.

Order No.	Shank Dia.	Length	For Bit Size
201-3001	1/4"	5"	5/32"round
201-3002	5/16"	6"	3/16"Round
201-3003	3/8"	6"	3/16"round
201-3004	1/2"	6"	3/16"square
201-3005	1/2"	6"	1/4"square
201-3006	1/2"	9"	1/4"square
201-3007	9/16"	6-1/2"	1/4"square

Order No.	Shank Dia.	Length	For Bit Size
201-3008	5/8"	10"	1/4"square
201-3009	3/4"	12"	1/4"square
201-3010	1"	12"	1/4"square
201-3011	1"	12"	5/16"square
201-3012	1-1/4"	16"	1/2"square
201-3013	1-1/2"	18"	1/2"square

45° SINGLE END BORING BAR



*Single end 45° boring bars.
*Broached holes for standard HSS, carbide tool bits.
*Black oxide finished. *Bits not included.

Order No.	Shank Dia.	Length	For Bit Size
201-3101	1/4"	2-1/2"	5/32"round
201-3102	5/16"	3"	3/16"Round
201-3103	3/8"	3"	3/16"round
201-3104	1/2"	3"	3/16"square
201-3105	1/2"	3"	1/4"square
201-3106	1/2"	4-1/2"	1/4"square
201-3107	9/16"	4-1/2"	1/4"square

Order No.	Shank Dia.	Length	For Bit Size
201-3108	5/8"	5"	1/4"square
201-3109	3/4"	6"	1/4"square
201-3110	1"	6"	1/4"square
201-3111	1"	6"	5/16"square
201-3112	1-1/4"	8"	1/2"square
201-3113	1-1/2"	9"	1/2"square

90° SINGLE END BORING BAR



*Single end 90° boring bars.
*Broached holes for standard HSS, carbide tool bits.
*Black oxide finished. *Bits not included.

Order No.	Shank Dia.	Length	For Bit Size
201-3201	1/4"	2-1/2"	5/32"round
201-3202	5/16"	3"	3/16"Round
201-3203	3/8"	3"	3/16"round
201-3204	1/2"	3"	3/16"square
201-3205	1/2"	3"	1/4"square
201-3206	1/2"	4-1/2"	1/4"square
201-3207	9/16"	4-1/2"	1/4"square

Order No.	Shank Dia.	Length	For Bit Size
201-3208	5/8"	5"	1/4"square
201-3209	3/4"	6"	1/4"square
201-3210	1"	6"	1/4"square
201-3211	1"	6"	5/16"square
201-3212	1-1/4"	8"	1/2"square
201-3213	1-1/2"	9"	1/2"square

CARBIDE TIPPED BORING BAR

Order No.	Shank Dia.	Piece/Set	Grade
201-0001	3/8"	9	C2-Cast Iron
201-0002	1/2"	9	
201-0003	5/8"	12	
201-0004	3/4"	12	
201-0005	1"	12	
201-1001	3/8"	9	C6-Steel
201-1002	1/2"	9	
201-1003	5/8"	12	
201-1004	3/4"	12	
201-1005	1"	12	



20PCS TAP AND DIE SET-METRIC

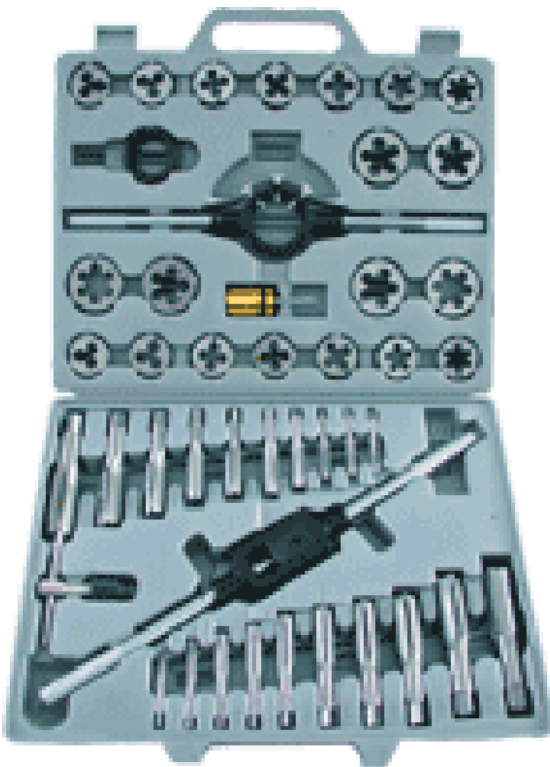
Set includes:
 One tap and one die of each of the following size:
 3x0.5, 4x0.7, 5x0.8, 6x1.0, 7x1.0, 8x1.25, 9x1.25,
 10x1.5, 12x1.75.
 One tap wrench. One die wrench 25.4mm O.D.
 Material: Alloy Steel.

Order No. 200-1020**40PCS METRIC TAP AND DIE SET**

Set includes:
 One tap and round adjustable die of each size shown:
 3x0.5, 3x0.6, 4x0.7, 4x0.75, 5x0.8, 5x0.9, 6x0.75, 6x1.0, 7x0.75, 7x1.0, 8x1.0, 8x1.25, 10x1.25, 10x1.5, 12x1.5,
 12x1.75 1/8-28 BSP.
 One adjustable die stock.
 One adjustable handle tap wrench.
 One T-tap wrench. One screw pitch gage.
 One screw driver. One plastic box.
 Material: Alloy Steel.

Order No. 200-1040**45PCS METRIC TAP AND DIE SET**

Set includes:
 One plug tap and one round die of the following size:
 6mmx0.75, 6mmx1.0, 8mmx1.0, 8mmx1.25, 10mmx1.25,
 10mmx1.50, 12mmx1.5, 12mmx1.75, 14mmx1.5, 14mmx2.0,
 16mmx1.5, 16mmx2.0, 18mmx1.5, 18mmx2.5, 20mmx1.5,
 20mmx2.5, 22mmx1.5, 22mmx2.5, 24mmx1.5, 24mmx3.0.
 One adjustable die stock with adaptor.
 One adjustable handle tap wrench.
 One T-tap wrench. One screw driver. One plastic box
 Material: Alloy Steel.

Order No. 200-1045

60PCS TAP AND DIE SET



Order No. 200-1060

Set includes:

One tap and one die of each of the following size:
 M3x0.5, M4x0.7, M5x0.8, M6x1, M7x1, M8x1.25, M9x1.25, M10x1.5, M10x1, M12x1.75, 4-40UNC, 6-32UNC, 8-32UNC, 10-24UNC, 12-24UNC, 1/4"-20UNC, 5/16"-18UNC, 3/8"-16UNC, 7/16"-14UNC, 1/2"-13UNC, 10-32UNF, 1/4"-18UNF, 5/16"-24UNF, 3/8"-24UNF, 7/16"-20UNF, 1/2"-20UNF, 1/8"-27NPT.
 One tap wrench-American patten 1/2"capacity.
 One T-type tap wrench 1/4"capacity.
 One die handle 1" O.D.
 One screw driver. One screw pitch gauge.
 Material: Alloy Steel.

100PCS TAP AND DIE SET



Order No. 200-1100

Set includes:

Two taps and one die of each of the following size:
 6 UNF taps and dies: 10-32, 1/4"-28, 5/16"-24, 3/8"-24, 7/16"-20, 1/2"-20.
 17 UNC taps and dies: 3mmx0.5, 4mmx0.7, 5mmx0.8, 6mmx1, 8mmx1.25, 10mmx1.5, 12mmx1.75, 4-40, 6-32, 8-32, 10-24, 12-24, 1/4"-20, 5/16"-18, 3/8"-16, 7/16"-14, 1/2"-13, 1/8"-27 NPT.
 Drills: 2.5mm, 3.3mm, 4.2mm, 5mm, 6.8mm, 8.6mm, 10.3mm, 3/32", 7/64", 9/64", 5/32, 11/64", 3/16", 13/64", 7/32", 17/64", 9/32", 5/16", 11/32", 3/8", 25/64", 27/64", 29/64".
 One tap wrench. One T-type tap wrench.
 One die wrench 25mm O.D.
 One screw driver. One metal box.
 Material: Alloy Steel.

20PCS TAP AND DIE SET-INCH

Set includes:

One tap and one 1" O.D. round die of each size:
 6-32UNC, 8-32UNC, 10-24UNC, 12-24UNC, 1/4"-20UNC, 5/16"-18UNC, 3/8"-16UNC, 7/16"-14UNC, 1/2"-13UNC.
 One tap wrench. One die wrench 1" O.D.
 Material: Alloy Steel.

Order No. 200-1120



40PCS INCH TAP AND DIE SET



Order No. 200-1140

Set includes:

One plug tap and 1" O.D. round die of each size shown:
 4-40NC, 6-32NC, 8-32NC, 10-24NC, 12-24NC, 1/4"-20NC, 5/16"-18NC, 3/8"-16NC, 7/16"-14NC, 1/2"-13NC, 10-32NF, 1/4"-28NF, 5/16"-24NF, 3/8"-24NF, 7/16"-20NF, 1/2"-20NF, 1/8"-27 NPT.
 One adjustable die stock.
 One adjustable handle tap wrench.
 One T-tap wrench. One screw pitch gage.
 One screw driver. One plastic box
 Material: Alloy Steel.

45PCS INCH TAP AND DIE SET



Order No. 200-1145

Set includes:

One plug tap and 1-1/2" and 2" O.D. round die of each size shown:
 1/4"-20NC, 5/16"-18NC, 3/8"-16NC, 7/16"-14NC, 1/2"-13NC, 9/16"-12NC, 5/8"-11NC, 3/4"-10NC, 7/9"-9NC, 1"-8NC, 1/4"-18NF, 5/16"-24NF, 3/8"-24NF, 7/16"-20NF, 1/2"-20NF, 9/16"-18NF, 5/8"-18NF, 3/4"-16NF, 7/8"-14NF, 1"-14NF.
 One adjustable die stock with adaptor.
 One adjustable handle tap wrench.
 One T-tap wrench. One screw driver. One plastic box
 Material: Alloy Steel.

110PCS INCH TAP AND DIE SET



Order No. 200-1110

Set includes:

One plug tap, one tap and one die of each of the following size:
 M2x0.4, M3x0.5, M4x0.7, M5x0.8, M6x1, M6x0.75, M7x1, M7x0.75, M8x0.75, M8x1, M8x1.25, M9x0.75, M9x1, M9x1.25, M10x1.5, M10x1.25, M10x0.75, M10x1, M11x1.5, M11x1.25, M11x1, M11x0.75, M12x0.75, M12x1, M12x1.25, M12x1.5, M12x1.75, M14x2, M14x1.5, M14x1, M14x1.25, M16x2, M16x1.5, M16x1.0, M18x1.5.
 One die handle 1"O.D.
 One die handle 1/2"O.D.
 Two taps wrench. One T tape tap wrench.
 Material: Alloy Steel.

HSS. SQUARE TOOL BITS-METRIC

Order No.	Bit Size	Order No.	Bit Size	Order No.	Bit Size	Order No.	Bit Size
200-0001	3x3x60mm	200-0017	7x7x80mm	200-0033	12x12x200mm	200-0049	25x25x100mm
200-0002	3x3x80mm	200-0018	7x7x100mm	200-0034	14x14x100mm	200-0050	25x25x125mm
200-0003	3x3x100mm	200-0019	7x7x150mm	200-0035	14x14x125mm	200-0051	25x25x150mm
200-0004	3x3x150mm	200-0020	7x7x200mm	200-0036	14x14x150mm	200-0052	25x25x200mm
200-0005	3x3x200mm	200-0021	8x8x60mm	200-0037	14x14x200mm	200-0053	25x25x250mm
200-0006	4x4x60mm	200-0022	8x8x80mm	200-0038	16x16x100mm	200-0054	32x32x100mm
200-0007	4x4x80mm	200-0023	8x8x100mm	200-0039	16x16x125mm	200-0055	32x32x125mm
200-0008	5x5x100mm	200-0024	8x8x150mm	200-0040	16x16x150mm	200-0056	32x32x150mm
200-0009	5x5x150mm	200-0025	8x8x200mm	200-0041	16x16x200mm	200-0057	32x32x200mm
200-0010	5x5x200mm	200-0026	10x10x100mm	200-0042	18x18x100mm	200-0058	32x32x250mm
200-0011	6x6x60mm	200-0027	10x10x125mm	200-0043	18x18x125mm	200-0059	38x38x150mm
200-0012	6x6x80mm	200-0028	10x10x150mm	200-0044	18x18x150mm	200-0060	38x38x200mm
200-0013	6x6x100mm	200-0029	10x10x200mm	200-0045	18x18x200mm	200-0061	38x38x250mm
200-0014	6x6x150mm	200-0030	12x12x100mm	200-0046	20x20x125mm	200-0062	50x50x200mm
200-0015	6x6x200mm	200-0031	12x12x125mm	200-0047	20x20x150mm	200-0063	50x50x250mm
200-0016	7x7x60mm	200-0032	12x12x150mm	200-0048	20x20x200mm		

HSS. SQUARE TOOL BITS-INCH

Order No.	Bit Size	Order No.	Bit Size	Order No.	Bit Size
200-0101	1/8"x1/8"x2-1/2"	200-0122	5/16"x5/16"x8"	200-0143	7/8"x7/8"x4"
200-0102	1/8"x1/8"x4"	200-0123	3/8"x3/8"x3"	200-0144	7/8"x7/8"x5"
200-0103	1/8"x1/8"x6"	200-0124	3/8"x3/8"x4"	200-0145	7/8"x7/8"x6"
200-0104	1/8"x1/8"x8"	200-0125	3/8"x3/8"x6"	200-0146	7/8"x7/8"x8"
200-0105	3/16"x3/16"x2"	200-0126	3/8"x3/8"x8"	200-0147	1"x1"x4"
200-0106	3/16"x3/16"x2-1/2"	200-0127	7/16"x7/16"x3-1/2"	200-0148	1"x1"x5"
200-0107	3/16"x3/16"x3"	200-0128	7/16"x7/16"x4"	200-0149	1"x1"x6"
200-0108	3/16"x3/16"x4"	200-0129	7/16"x7/16"x6"	200-0150	1"x1"x7"
200-0109	3/16"x3/16"x5"	200-0130	7/16"x7/16"x8"	200-0151	1"x1"x8"
200-0110	3/16"x3/16"x6"	200-0131	1/2"x1/2"x3"	200-0152	1-1/8"x1/8"x5"
200-0111	3/16"x3/16"x8"	200-0132	1/2"x1/2"x4"	200-0153	1-1/8"x1/8"x6"
200-0112	1/4"x1/4"x2-1/2"	200-0133	1/2"x1/2"x6"	200-0154	1-1/8"x1/8"x7"
200-0113	1/4"x1/4"x3"	200-0134	1/2"x1/2"x8"	200-0155	1-1/8"x1/8"x8"
200-0114	1/4"x1/4"x4"	200-0135	5/8"x5/8"x4"	200-0156	1-1/4"x1-1/4"x6"
200-0115	1/4"x1/4"x6"	200-0136	5/8"x5/8"x4-1/2"	200-0157	1-1/4"x1-1/4"x7"
200-0116	1/4"x1/4"x8"	200-0137	5/8"x5/8"x6"	200-0158	1-1/4"x1-1/4"x8"
200-0117	5/16"x5/16"x2-1/2"	200-0138	5/8"x5/8"x8"	200-0159	1-1/2"x1-1/2"x8"
200-0118	5/16"x5/16"x3"	200-0139	3/4"x3/4"x4"	200-0160	1-1/2"x1-1/2"x10"
200-0119	5/16"x5/16"x3-1/2"	200-0140	3/4"x3/4"x5"	200-0161	2"x2"x8"
200-0120	5/16"x5/16"x4"	200-0141	3/4"x3/4"x6"	200-0162	2"x2"x10"
200-0121	5/16"x5/16"x6"	200-0142	3/4"x3/4"x8"		

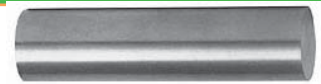
T TYPE CUT-OFF BLADE HSS.

Order No.	Width	Height	Length
200-0701	1/16"	11/16"	5"
200-0702	3/32"	1/2"	4-1/2"
200-0703	3/32"	5/8"	5"
200-0704	1/8"	3/4"	5"
200-0705	1/8"	7/8"	6"



Order No.	Width	Height	Length
200-0706	3/16"	1"	6-1/2"
200-0707	3/16"	1-1/8"	7"
200-0708	1/4"	1-1/8"	7"
200-0709	1/4"	1-1/4"	7"
200-0710	1/4"	1-3/8"	7"

HSS. ROUND TOOL BITS-INCH



Order No.	Dia. X Length	Order No.	Dia. X Length	Order No.	Dia. X Length	Order No.	Dia. X Length
200-0201	1/8"x2-1/2"	200-0213	1/4"x4"	200-0225	3/8"x6"	200-0237	5/8"x5"
200-0202	1/8"x3"	200-0214	1/4"x6"	200-0226	3/8"x8"	200-0238	5/8"x6"
200-0203	1/8"x4"	200-0215	1/4"x8"	200-0227	7/16"x4"	200-0239	5/8"x8"
200-0204	1/8"x6"	200-0216	5/16"x2-1/2"	200-0228	7/16"x5"	200-0240	3/4"x4"
200-0205	1/8"x8"	200-0217	5/16"x3"	200-0229	7/16"x6"	200-0241	3/4"x5"
200-0206	3/16"x2-1/2"	200-0218	5/16"x4"	200-0230	7/16"x8"	200-0242	3/4"x6"
200-0207	3/16"x3"	200-0219	5/16"x6"	200-0231	1/2"x3"	200-0243	3/4"x8"
200-0208	3/16"x4"	200-0220	5/16"x8"	200-0232	1/2"x4"	200-0244	1"x4"
200-0209	3/16"x6"	200-0221	3/8"x3"	200-0233	1/2"x5"	200-0245	1"x5"
200-0210	3/16"x8"	200-0222	3/8"x4"	200-0234	1/2"x6"	200-0246	1"x6"
200-0211	1/4"x2-1/2"	200-0223	3/8"x5"	200-0235	1/2"x8"	200-0247	1"x8"
200-0212	1/4"x3"	200-0224	3/8"x5"	200-0236	5/8"x4"		

HSS. ROUND TOOL BITS-METRIC



Order No.	Dia. X Length	Order No.	Dia. X Length	Order No.	Dia. X Length	Order No.	Dia. X Length
200-0301	2x50mm	200-0314	5x125mm	200-0327	8x200mm	200-0340	16x100mm
200-0302	2.5x50mm	200-0315	5x150mm	200-0328	10x80mm	200-0341	16x150mm
200-0303	3x60mm	200-0316	5x200mm	200-0329	10x100mm	200-0342	16x200mm
200-0304	3x100mm	200-0317	6x80mm	200-0330	10x125mm	200-0343	18x100mm
200-0305	3x150mm	200-0318	6x100mm	200-0331	10x150mm	200-0344	18x150mm
200-0306	3x200mm	200-0319	6x125mm	200-0332	10x200mm	200-0345	18x200mm
200-0307	4x60mm	200-0320	6x150mm	200-0333	12x100mm	200-0346	20x100mm
200-0308	4x80mm	200-0321	6x200mm	200-0334	12x125mm	200-0347	20x150mm
200-0309	4x100mm	200-0322	8x60mm	200-0335	12x150mm	200-0348	20x200mm
200-0310	4x125mm	200-0323	8x80mm	200-0336	12x200mm	200-0349	25x100mm
200-0311	4x150mm	200-0324	8x100mm	200-0337	14x100mm	200-0350	25x150mm
200-0312	5x80mm	200-0325	8x125mm	200-0338	14x150mm	200-0351	25x200mm
200-0313	5x100mm	200-0326	8x150mm	200-0339	14x200mm		



HSS. RECTANGULAR TOOL BITS-INCH

Order No.	Bit Size	Order No.	Bit Size	Order No.	Bit Size	Order No.	Bit Size
200-0401	1/8"x1/2"x4"	200-0412	5/16"x3/8"x4"	200-0423	3/8"x3/4"x5"	200-0434	5/8"x1"x7"
200-0402	1/4"x3/8"x3"	200-0413	5/16"x7/16"x3"	200-0424	3/8"x3/4"x6"	200-0435	5/8"x1-1/4"x6"
200-0403	1/4"x3/8"x4"	200-0414	5/16"x1/2"x4"	200-0425	3/8"x1"x6"	200-0436	5/8"x1-1/4"x7"
200-0404	1/4"x3/8"x6"	200-0415	5/16"x3/4"x4"	200-0426	1/2"x3/4"x4"	200-0437	5/8"x1-1/2"x7"
200-0405	1/4"x1/2"x3"	200-0416	5/16"x1"x6"	200-0427	1/2"x3/4"x5"	200-0438	3/4"x1"x6"
200-0406	1/4"x1/2"x4"	200-0417	3/8"x1/2"x3"	200-0428	1/2"x3/4"x6"	200-0439	3/4"x1"x7"
200-0407	1/4"x1/2"x6"	200-0418	3/8"x1/2"x4"	200-0429	1/2"x1"x7"	200-0440	3/4"x1-1/4"x6"
200-0408	1/4"x3/4"x4"	200-0419	3/8"x5/8"x4"	200-0430	1/2"x1-1/4"x7"	200-0441	3/4"x1-1/4"x7"
200-0409	1/4"x3/4"x5"	200-0420	3/8"x5/8"x5"	200-0431	1/2"x1-1/2"x7"	200-0442	3/4"x1-1/2"x7"
200-0410	1/4"x3/4"x6"	200-0421	3/8"x5/8"x6"	200-0432	5/8"x3/4"x5"	200-0443	1"x1-1/4"x6"
200-0411	1/4"x1"x6"	200-0422	3/8"x3/4"x4"	200-0433	5/8"x7/8"x6"	200-0444	1"x1-1/4"x7"
						200-0445	1"x1-1/2"x7"

HSS RECTANGULAR TOOL BITS -METRIC



Order No.	Bit Size	Order No.	Bit Size	Order No.	Bit Size	Order No.	Bit Size
200-0501	3x13x100mm	200-0516	8x10x150mm	200-0531	10x16x125mm	200-0549	16x20x100mm
200-0502	6x10x75mm	200-0517	8x13x100mm	200-0532	10x16x150mm	200-0550	16x20x125mm
200-0503	6x10x100mm	200-0518	8x13x125mm	200-0533	10x20x100mm	200-0551	16x20x150mm
200-0504	6x10x100mm	200-0519	8x13x150mm	200-0534	10x20x125mm	200-0552	16x25x125mm
200-0505	6x10x125mm	200-0520	8x20x100mm	200-0535	10x20x150mm	200-0553	16x25x150mm
200-0506	6x10x150mm	200-0521	8x20x125mm	200-0536	10x25x100mm	200-0554	16x25x175mm
200-0507	6x13x75mm	200-0522	8x20x150mm	200-0537	10x25x125mm	200-0555	16x32x125mm
200-0508	6x13x100mm	200-0523	8x25x100mm	200-0538	10x25x150mm	200-0556	16x32x150mm
200-0509	6x13x125mm	200-0524	8x25x125mm	200-0539	13x20x100mm	200-0557	16x32x175mm
200-0510	6x13x150mm	200-0525	8x25x150mm	200-0540	13x20x125mm	200-0558	22x25x150mm
200-0511	6x20x100mm	200-0526	10x13x75mm	200-0541	13x20x150mm	200-0559	22x25x175mm
200-0512	6x20x125mm	200-0527	10x13x100mm	200-0542	13x20x175mm	200-0560	22x32x150mm
200-0513	6x20x150mm	200-0528	10x13x125mm	200-0543	13x25x100mm	200-0561	22x32x175mm
200-0514	8x10x100mm	200-0529	10x13x150mm	200-0544	13x25x125mm	200-0562	22x38x150mm
200-0515	8x10x125mm	200-0530	10x16x100mm	200-0545	13x25x150mm	200-0563	22x38x175mm
				200-0546	13x25x175mm	200-0564	25x32x150mm
				200-0547	13x32x150mm	200-0565	25x32x175mm
				200-0548	13x32x175mm	200-0566	25x38x175mm

COUNTERSINK AND DEBURRING TOOL

Order No.	Range of Hole	Pieces/Set	Degrees
230-0001	1/16"-15/64", 5/32" to 13/32", 3/16" to 17/32", 5/16" to 25/32", 9/16" to 1-1/16"	5pcs	60°
230-0002		5pcs	82°
230-0003		5pcs	90°



INDIVIDUAL SIZE

Order No.	Range of Hole	Shank Dia.	Degrees
230-0020	1/16"-15/64"	1/4"	60°
230-0021	5/32"-13/32"	1/4"	
230-0022	3/16"-17/32"	1/4"	
230-0023	5/16"-25/32"	1/2"	
230-0024	9/16"-1-1/16"	1/2"	
230-0025	5/8"-1-15/32"	1/2"	
230-0026	3/4"-1-3/4"	5/8"	
230-0027	1"-2"	5/8"	
230-0028	1-1/4"-2-1/2"	3/4"	
230-0030	1/16"-15/64"	1/4"	
230-0031	5/32"-13/32"	1/4"	
230-0032	3/16"-17/32"	1/4"	
230-0033	5/16"-25/32"	1/2"	

230-0034	9/16"-1-1/16"	1/2"	82°
230-0035	5/8"-1-15/32"	1/2"	
230-0036	3/4"-1-3/4"	5/8"	
230-0037	1"-2"	5/8"	
230-0038	1-1/4"-2-1/2"	3/4"	
230-0040	1/16"-15/64"	1/4"	90°
230-0041	5/32"-13/32"	1/4"	
230-0042	3/16"-17/32"	1/4"	
230-0043	5/16"-25/32"	1/2"	
230-0044	9/16"-1-1/16"	1/2"	
230-0045	5/8"-1-15/32"	1/2"	
230-0046	3/4"-1-3/4"	5/8"	
230-0047	1"-2"	5/8"	
230-0048	1-1/4"-2-1/2"	3/4"	

DEBURRING TOOL

Order No. 230-0100

- *Universal handle.
- *1 each of blade 10 and blade 20.
- *Blade holder B.



THROW-AWAY DEBURRING TOOL

Order No. 230-0200

*With blade 100E



TWO-KEY DIGITAL CALIPER



2 type of covers are available

- Automatic power -on/off
- Units conversion
- Zero-setting at any position
- Data output

Order No.	Range	Resolution	Permissible Error	Remarks
100-1000	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round)
100-1001	0-200mm (0-8")		±0.03mm	
100-1002	0-300mm (0-12")		±0.04mm	With depth bar

THREE-KEY DIGITAL CALIPER



4 type of covers are available

- Large and clear LCD readout
- Power on/off
- Units conversion
- Zero-setting at any position
- Absolute and incremental measurement mode switching
- Data output
- A thumb roller is optional

Order No.	Range	Description	Resolution	Permissible Error	Remarks
100-1506	0-150mm (0-6")	Three-key Digital Caliper	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1508	0-200mm (0-8")			±0.03mm	
100-1512	0-300mm (0-12")			±0.04mm	With depth bar
100-1006	0-150mm (0-6")	Carbide Type Digital Caliper	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1008	0-200mm (0-8")			±0.03mm	
100-1012	0-300mm (0-12")			±0.04mm	With depth bar
100-1003	0-150mm (0-6")	Digital Caliper -Large Screen	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1004	0-200mm (0-8")			±0.03mm	
100-1005	0-300mm (0-12")			±0.04mm	With depth bar
100-1020	0-150mm (0-6")	Carbide Type Digital Caliper -Large Screen	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1021	0-200mm (0-8")			±0.03mm	
100-1022	0-300mm (0-12")			±0.04mm	With depth bar

THREE-KEY "ABS" DIGITAL CALIPER



- Power on/off
- Units conversion
- Zero-setting at any position
- Data output
- Absolute and incremental measurement mode switching

Order No.	Range	Resolution	Permissible Error	Remarks
100-1023	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1024	0-200mm (0-8")		±0.03mm	
100-1025	0-300mm (0-12")		±0.04mm	With depth bar

DIGITAL CALIPER-RHOMBUS TYPE SLIDER



3 type of covers are available

- With a Rhombus Slider
- Power on/off
- Units conversion
- Zero-setting at any position
- Data output

Order No.	Range	Resolution	Permissible Error	Remarks
100-1015	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round)
100-1016	0-200mm (0-8")		±0.03mm	
100-1017	0-300mm (0-12")		±0.04mm	With depth bar

FOUR-KEY DIGITAL CALIPER



- Power on/off
- Units conversion
- Zero-setting at any position
- Data output



4 type of covers are available

MODE

- Date hold
- Speedy display mode (during which data can be hold)
- Fast tracing MAX/MIN value during measurement)

TOL

- Tolerance setting and OK(GO) or ±NG discrimination

HOLD

- Data hold

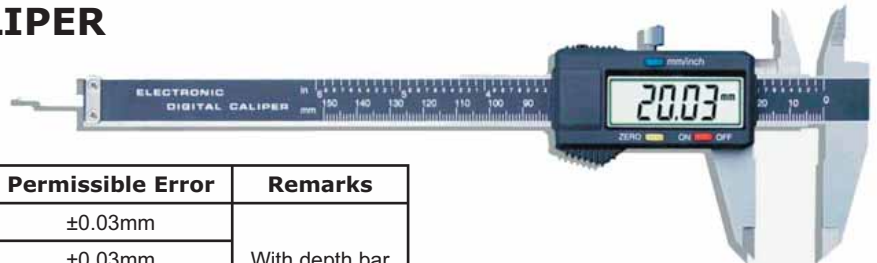
ABS

- Absolute and incremental measurement mode switching

Order No.	Range	Description	Resolution	Permissible Error	Remarks
100-1406	0-150mm (0-6")	MODE Digital Caliper	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1408	0-200mm (0-8")			±0.03mm	
100-1412	0-300mm (0-12")			±0.04mm	With depth bar
100-1206	0-150mm (0-6")	TOL Digital Caliper	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1208	0-200mm (0-8")			±0.03mm	
100-1212	0-300mm (0-12")			±0.04mm	With depth bar
100-1306	0-150mm (0-6")	HOLD Digital Caliper	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1308	0-200mm (0-8")			±0.03mm	
100-1312	0-300mm (0-12")			±0.04mm	With depth bar
100-1106	0-150mm (0-6")	ABS Digital Caliper	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round Ø1.6)
100-1108	0-200mm (0-8")			±0.03mm	
100-1112	0-300mm (0-12")			±0.04mm	With depth bar

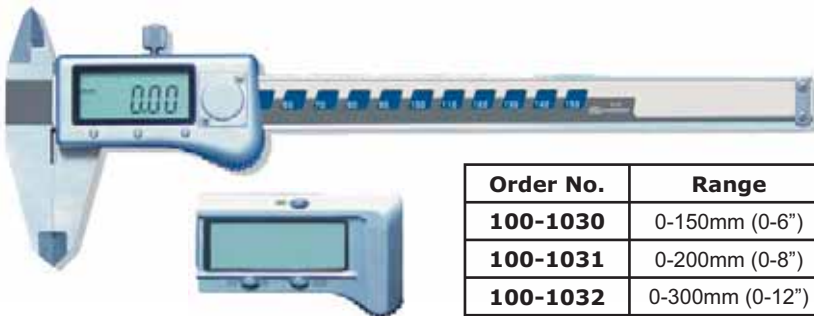
LEFT-HAND DIGITAL CALIPER

- Power on/off
- Units conversion
- Zero-setting at any position
- Data output
- Designed for left handers



Order No.	Range	Resolution	Permissible Error	Remarks
100-1026	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar
100-1027	0-200mm (0-8")		±0.03mm	
100-1028	0-300mm (0-12")		±0.04mm	

METAL CASING DIGITAL CALIPER

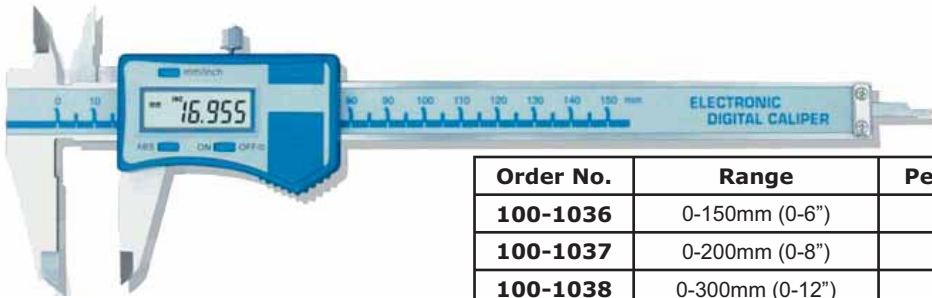


2 type of covers are available

- Metal casing
- Power on/off
- Units conversion
- Zero-setting at any position
- Absolute and incremental measurement mode switching

Order No.	Range	Resolution	Permissible Error	Remarks
100-1030	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round)
100-1031	0-200mm (0-8")		±0.03mm	
100-1032	0-300mm (0-12")		±0.04mm	With depth bar
100-1033	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round)
100-1034	0-200mm (0-8")		±0.03mm	
100-1035	0-300mm (0-12")		±0.04mm	With depth bar

HIGH PRECISION DIGITAL CALIPER



- Power on/off
- Units conversion
- Zero-setting at any position
- Absolute and incremental measurement mode switching
- Data output
- Resolution: 0.005mm

Order No.	Range	Permissible Error	Remarks
100-1036	0-150mm (0-6")	±0.020mm	With depth bar (flat or round Ø1.6)
100-1037	0-200mm (0-8")	±0.025mm	
100-1038	0-300mm (0-12")	±0.035mm	With depth bar

IP54 WATER-RESISTANT DIGITAL CALIPER



- Can be used in workshop condition
- Incorporates absolute measure system
- Can be exposed to water, dust and oil
- Power on/off
- Units conversion
- Zero-setting at any position
- Data output
- Resolution: 0.01mm (0.0005")

3 type of covers are available

Order No.	Range	Permissible Error	Remarks
100-1039	0-150mm (0-6")	±0.03mm	With depth bar (flat or round)
100-1040	0-200mm (0-8")	±0.03mm	
100-1041	0-300mm (0-12")	±0.04mm	With depth bar

DIGITAL CALIPER WITH FINE ADJUSTMENT



- Provided with a fine-adjustment carriage
- Power on/off
- Units conversion
- Zero-setting at any position
- Data output
- Resolution: 0.01mm (0.0005")

3 type of covers are available

Order No.	Range	Permissible Error	Remarks
100-1042	0-150mm (0-6")	±0.03mm	With depth bar (flat or round)
100-1043	0-200mm (0-8")	±0.03mm	
100-1044	0-300mm (0-12")	±0.04mm	With depth bar

VERNIER-DIGITAL CALIPER



- With both vernier reading and digital reading

Order No.	Range	Resolution	Permissible Error	Remarks
100-1606	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round)
100-1608	0-200mm (0-8")		±0.03mm	
100-1612	0-300mm (0-12")		±0.04mm	With depth bar

DIGITAL CALIPER WITH THUMB CLAMP



- With Thumb Clamp
- Power on/off
- Units conversion
- Zero-setting at any position
- Absolute and incremental measurement mode switching

Order No.	Range	Resolution	Permissible Error	Remarks
100-1045	0-150mm (0-6")	0.01mm (0.0005")	±0.03mm	With depth bar (flat or round)
100-1046	0-200mm (0-8")		±0.03mm	
100-1047	0-300mm (0-12")		±0.04mm	With depth bar

POCKET DIGITAL CALIPER

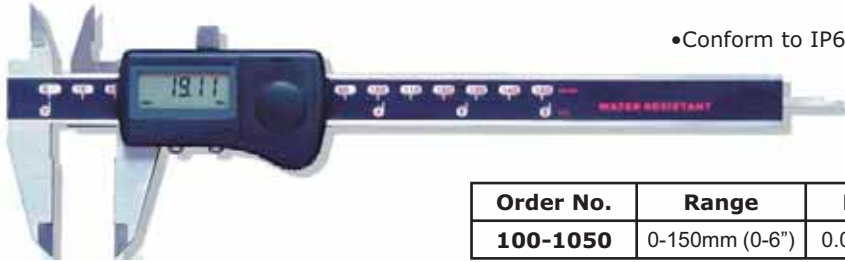


2 type of covers are available

- Large and clear LCD readout
- Power on/off & Data output
- Inch/mm conversion at any position
- Zero-setting at any position
- Absolute and incremental measurement mode switching
- Resolution: 0.01mm (0.0005")
- Permissible error: $\pm 0.03\text{mm}$

Order No.	Range	Remarks
100-1048	0-150mm (0-6")	With depth bar (flat or round)
100-1049	0-200mm (0-8")	
100-1050	0-300mm (0-12")	Carbide type; With depth bar

IP65 WATER PROOF DIGITAL CALIPER



- Conform to IP65 level and can be used in cutting liquid conditions

Order No.	Range	Resolution	Permissible Error	Remarks
100-1050	0-150mm (0-6")	0.01mm (0.0005")	$\pm 0.03\text{mm}$	With depth bar

IP67 WATER PROOF DIGITAL CALIPER



- New patented conductive sensor and measuring system
- Conform to IP65 level and can be used in cutting liquid conditions



Metal casing type

Order No.	Range	Resolution	Permissible Error	Remarks
100-1051	0-150mm (0-6")	0.01mm (0.0005")	$\pm 0.03\text{mm}$	With depth bar
100-1052	0-200mm (0-8")	0.01mm (0.0005")	$\pm 0.03\text{mm}$	
100-1053	0-300mm (0-12")	0.01mm (0.0005")	$\pm 0.03\text{mm}$	
100-1054	0-150mm (0-6")	0.01mm (0.0005")	$\pm 0.03\text{mm}$	Metal casing; With depth bar
100-1055	0-200mm (0-8")	0.01mm (0.0005")	$\pm 0.03\text{mm}$	
100-1056	0-300mm (0-12")	0.01mm (0.0005")	$\pm 0.03\text{mm}$	

DIGITAL CALIPER WITH EXTERNAL UPPER JAWS



Cover for calipers within 300mm range

- Provided with a fine-adjustment carriage
- The jaws have round measuring faces for accurate inside measurement
- Power on/off
- Data output
- Zero-setting at any position
- Units conversion

Order No.	Range	Resolution	Permissible Error	Lower jaw length	I.D. range
100-2000	0-200mm (0-8")	0.01mm (0.0005")	±0.03mm	60mm	10-200mm
100-2001	0-200mm (0-8")	0.01mm (0.0005")	±0.03mm	75mm	10-200mm
100-2002	0-200mm (0-8")	0.01mm (0.0005")	±0.03mm	100mm	10-200mm
100-2003	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	60mm	10-250mm
100-2004	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	75mm	10-250mm
100-2005	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	100mm	20-250mm
100-2006	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	125mm	10-250mm
100-2007	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	60mm	10-300mm
100-2008	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	75mm	10-300mm
100-2009	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	90mm	10-300mm
100-2010	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	100mm	20-300mm
100-2011	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	125mm	20-300mm
100-2012	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	150mm	10-300mm
100-2013	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	100mm	20-400mm
100-2014	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	125mm	20-400mm
100-2015	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	150mm	20-400mm
100-2016	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	200mm	20-400mm
100-2017	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	100mm	20-500mm
100-2018	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	150mm	20-500mm
100-2019	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	200mm	20-500mm
100-2020	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	250mm	20-500mm
100-2021	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	100mm	20-600mm
100-2022	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	150mm	20-600mm
100-2023	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	200mm	20-600mm
100-2024	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	250mm	20-600mm
100-2025	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	300mm	20-600mm
100-2026	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	125mm	20-800mm
100-2027	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	150mm	20-800mm
100-2028	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	200mm	20-800mm
100-2029	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	250mm	20-800mm
100-2030	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	300mm	20-800mm
100-2031	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	125mm	20-1000mm
100-2032	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	150mm	20-1000mm
100-2033	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	200mm	20-1000mm
100-2034	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	250mm	20-1000mm
100-2035	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	300mm	20-1000mm
100-2036	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	150mm	20-1250mm
100-2037	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	200mm	20-1250mm
100-2038	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	250mm	20-1250mm
100-2039	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	300mm	20-1250mm
100-2040	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	150mm	20-1500mm
100-2041	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	200mm	20-1500mm
100-2042	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	250mm	20-1500mm
100-2043	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	300mm	20-1500mm
100-2044	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	150mm	20-2000mm
100-2045	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	200mm	20-2000mm
100-2046	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	250mm	20-2000mm
100-2047	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	300mm	20-2000mm

DIGITAL CALIPER WITH TWO PAIRS INTERNAL JAWS



- Provided with a fine-adjustment carriage
- Two different inside measuring faces fit for accurate inside measurement
- Power on/off
- Data output
- Zero-setting at any position
- Units conversion

Cover for calipers within 300mm range

Order No.	Range	Resolution	Permissible Error	I.D. range	Lower jaw length
100-2050	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	10-250mm	60mm
100-2051	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	10-250mm	75mm
100-2052	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	10-250mm	100mm
100-2053	0-250mm (0-10")	0.01mm (0.0005")	±0.04mm	20-250mm	125mm
100-2054	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	10-300mm	60mm
100-2055	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	10-300mm	75mm
100-2056	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	10-300mm	90mm
100-2057	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	10-300mm	100mm
100-2058	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	20-300mm	125mm
100-2059	0-300mm (0-12")	0.01mm (0.0005")	±0.04mm	20-300mm	150mm
100-2060	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	10-400mm	90mm
100-2061	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	20-400mm	125mm
100-2062	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	20-400mm	150mm
100-2063	0-400mm (0-16")	0.01mm (0.0005")	±0.05mm	20-400mm	200mm
100-2064	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	20-500mm	100mm
100-2065	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	20-500mm	150mm
100-2066	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	20-500mm	200mm
100-2067	0-500mm (0-20")	0.01mm (0.0005")	±0.05mm	20-500mm	250mm
100-2068	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	20-600mm	100mm
100-2069	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	20-600mm	150mm
100-2070	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	20-600mm	200mm
100-2071	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	20-600mm	250mm
100-2072	0-600mm (0-24")	0.01mm (0.0005")	±0.08mm	20-600mm	300mm
100-2073	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	20-800mm	125mm
100-2074	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	20-800mm	150mm
100-2075	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	20-800mm	200mm
100-2076	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	20-800mm	250mm
100-2077	0-800mm (0-32")	0.01mm (0.0005")	±0.08mm	20-800mm	300mm
100-2078	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	20-1000mm	125mm
100-2079	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	20-1000mm	150mm
100-2080	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	20-1000mm	200mm
100-2081	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	20-1000mm	250mm
100-2082	0-1000mm (0-40")	0.01mm (0.0005")	±0.10mm	20-1000mm	300mm
100-2083	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	20-1250mm	150mm
100-2084	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	20-1250mm	200mm
100-2085	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	20-1250mm	250mm

Order No.	Range	Resolution	Permissible Error	I.D. range	Lower jaw length
100-2086	0-1250mm (0-50")	0.01mm (0.0005")	±0.14mm	20-1250mm	300mm
100-2087	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	20-1500mm	150mm
100-2088	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	20-1500mm	200mm
100-2089	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	20-1500mm	250mm
100-2090	0-1500mm (0-60")	0.01mm (0.0005")	±0.14mm	20-1500mm	300mm
100-2091	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	20-2000mm	150mm
100-2092	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	20-2000mm	200mm
100-2093	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	20-2000mm	250mm
100-2094	0-2000mm (0-80")	0.01mm (0.0005")	±0.20mm	20-2000mm	300mm

DIGITAL CALIPER WITH NIB STYLE AND STANDARD JAWS



- Provided with a fine-adjustment carriage
- Power on/off
- Data output
- Zero-setting at any position
- Units conversion
- Resolution: 0.01mm (0.0005")

Cover for calipers
within 300mm range

Order No.	Range	Permissible Error	Lower jaw length	Order No.	Range	Permissible Error	Lower jaw length
100-2100	0-200mm (0-8")	±0.03mm	50mm	100-2124	0-600mm (0-24")	±0.08mm	250mm
100-2101	0-200mm (0-8")	±0.03mm	75mm	100-2125	0-600mm (0-24")	±0.08mm	300mm
100-2102	0-200mm (0-8")	±0.03mm	90mm	100-2126	0-800mm (0-32")	±0.08mm	125mm
100-2103	0-250mm (0-10")	±0.04mm	60mm	100-2127	0-800mm (0-32")	±0.08mm	150mm
100-2104	0-250mm (0-10")	±0.04mm	75mm	100-2128	0-800mm (0-32")	±0.08mm	200mm
100-2105	0-250mm (0-10")	±0.04mm	90mm	100-2129	0-800mm (0-32")	±0.08mm	250mm
100-2106	0-250mm (0-10")	±0.04mm	125mm	100-2130	0-800mm (0-32")	±0.08mm	300mm
100-2107	0-300mm (0-12")	±0.04mm	60mm	100-2131	0-1000mm (0-40")	±0.10mm	125mm
100-2108	0-300mm (0-12")	±0.04mm	75mm	100-2132	0-1000mm (0-40")	±0.10mm	150mm
100-2109	0-300mm (0-12")	±0.04mm	90mm	100-2133	0-1000mm (0-40")	±0.10mm	200mm
100-2110	0-300mm (0-12")	±0.04mm	100mm	100-2134	0-1000mm (0-40")	±0.10mm	250mm
100-2111	0-300mm (0-12")	±0.04mm	125mm	100-2135	0-1000mm (0-40")	±0.10mm	300mm
100-2112	0-300mm (0-12")	±0.04mm	150mm	100-2136	0-1250mm (0-50")	±0.14mm	150mm
100-2113	0-400mm (0-16")	±0.05mm	100mm	100-2137	0-1250mm (0-50")	±0.14mm	200mm
100-2114	0-400mm (0-16")	±0.05mm	125mm	100-2138	0-1250mm (0-50")	±0.14mm	250mm
100-2115	0-400mm (0-16")	±0.05mm	150mm	100-2139	0-1250mm (0-50")	±0.14mm	300mm
100-2116	0-400mm (0-16")	±0.05mm	200mm	100-2140	0-1500mm (0-60")	±0.14mm	150mm
100-2117	0-500mm (0-20")	±0.05mm	100mm	100-2141	0-1500mm (0-60")	±0.14mm	200mm
100-2118	0-500mm (0-20")	±0.05mm	150mm	100-2142	0-1500mm (0-60")	±0.14mm	250mm
100-2119	0-500mm (0-20")	±0.05mm	200mm	100-2143	0-1500mm (0-60")	±0.14mm	300mm
100-2120	0-500mm (0-20")	±0.05mm	250mm	100-2144	0-2000mm (0-80")	±0.20mm	150mm
100-2121	0-600mm (0-24")	±0.08mm	100mm	100-2145	0-2000mm (0-80")	±0.20mm	200mm
100-2122	0-600mm (0-24")	±0.08mm	150mm	100-2146	0-2000mm (0-80")	±0.20mm	250mm
100-2123	0-600mm (0-24")	±0.08mm	200mm	100-2147	0-2000mm (0-80")	±0.20mm	300mm

DIGITAL CALIPER WITH NIB STYLE JAW



Cover for calipers within 300mm range

- Provided with a fine-adjustment carriage
- The jaws have round measuring faces for accurate inside measurement
- Power on/off
- Data output
- Zero-setting at any position
- Units conversion
- Resolution: 0.01mm (0.0005")

Order No.	Range	Permissible Error	I.D. range	Lower jaw length	Order No.	Range	Permissible Error	I.D. range	Lower jaw length	
100-3000	0-150mm (0-6")	±0.03mm	10-150mm	40mm	100-3028	0-800mm (0-32")	±0.08mm	20-800mm	100mm	
100-3001		±0.03mm		75mm	100-3029		±0.08mm		150mm	
100-3002	0-200mm (0-8")	±0.03mm	10-200mm	40mm	100-3030		±0.08mm		200mm	
100-3003		±0.03mm		75mm	100-3031		±0.08mm		250mm	
100-3004		±0.03mm		100mm	100-3032		±0.08mm		300mm	
100-3005	0-250mm (0-10")	±0.04mm	10-250mm	60mm	100-3033	0-1000mm (0-40")	±0.10mm	20-1000mm	125mm	
100-3006		±0.04mm		75mm	100-3034		±0.10mm		150mm	
100-3007		±0.04mm		100mm	100-3035		±0.10mm		200mm	
100-3008		±0.04mm		150mm	100-3036		±0.10mm		250mm	
100-3009	0-300mm (0-12")	±0.04mm	10-300mm	60mm	100-3037		±0.10mm		300mm	
100-3010		±0.04mm		75mm	100-3038	0-1250mm (0-50")	±0.14mm	20-1250mm	125mm	
100-3011		±0.04mm		100mm	100-3039		±0.14mm		150mm	
100-3012	±0.04mm	150mm	100-3040	±0.14mm	200mm					
100-3013	0-400mm (0-16")	±0.05mm	10-400mm	600mm	100-3041		±0.14mm		250mm	
100-3014		±0.05mm		100mm	100-3042		±0.14mm		300mm	
100-3015		±0.05mm		20-400mm	150mm	100-3043	0-1500mm (0-60")	±0.14mm	20-1500mm	125mm
100-3016		±0.05mm			200mm	100-3044		±0.14mm		150mm
100-3017	±0.05mm	250mm	100-3045		±0.14mm	200mm				
100-3018	0-500mm (0-20")	±0.05mm	20-500mm	100mm	100-3046	±0.14mm		250mm		
100-3019		±0.05mm		150mm	100-3047	±0.14mm		300mm		
100-3020		±0.05mm		200mm	100-3048	0-2000mm (0-80")	±0.20mm	20-2000mm	125mm	
100-3021		±0.05mm		250mm	100-3049		±0.20mm		150mm	
100-3022	±0.05mm	300mm	100-3050	±0.20mm	200mm					
100-3023	0-600mm (0-24")	±0.08mm	20-600mm	100mm	100-3051		±0.20mm		250mm	
100-3024		±0.08mm		150mm	100-3052		±0.20mm		300mm	
100-3025		±0.08mm		200mm						
100-3026		±0.08mm		250mm						
100-3027		±0.08mm		300mm						

TOOLMAKERS' V-BLOCK & CLAMP

- All surface parallel and square are within 0.0002".
- Top 90° V-Groove central, parallel and square with all surface within 0.0003".
- Side 90° V-Groove on base central, parallel and square with all surface within 0.00015".
- Harden steel ground.

Order No.	Specification	Hardend
TY03-18	3-1/2"×1-7/8"×1-7/8"	HRC50-55



OFFSET DIGITAL CALIPER



- Main scale jaw can be slid up and down to facilitate measurement of stepped sections
- Power on/off & Data output
- Units conversion
- Zero-setting at any position

Order No.	Range	Resolution	Permissible Error
100-5010	0-150mm (0-6")	0.01mm (.0005")	±0.04mm
100-5011	0-200mm (0-8")	0.01mm (.0005")	±0.04mm
100-5012	0-300mm (0-12")	0.01mm (.0005")	±0.05mm
100-5013	0-500mm (0-20")	0.01mm (.0005")	±0.07mm

CENTERLINE DIGITAL CALIPER WITH CONICAL POINTS



- Power on/off & Data output.
- Zero-setting at any position.
- Units conversion.
- Center distance over $>\Phi 1$ between two holes can be obtained by adjusting the length of a measuring spindle on the left and moving the slider.
- Distance between a plane and a hole can also be obtained.

Order No.	Range	Resolution	Permissible Error
100-5000	5-150mm (.2-6")	0.01mm (.0005")	±0.05mm
100-5001	10-150mm (.4-6")	0.01mm (.0005")	±0.05mm
100-5002	5-200mm (.2-8")	0.01mm (.0005")	±0.07mm
100-5003	10-200mm (.4-8")	0.01mm (.0005")	±0.07mm
100-5004	5-300mm (.2-12")	0.01mm (.0005")	±0.09mm
100-5005	10-300mm (.4-12")	0.01mm (.0005")	±0.09mm
100-5006	5-500mm (.2-20")	0.01mm (.0005")	±0.09mm
100-5007	10-1000mm (.4-40")	0.01mm (.0005")	±0.20mm
100-5008	20-1000mm (.8-40")	0.01mm (.0005")	±0.20mm

POINT DIGITAL CALIPER



- The narrow tip jaws fit into very small grooves and tracks, making many previously difficult outside measurements far easier to obtain.

Order No.	Range	Resolution	Permissible Error
100-9004	111-200	0.01mm (.0005")	±0.03mm
100-9006	111-201	0.01mm (.0005")	±0.03mm
100-9008	111-202	0.01mm (.0005")	±0.03mm
100-9012	111-203	0.01mm (.0005")	±0.04mm

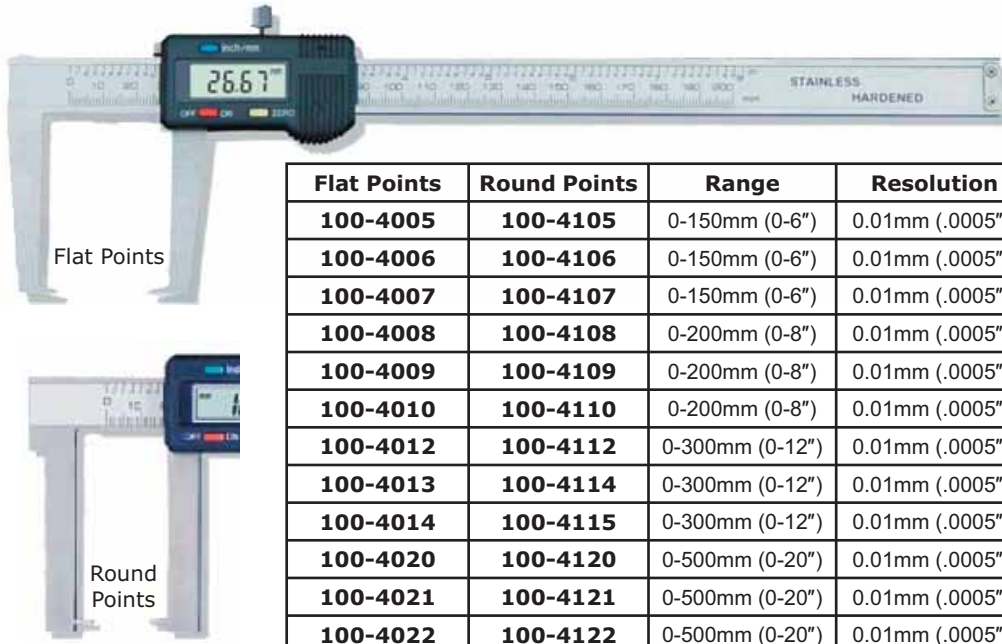
DIGITAL CALIPER WITH UPPER JAWS IN ONE DIRECTION



- To measure the step distance on the same surface and in the same direction.
- To measure the step distance in the same direction but on different surfaces.

Order No.	Range	Resolution	Permissible Error
100-5014	0-150mm (0-6")	0.01mm (.0005")	±0.03mm
100-5015	0-200mm (0-8")	0.01mm (.0005")	±0.03mm
100-5016	0-300mm (0-12")	0.01mm (.0005")	±0.04mm

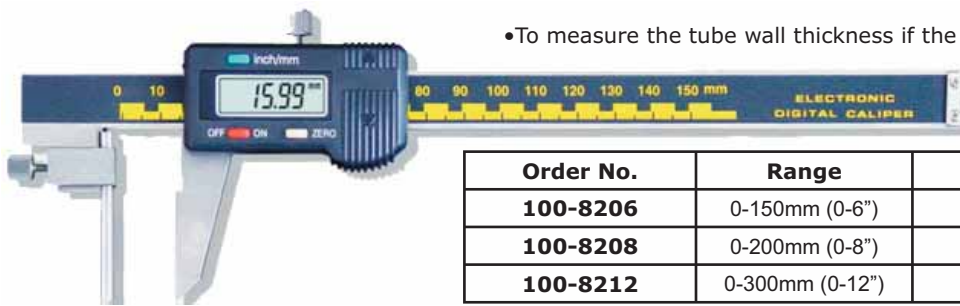
OUTSIDE GROOVE DIGITAL CALIPER



- Can measure the diameter of outside groove of a workpiece.
- Power on/off.
- Units conversion.
- Zero-setting at any position.

Flat Points	Round Points	Range	Resolution	Permissible Error	Jaw Length
100-4005	100-4105	0-150mm (0-6")	0.01mm (.0005")	±0.03mm	40mm
100-4006	100-4106	0-150mm (0-6")	0.01mm (.0005")	±0.04mm	70mm
100-4007	100-4107	0-150mm (0-6")	0.01mm (.0005")	±0.04mm	100mm
100-4008	100-4108	0-200mm (0-8")	0.01mm (.0005")	±0.04mm	50mm
100-4009	100-4109	0-200mm (0-8")	0.01mm (.0005")	±0.04mm	80mm
100-4010	100-4110	0-200mm (0-8")	0.01mm (.0005")	±0.04mm	110mm
100-4012	100-4112	0-300mm (0-12")	0.01mm (.0005")	±0.04mm	60mm
100-4013	100-4114	0-300mm (0-12")	0.01mm (.0005")	±0.05mm	100mm
100-4014	100-4115	0-300mm (0-12")	0.01mm (.0005")	±0.05mm	150mm
100-4020	100-4120	0-500mm (0-20")	0.01mm (.0005")	±0.06mm	100mm
100-4021	100-4121	0-500mm (0-20")	0.01mm (.0005")	±0.06mm	150mm
100-4022	100-4122	0-500mm (0-20")	0.01mm (.0005")	±0.06mm	200mm

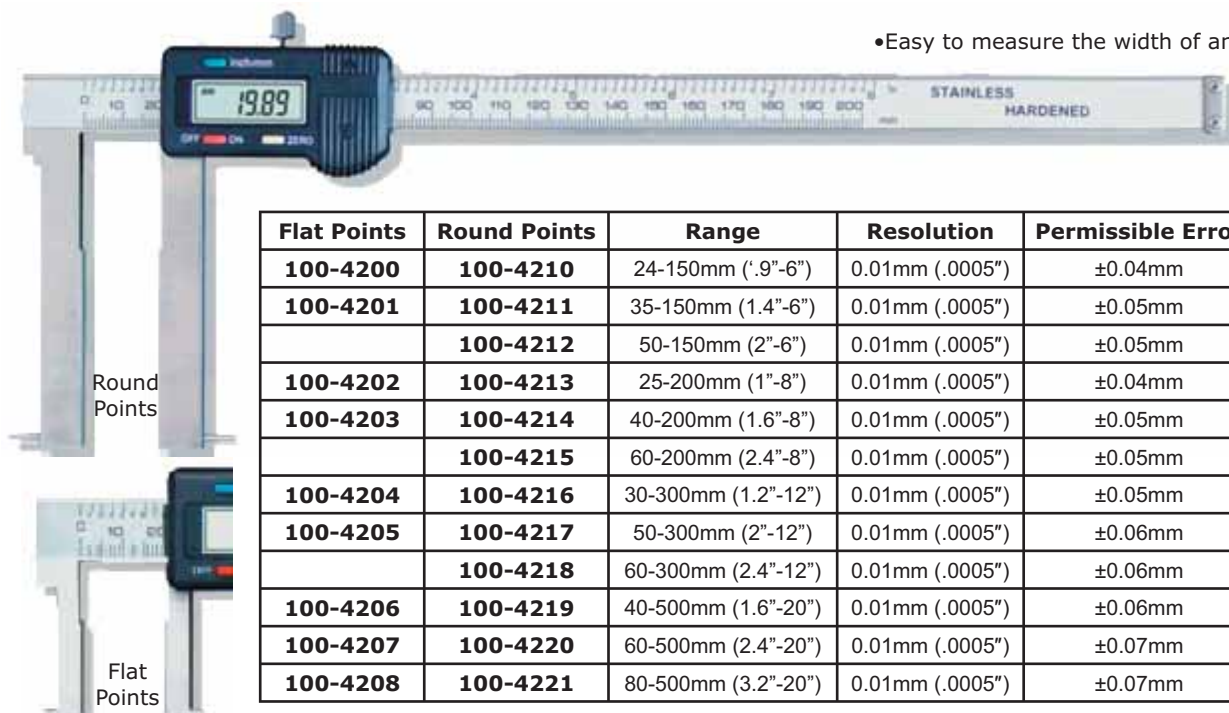
TUBE THICKNESS DIGITAL CALIPER



- To measure the tube wall thickness if the tube's internal diameter is 4mm or more.

Order No.	Range	Resolution	Permissible Error
100-8206	0-150mm (0-6")	0.01 (.0005")	±0.03mm
100-8208	0-200mm (0-8")	0.01 (.0005")	±0.03mm
100-8212	0-300mm (0-12")	0.01 (.0005")	±0.04mm

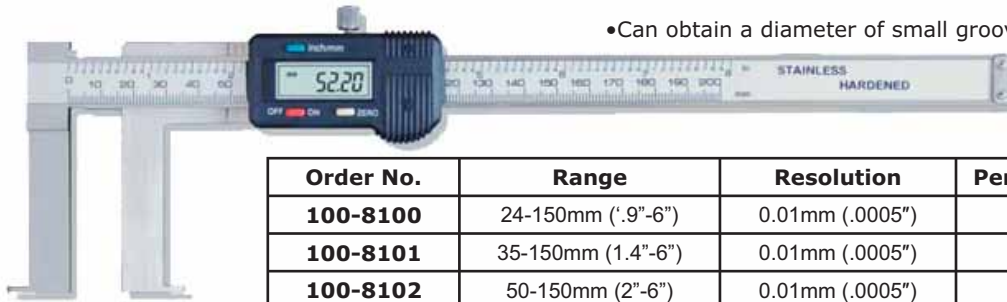
INSIDE GROOVE DIGITAL CALIPER



- Easy to measure the width of an inside groove

Flat Points	Round Points	Range	Resolution	Permissible Error	Jaw Length
100-4200	100-4210	24-150mm (.9"-6")	0.01mm (.0005")	±0.04mm	30mm
100-4201	100-4211	35-150mm (1.4"-6")	0.01mm (.0005")	±0.05mm	60mm
	100-4212	50-150mm (2"-6")	0.01mm (.0005")	±0.05mm	90mm
100-4202	100-4213	25-200mm (1"-8")	0.01mm (.0005")	±0.04mm	40mm
100-4203	100-4214	40-200mm (1.6"-8")	0.01mm (.0005")	±0.05mm	70mm
	100-4215	60-200mm (2.4"-8")	0.01mm (.0005")	±0.05mm	100mm
100-4204	100-4216	30-300mm (1.2"-12")	0.01mm (.0005")	±0.05mm	50mm
100-4205	100-4217	50-300mm (2"-12")	0.01mm (.0005")	±0.06mm	80mm
	100-4218	60-300mm (2.4"-12")	0.01mm (.0005")	±0.06mm	110mm
100-4206	100-4219	40-500mm (1.6"-20")	0.01mm (.0005")	±0.06mm	90mm
100-4207	100-4220	60-500mm (2.4"-20")	0.01mm (.0005")	±0.07mm	120mm
100-4208	100-4221	80-500mm (3.2"-20")	0.01mm (.0005")	±0.07mm	150mm

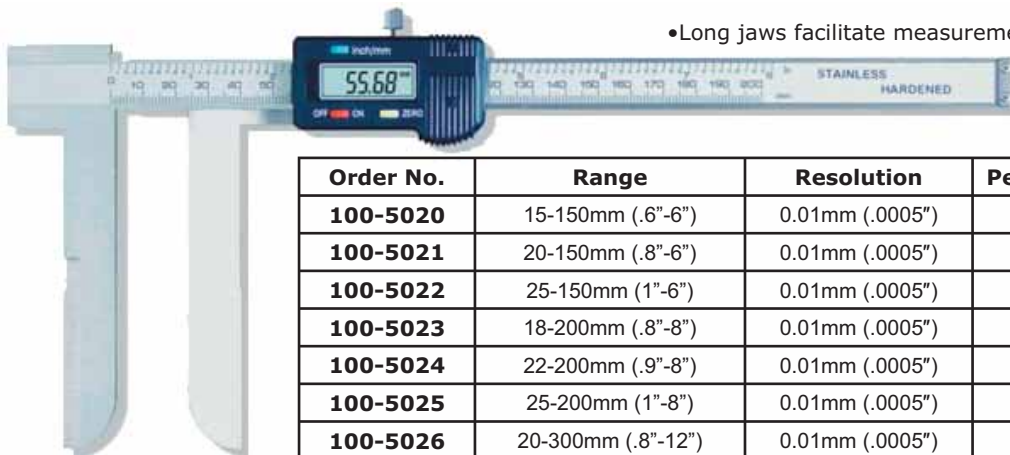
KNIFE-POINT INSIDE GROOVE DIGITAL CALIPER



•Can obtain a diameter of small groove in a hole through thinner probes.

Order No.	Range	Resolution	Permissible Error	Jaw Length
100-8100	24-150mm (.9"-6")	0.01mm (.0005")	±0.04mm	30mm
100-8101	35-150mm (1.4"-6")	0.01mm (.0005")	±0.05mm	60mm
100-8102	50-150mm (2"-6")	0.01mm (.0005")	±0.05mm	90mm
100-8103	25-200mm (1"-8")	0.01mm (.0005")	±0.04mm	40mm
100-8104	40-200mm (1.6"-8")	0.01mm (.0005")	±0.05mm	70mm
100-8105	60-200mm (2.4"-8")	0.01mm (.0005")	±0.05mm	100mm
100-8106	30-300mm (1.2"-12")	0.01mm (.0005")	±0.05mm	50mm
100-8107	50-300mm (2"-12")	0.01mm (.0005")	±0.06mm	80mm
100-8108	60-300mm (2.4"-12")	0.01mm (.0005")	±0.06mm	110mm
100-8109	40-500mm (1.6"-20")	0.01mm (.0005")	±0.06mm	90mm
100-8110	60-500mm (2.4"-20")	0.01mm (.0005")	±0.07mm	120mm
100-8111	80-500mm (3.2"-20")	0.01mm (.0005")	±0.07mm	150mm

LONG JAW INSIDE DIGITAL CALIPER



•Long jaws facilitate measurement of the diameters of deep holes.

Order No.	Range	Resolution	Permissible Error	Jaw Length
100-5020	15-150mm (.6"-6")	0.01mm (.0005")	±0.04mm	60mm
100-5021	20-150mm (.8"-6")	0.01mm (.0005")	±0.04mm	90mm
100-5022	25-150mm (1"-6")	0.01mm (.0005")	±0.04mm	150mm
100-5023	18-200mm (.8"-8")	0.01mm (.0005")	±0.04mm	75mm
100-5024	22-200mm (.9"-8")	0.01mm (.0005")	±0.04mm	100mm
100-5025	25-200mm (1"-8")	0.01mm (.0005")	±0.04mm	150mm
100-5026	20-300mm (.8"-12")	0.01mm (.0005")	±0.05mm	90mm
100-5027	22-300mm (.9"-12")	0.01mm (.0005")	±0.05mm	120mm
100-5028	25-300mm (1"-12")	0.01mm (.0005")	±0.05mm	150mm

DIGITAL THICKNESS CALIPER



•To measure the thickness of metal sheet.

Order No.	Range	Resolution	Permissible Error	Jaw Length
100-8300	0-50mm (0-2")	0.01mm (.0005")	±0.03mm	50
100-8301			±0.03mm	80
100-8302			±0.03mm	100
100-8303			±0.03mm	150
100-8304	0-80mm (0-3.2")	0.01mm (.0005")	±0.03mm	200
100-8305			±0.04mm	50
100-8306			±0.04mm	80
100-8307			±0.04mm	100
100-8308			±0.04mm	150
100-8309			±0.04mm	200

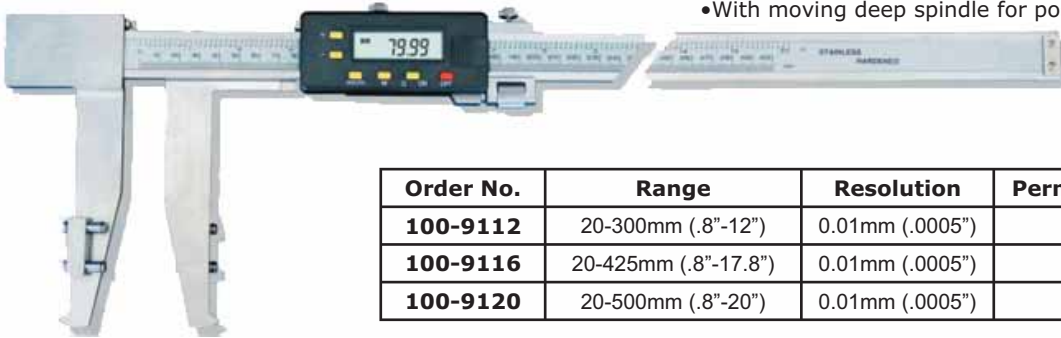
PLATE ANVIL DIGITAL CALIPER



- To measure the half-soft board (foamed plastic, sponge, plank).
- Force Limit Device is optional.

Order No.	Range	Resolution	Permissible Error	Jaw Length
100-9300	0-150mm (0-6")	0.01mm (.0005")	±0.05mm	50mm
100-9301	0-150mm (0-6")	0.01mm (.0005")	±0.05mm	100mm
100-9302	0-200mm (0-8")	0.01mm (.0005")	±0.05mm	80mm
100-9303	0-200mm (0-8")	0.01mm (.0005")	±0.05mm	150mm
100-9304	0-300mm (0-12")	0.01mm (.0005")	±0.07mm	120mm
100-9305	0-500mm (0-20")	0.01mm (.0005")	±0.09mm	150mm

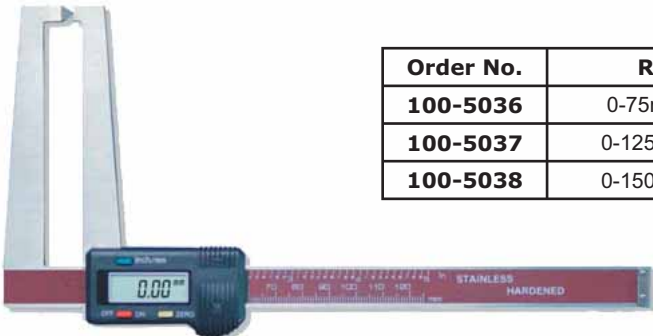
DIGITAL BRAKE DRUM GAUGE



- To measure the wear dimension of the automobile brake drum
- With moving deep spindle for position setting

Order No.	Range	Resolution	Permissible Error	Jaw Length
100-9112	20-300mm (.8"-12")	0.01mm (.0005")	±0.05mm	85mm
100-9116	20-425mm (.8"-17.8")	0.01mm (.0005")	±0.06mm	110mm
100-9120	20-500mm (.8"-20")	0.01mm (.0005")	±0.06mm	115mm

SINGLE POINT DIGITAL CALIPER



Order No.	Range	Resolution	Permissible Error	Jaw Length
100-5036	0-75mm (0-3")	0.01mm (.0005")	±0.03mm	93mm
100-5037	0-125mm (0-5")	0.01mm (.0005")	±0.04mm	93mm
100-5038	0-150mm (0-6")	0.01mm (.0005")	±0.04mm	93mm

- Point jaw type.
- Easy to measure the thickness of an inside groove.

DIGITAL WELDING GAGE

- Facilitate measurement of welding thickness.

Order No.	Range	Resolution	Permissible Error
100-5039	0-12.5mm (0-.5")	0.01mm (.0005")	±0.03mm
100-5040	0-20mm (0-.8")	0.01mm (.0005")	±0.03mm



LOWER JAWS TYPE DIGITAL CALIPER WITH THUMB ROLLER



- Easy to clamp.
- The jaws have round measuring faces for accurate inside measurement.

Order No.	Range	Resolution	Permissible Error	ID. Range
100-5041	0-100mm (0-4")	0.01mm (.0005")	±0.03mm	6-106mm

HOOK TYPE DIGITAL CALIPER

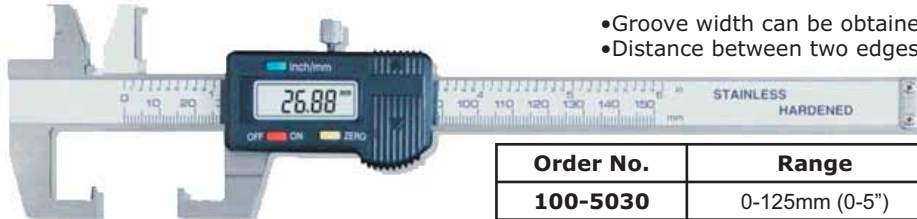
- Can measure the inside groove width and position of groove



Order No.	Range	Resolution	Permissible Error	Jaw Length
100-5017	3-125mm (.2"-5")	0.01mm (.0005")	±0.03mm	4mm
100-5018	3-200mm (.2"-8")	0.01mm (.0005")	±0.03mm	4mm
100-5019	4-300mm (.2"-12")	0.01mm (.0005")	±0.04mm	5mm

UNIVERSAL GROOVE DIGITAL CALIPER

- Groove width can be obtained by moving the slider.
- Distance between two edges of an internal groove can be easily obtained.



Order No.	Range	Resolution	Permissible Error
100-5030	0-125mm (0-5")	0.01mm (.0005")	±0.03mm
100-5031	0-150mm (0-6")	0.01mm (.0005")	±0.03mm
100-5032	0-200mm (0-8")	0.01mm (.0005")	±0.03mm
100-5033	0-300mm (0-12")	0.01mm (.0005")	±0.04mm

ARC OUTSIDE DIGITAL CALIPER

- Facilitate measure the radius of a workpiece which radius is shorter than 180.



Order No.	Range	Resolution	Permissible Error
100-5034	3-150mm (.3"-6")	0.01mm (.0005")	±0.03mm
100-5035	3-200mm (.3"-8")	0.01mm (.0005")	±0.03mm

DIGITAL GEAR TOOTH CALIPER

- Facilitate measurement of gear thickness.
- Power on/off.
- Inch/mm conversion at any position.
- Zero-setting at any position.
- Data output.



Order No.	Range	Resolution	Permissible Error
100-9401	M1-25	0.01mm	±0.03mm
100-9405	M5-50	0.01mm	±0.03mm



DIGITAL DEPTH GAGE

Order No.	Measuring range	Resolution	Accuracy	Jaw Length
102-1000	0-150mm(0-6")	0.01mm(.0005")	±0.03mm	100
102-1001	0-150mm(0-6")	0.01mm(.0005")	±0.03mm	150
102-1002	0-200mm(0-8")	0.01mm(.0005")	±0.03mm	100
102-1003	0-200mm(0-8")	0.01mm(.0005")	±0.03mm	150
102-1004	0-250mm(0-10")	0.01mm(.0005")	±0.04mm	100
102-1005	0-250mm(0-10")	0.01mm(.0005")	±0.04mm	150
102-1006	0-300mm(0-12")	0.01mm(.0005")	±0.04mm	100
102-1007	0-300mm(0-12")	0.01mm(.0005")	±0.04mm	150
102-1008	0-500mm(0-20")	0.01mm(.0005")	±0.05mm	120
102-1009	0-500mm(0-20")	0.01mm(.0005")	±0.05mm	150
102-1010	0-500mm(0-20")	0.01mm(.0005")	±0.05mm	200
102-1011	0-600mm(0-24")	0.01mm(.0005")	±0.06mm	120
102-1012	0-600mm(0-24")	0.01mm(.0005")	±0.06mm	150
102-1013	0-600mm(0-24")	0.01mm(.0005")	±0.06mm	200
102-1014	0-800mm(0-32")	0.01mm(.0005")	±0.07mm	150
102-1015	0-800mm(0-32")	0.01mm(.0005")	±0.07mm	200
102-1016	0-800mm(0-32")	0.01mm(.0005")	±0.07mm	250
102-1017	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	150
102-1018	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	200
102-1019	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	250
102-1020	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	300

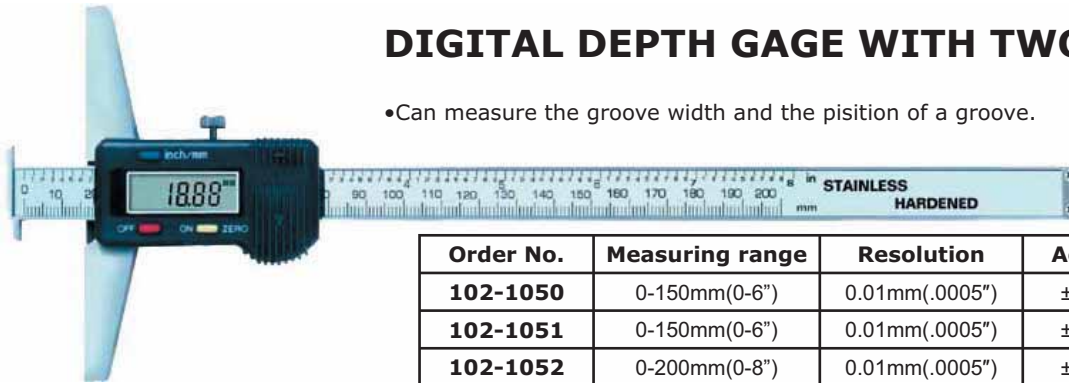


DIGITAL DEPTH GAGE (HOOK TYPE)

Order No.	Measuring range	Resolution	Accuracy	Jaw Length
102-1021	0-150mm(0-6")	0.01mm(.0005")	±0.03mm	100
102-1022	0-150mm(0-6")	0.01mm(.0005")	±0.03mm	150
102-1023	0-200mm(0-8")	0.01mm(.0005")	±0.03mm	100
102-1024	0-200mm(0-8")	0.01mm(.0005")	±0.03mm	150
102-1025	0-250mm(0-10")	0.01mm(.0005")	±0.04mm	100
102-1026	0-250mm(0-10")	0.01mm(.0005")	±0.04mm	150
102-1027	0-300mm(0-12")	0.01mm(.0005")	±0.04mm	100
102-1028	0-300mm(0-12")	0.01mm(.0005")	±0.04mm	150
102-1029	0-500mm(0-20")	0.01mm(.0005")	±0.05mm	120
102-1030	0-500mm(0-20")	0.01mm(.0005")	±0.05mm	150
102-1031	0-500mm(0-20")	0.01mm(.0005")	±0.05mm	200
102-1032	0-600mm(0-24")	0.01mm(.0005")	±0.06mm	120
102-1033	0-600mm(0-24")	0.01mm(.0005")	±0.06mm	150
102-1034	0-600mm(0-24")	0.01mm(.0005")	±0.06mm	200
102-1035	0-800mm(0-32")	0.01mm(.0005")	±0.07mm	150
102-1036	0-800mm(0-32")	0.01mm(.0005")	±0.07mm	200
102-1037	0-800mm(0-32")	0.01mm(.0005")	±0.07mm	250
102-1038	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	150
102-1039	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	200
102-1040	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	250
102-1041	0-1000mm(0-40")	0.01mm(.0005")	±0.07mm	300

•Can measure the groove width and the position of a groove.

DIGITAL DEPTH GAGE WITH TWO HOOK



•Can measure the groove width and the position of a groove.

Order No.	Measuring range	Resolution	Accuracy	Jaw Length
102-1050	0-150mm(0-6")	0.01mm(.0005")	±0.03mm	100
102-1051	0-150mm(0-6")	0.01mm(.0005")	±0.03mm	150
102-1052	0-200mm(0-8")	0.01mm(.0005")	±0.03mm	100
102-1053	0-200mm(0-8")	0.01mm(.0005")	±0.03mm	150
102-1054	0-250mm(0-10")	0.01mm(.0005")	±0.04mm	100
102-1055	0-250mm(0-10")	0.01mm(.0005")	±0.04mm	150

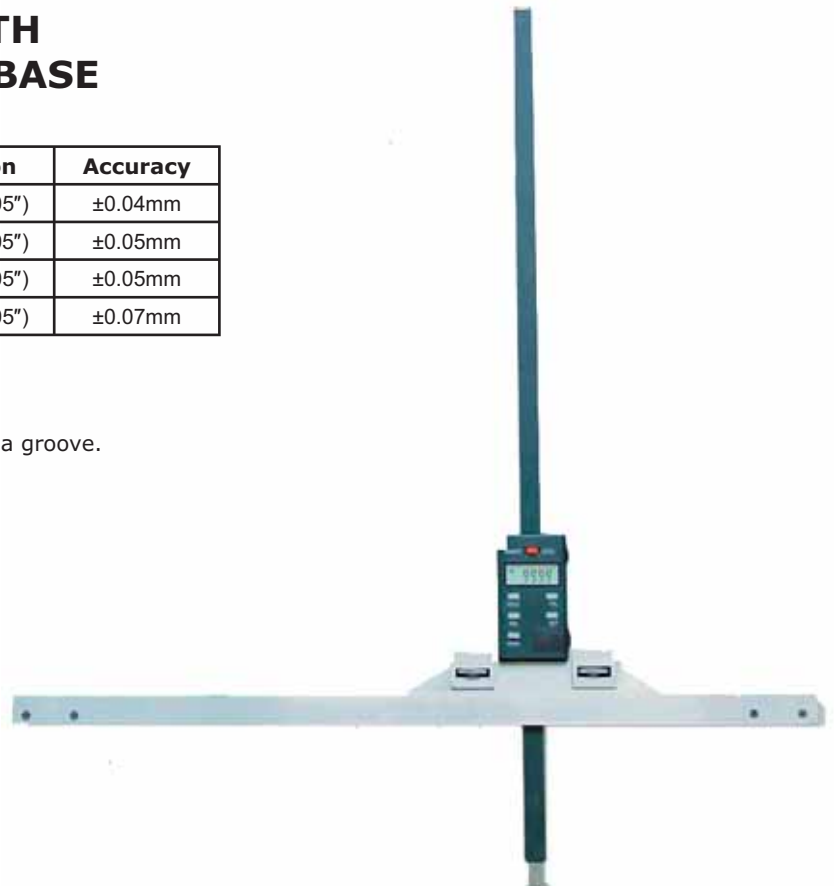
DIGITAL DEPTH GAGE WITH ADJUSTABLE EXTENSION BASE

Order No.	Measuring range	Resolution	Accuracy
102-1060	0-300mm(0-12")	0.01mm(.0005")	±0.04mm
102-1061	0-400mm(0-16")	0.01mm(.0005")	±0.05mm
102-1062	0-500mm(0-20")	0.01mm(.0005")	±0.05mm
102-1063	0-600mm(0-24")	0.01mm(.0005")	±0.07mm

•Can measure the groove width and the position of a groove.

MOVABLE EXTENSION BASE

Order No.	Size
721-501	300mm
721-502	400mm
721-503	500mm



DIGITAL TIRE THREAD DEPTH GAGE

Order No.	Measuring range	Resolution	Accuracy
102-1065	0-30mm(0-1.2")	0.01mm(.0005")	±0.03mm



DIAL CALIPERS

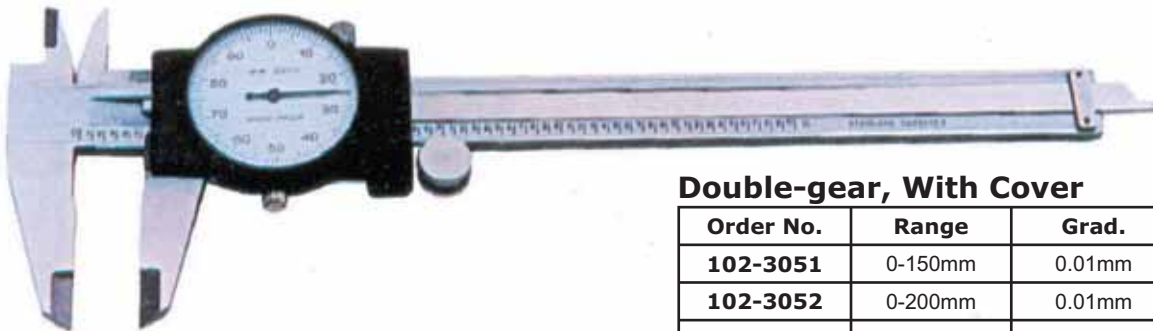


Open-type, Single-gear

Order No.	Range	Grand.	Accuracy
102-3013	0-100mm	0.05mm	0-100mm±0.05mm >100-200±0.05mm >200-300+0.08mm
102-3014	0-150mm	0.05mm	
102-3015	0-200mm	0.05mm	
102-3016	0-300mm	0.05mm	
102-3017	0-4"	0.001"	0-4"±0.002" >4-8±0.002" >8-12+0.003"
102-3018	0-6"	0.001"	
102-3019	0-8"	0.001"	
102-3020	0-12"	0.001"	

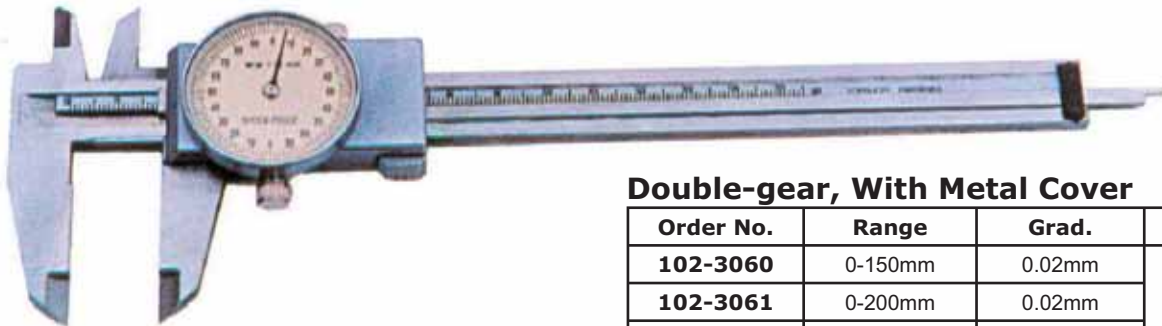
Open-type, Double-gear

Order No.	Range	Grand.	Accuracy
102-3001	0-100mm	0.01mm	0-100mm±0.02mm >100-200±0.03mm >200-300+0.04mm
102-3002	0-150mm	0.01mm	
102-3003	0-200mm	0.01mm	
102-3004	0-300mm	0.01mm	
102-3005	0-100mm	0.02mm	
102-3006	0-150mm	0.02mm	
102-3007	0-200mm	0.02mm	
102-3008	0-300mm	0.02mm	
102-3009	0-4"	0.001"	
102-3010	0-6"	0.001"	
102-3011	0-8"	0.001"	
102-3012	0-12"	0.001"	



Double-gear, With Cover

Order No.	Range	Grad.	Accuracy
102-3051	0-150mm	0.01mm	0-100mm±0.02mm >100-200±0.03mm >200-300+0.04mm
102-3052	0-200mm	0.01mm	
102-3053	0-300mm	0.01mm	
102-3054	0-150mm	0.02mm	
102-3055	0-200mm	0.02mm	
102-3056	0-300mm	0.02mm	
102-3057	0-6"	0.001"	0-4"±0.001" >4-8±0.0012" >8-12+0.0015"
102-3058	0-8"	0.001"	
102-3059	0-12"	0.001"	



Double-gear, With Metal Cover

Order No.	Range	Grad.	Accuracy
102-3060	0-150mm	0.02mm	0-100mm±0.02mm >100-200±0.03mm >200-300+0.04mm
102-3061	0-200mm	0.02mm	
102-3062	0-300mm	0.02mm	
102-3063	0-6"	0.001"	0-4"±0.001" >4-8±0.0012" >8-12+0.0015"
102-3064	0-8"	0.001"	
102-3065	0-12"	0.001"	

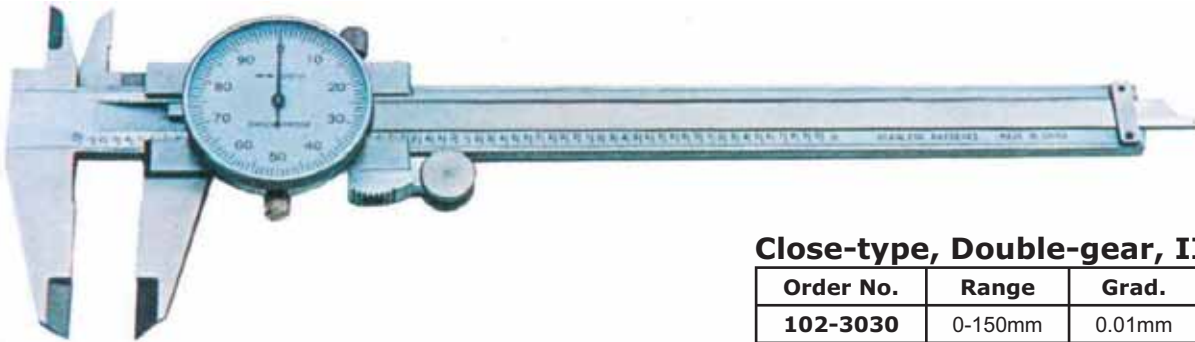


Close-type, Single-gear, I Model

Order No.	Range	Grad.	Accuracy
102-3039	0-150mm	0.05mm	0-100mm±0.05mm >100-200±0.05mm >200-300+0.08mm
102-3040	0-200mm	0.05mm	
102-3041	0-300mm	0.05mm	
102-3042	0-6"	0.001"	0-4"±0.002" >4-8±0.002" >8-12+0.003"
102-3043	0-8"	0.001"	
102-3044	0-12"	0.001"	

Close-type, Double-gear, I Model

Order No.	Range	Grad.	Accuracy
102-3021	0-150mm	0.01mm	0-100mm±0.02mm >100-200±0.03mm >200-300+0.04mm
102-3022	0-200mm	0.01mm	
102-3023	0-300mm	0.01mm	
102-3024	0-150mm	0.02mm	
102-3025	0-200mm	0.02mm	
102-3026	0-300mm	0.02mm	
102-3027	0-6"	0.001"	0-4"±0.001" >4-8±0.0012" >8-12+0.0015"
102-3028	0-8"	0.001"	
102-3029	0-12"	0.001"	

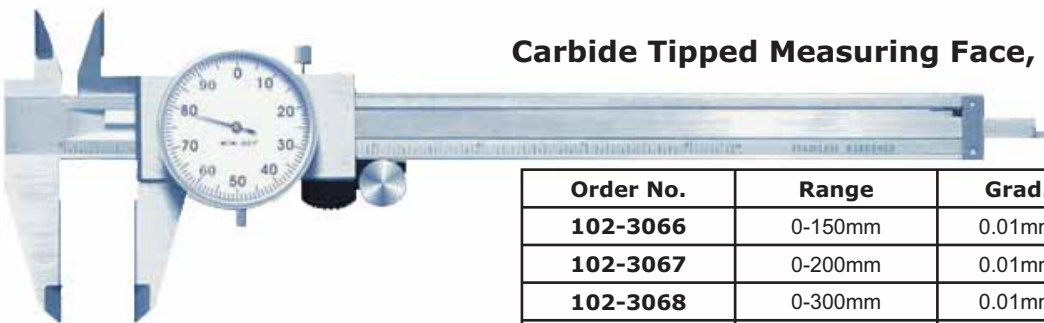


Close-type, Single-gear, II Model

Order No.	Range	Grad.	Accuracy
102-3045	0-150mm	0.05mm	0-100mm±0.05mm >100-200±0.05mm >200-300+0.08mm
102-3046	0-200mm	0.05mm	
102-3047	0-300mm	0.05mm	
102-3048	0-6"	0.001"	0-4"±0.002" >4-8±0.002" >8-12+0.003"
102-3049	0-8"	0.001"	
102-3050	0-12"	0.001"	

Close-type, Double-gear, II Model

Order No.	Range	Grad.	Accuracy
102-3030	0-150mm	0.01mm	0-100mm±0.02mm >100-200±0.03mm >200-300+0.04mm
102-3031	0-200mm	0.01mm	
102-3032	0-300mm	0.01mm	
102-3033	0-150mm	0.02mm	
102-3034	0-200mm	0.02mm	
102-3035	0-300mm	0.02mm	
102-3036	0-6"	0.001"	0-4"±0.001" >4-8±0.0012" >8-12+0.0015"
102-3037	0-8"	0.001"	
102-3038	0-12"	0.001"	



Carbide Tipped Measuring Face, Double-gear

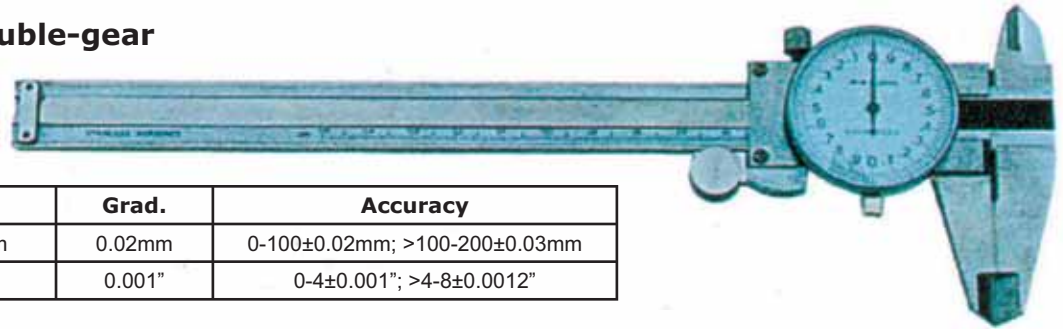
Order No.	Range	Grad.	Accuracy
102-3066	0-150mm	0.01mm	0-100mm±0.02mm >100-200±0.03mm >200-300+0.04mm
102-3067	0-200mm	0.01mm	
102-3068	0-300mm	0.01mm	
102-3069	0-150mm	0.02mm	
102-3070	0-200mm	0.02mm	
102-3071	0-300mm	0.02mm	
102-3072	0-6"	0.001"	0-4"±0.001" >4-8±0.0012" >8-12+0.0015"
102-3073	0-8"	0.001"	
102-3074	0-12"	0.001"	



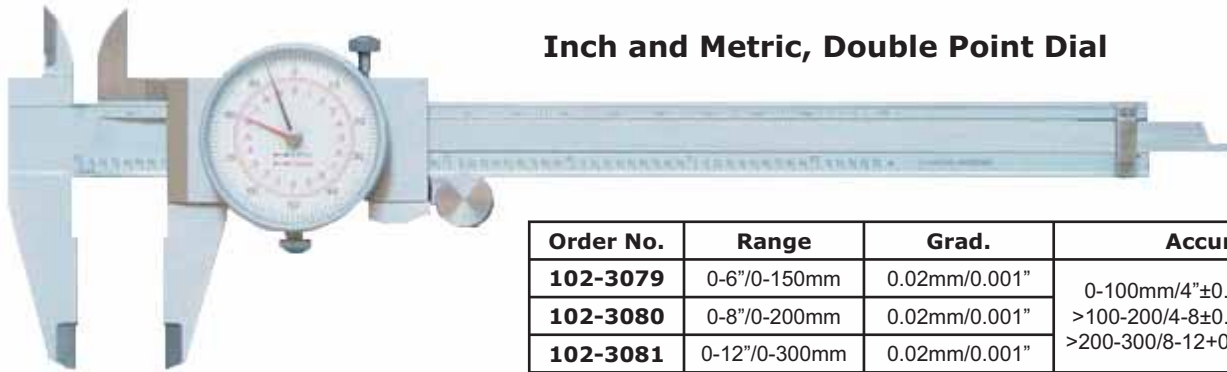
Elliptic Dial, Double-gear

Order No.	Range	Grad.	Accuracy
102-3075	0-150mm	0.02mm	0-100±0.02mm >100-200±0.03mm
102-3076	0-200mm	0.02mm	
102-3077	0-6"	0.001"	0-4"±0.001" >4-8±0.0012"
102-3078	0-8"	0.001"	

Left Hand Use, Double-gear



Order No.	Range	Grad.	Accuracy
102-3082	0-150mm	0.02mm	0-100±0.02mm; >100-200±0.03mm
102-3083	0-6in	0.001"	0-4±0.001"; >4-8±0.0012"

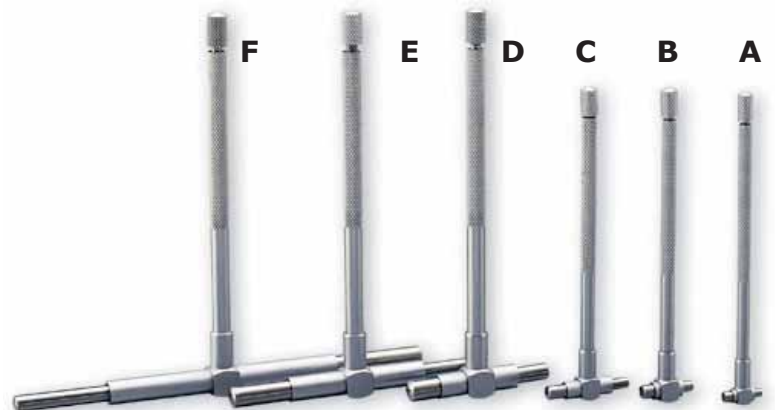


Inch and Metric, Double Point Dial

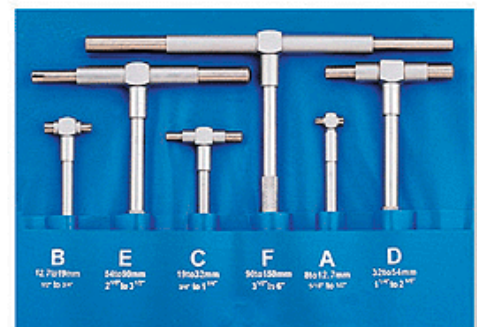
Order No.	Range	Grad.	Accuracy
102-3079	0-6"/0-150mm	0.02mm/0.001"	0-100mm/4"±0.02mm/0.001" >100-200/4-8±0.03mm/0.0012" >200-300/8-12+0.04mm/0.0015"
102-3080	0-8"/0-200mm	0.02mm/0.001"	
102-3081	0-12"/0-300mm	0.02mm/0.001"	

TELESCOPING GAUGE

The telescoping gauge are used to measure internal diameter or internal through-groove of the workpiece by comparative method, the reading can be shown on the external micrometer.



Order No.	Model	Range	Holder Length
103-0020	A-F	8-150mm or 5/16" to 6"	
103-0021	A	8-12.7mm or 5/16"-1/2"	102mm/4"
103-0022	B	12.7-19mm or 1/2"-3/4"	102mm/4"
103-0023	C	19-32mm or 3/4"-1 1/4"	102mm/4"
103-0024	D	32-54mm or 1 1/4"-2 1/4"	127mm/5"
103-0025	E	54-90mm or 2 1/4"-3 9/16"	127mm/5"
103-0026	F	90-150mm or 3 9/16"-6"	127mm/5"

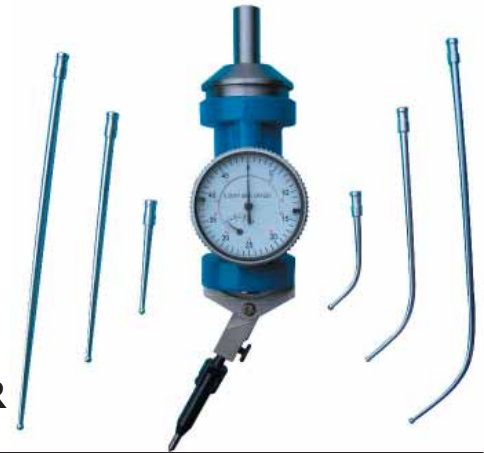


UNIVERSAL 3D TASTER SET



Order No.: 102-3085
 Accuracy: 0.008mm
 Dia. of Holding Bar: 20mm
 Radial Movement: 10mm
 Axial Movement: 6mm
 Radial Graduation: 0.01mm
 Axial Graduation: 0.0032mm

CO-AX INDICATOR



Order No.	Range of per Rev.	Length of Straight Feeler	Length of Center Feeler	Length of Curved Feeler
102-3086	0-3mm	45;100;154mm	52.5mm	46;100;154mm
102-3087	0-0.12"	1.77";4";6.06"	2.07"	1.8";4";6.06"

Z-AXES SETTER

Order No.	Range	Grad.	Accuracy
102-3090	2"	0.001"	0.0006"
102-3091	50mm	0.01mm	0.015mm
102-3092	4"	0.001"	0.0008"
102-3093	100mm	0.01mm	0.015mm



Z-AXES SETTER, INNER GAUGE TYPE

Order No.	Range	Grad.	Accuracy
102-3094	2"	0.001"	0.0006"
102-3095	50mm	0.01mm	0.015mm



Z-AXES SETTER, BACK INSERT TYPE

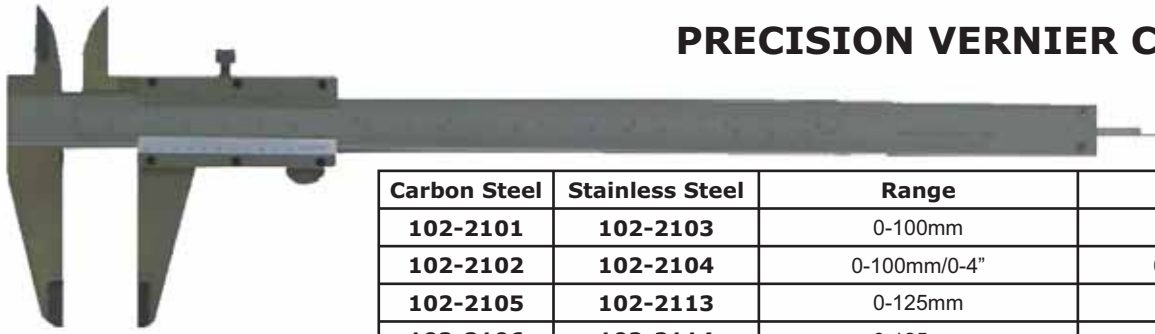
Order No.	Range	Grad.	Accuracy
102-3096	2"	0.001"	0.0006"
102-3097	50mm	0.01mm	0.015mm



Z-AXES SETTER, OPTICAL TYPE

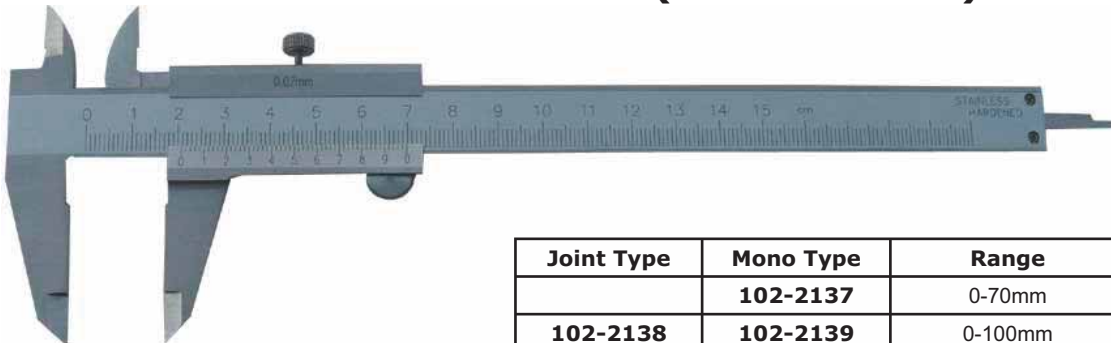
Order No.	Range	Accuracy
102-3098	50mm	0.015mm
102-3099	100mm	0.02mm

PRECISION VERNIER CALIPER



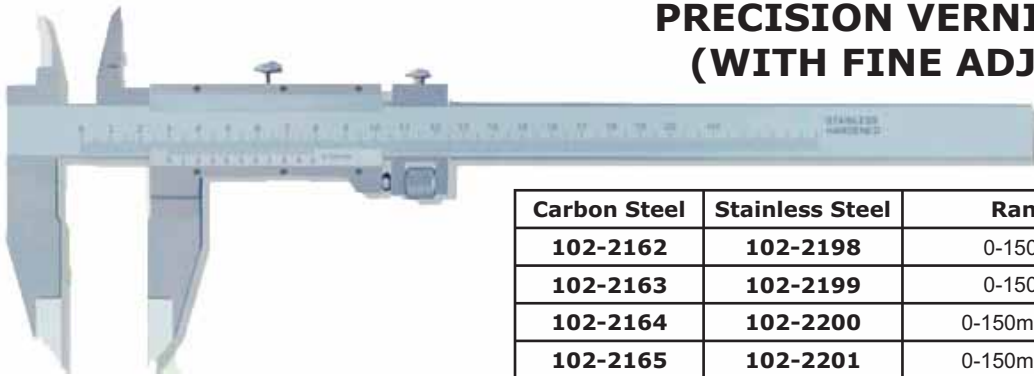
Carbon Steel	Stainless Steel	Range	Reading
102-2101	102-2103	0-100mm	0.05mm
102-2102	102-2104	0-100mm/0-4"	0.05mm (1/128")
102-2105	102-2113	0-125mm	0.02mm
102-2106	102-2114	0-125mm	0.05mm
102-2107	102-2115	0-125mm/0-5"	0.02mm (1/1000")
102-2108	102-2116	0-125mm/0-5"	0.05mm (1/128")
102-2109	102-2117	0-150mm	0.02mm
102-2110	102-2118	0-150mm	0.05mm
102-2111	102-2119	0-150mm/0-6"	0.02mm (1/1000")
102-2112	102-2120	0-150mm/0-6"	0.05mm (1/128")
102-2121	102-2125	0-200mm	0.02mm
102-2122	102-2126	0-200mm	0.05mm
102-2123	102-2127	0-200mm/0-8"	0.02mm (1/1000")
102-2124	102-2128	0-200mm/0-8"	0.05mm (1/128")
102-2129	102-2133	0-300mm	0.02mm
102-2130	102-2134	0-300mm	0.05mm
102-2131	102-2135	0-300mm/0-12"	0.02mm (1/1000")
102-2132	102-2136	0-300mm/0-12"	0.05mm (1/128")

PRECISION VERNIER CALIPER (MONO-BLOCK)

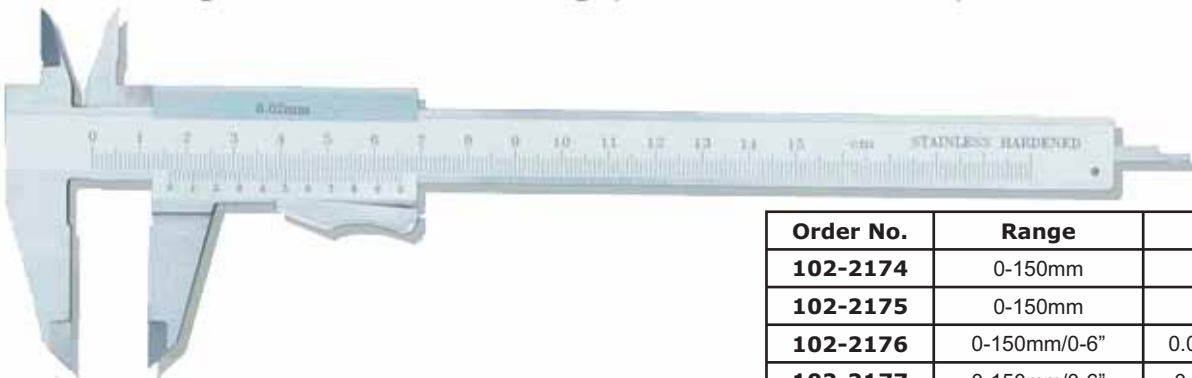


Joint Type	Mono Type	Range	Reading
	102-2137	0-70mm	0.05mm
102-2138	102-2139	0-100mm	0.05mm
102-2140	102-2141	0-100mm/0-4"	0.05mm (1/128")
102-2142	102-2146	0-150mm	0.02mm
102-2143	102-2147	0-150mm	0.05mm
102-2144	102-2148	0-150mm/0-6"	0.02mm (1/1000")
102-2145	102-2149	0-150mm/0-6"	0.05mm (1/128")
102-2150	102-2154	0-200mm	0.02mm
102-2151	102-2155	0-200mm	0.05mm
102-2152	102-2156	0-200mm/0-8"	0.02mm (1/1000")
102-2153	102-2157	0-200mm/0-8"	0.05mm (1/128")
	102-2158	0-300mm	0.02mm
	102-2159	0-300mm	0.05mm
	102-2160	0-300mm/0-12"	0.02mm (1/1000")
	102-2161	0-300mm/0-12"	0.05mm (1/128")

**PRECISION VERNIER CALIPER
(WITH FINE ADJUSTMENT)**



Carbon Steel	Stainless Steel	Range	Reading
102-2162	102-2198	0-150mm	0.02mm
102-2163	102-2199	0-150mm	0.05mm
102-2164	102-2200	0-150mm/0-6"	0.02mm (1/1000")
102-2165	102-2201	0-150mm/0-6"	0.05mm (1/128")
102-2166	102-2202	0-200mm	0.02mm
102-2167	102-2203	0-200mm	0.05mm
102-2168	102-2204	0-200mm/0-8"	0.02mm (1/1000")
102-2169	102-2205	0-200mm/0-8"	0.05mm (1/128")
102-2170	102-2206	0-300mm	0.02mm
102-2171	102-2207	0-300mm	0.05mm
102-2172	102-2208	0-300mm/0-12"	0.02mm (1/1000")
102-2173	102-2209	0-300mm/0-12"	0.05mm (1/128")



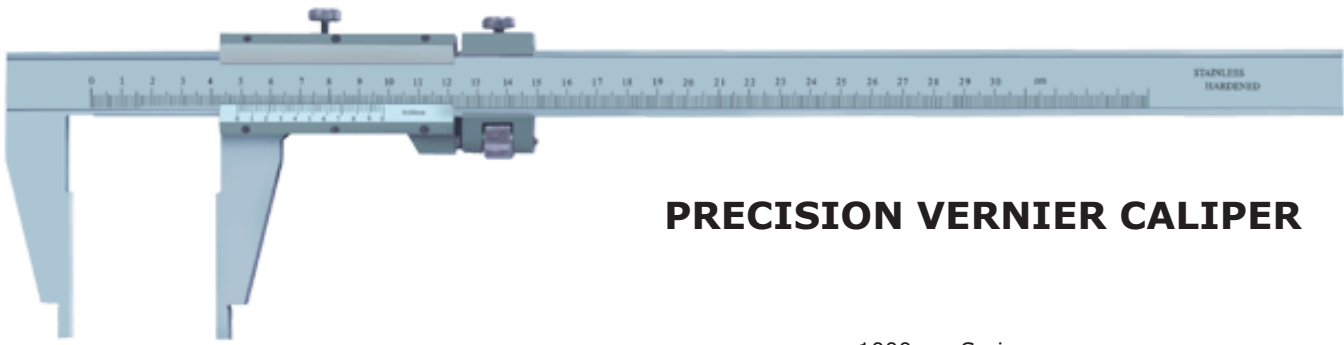
**PRECISION VERNIER CALIPER
(MONO-BLOCK & SELF-LOCKING)**

Order No.	Range	Reading
102-2174	0-150mm	0.02mm
102-2175	0-150mm	0.05mm
102-2176	0-150mm/0-6"	0.02mm (1/1000")
102-2177	0-150mm/0-6"	0.05mm (1/128")
102-2178	0-200mm	0.02mm
102-2179	0-200mm	0.05mm
102-2180	0-200mm/0-8"	0.02mm (1/1000")
102-2181	0-200mm/0-8"	0.05mm (1/128")

PRECISION VERNIER CALIPER (SELF-LOCKING)



Carbon Steel	Stainless Steel	Range	Reading
102-2182	102-2186	0-150mm	0.02mm
102-2183	102-2187	0-150mm	0.05mm
102-2184	102-2188	0-150mm/0-6"	0.02mm (1/1000")
102-2185	102-2189	0-150mm/0-6"	0.05mm (1/128")
102-2190	102-2194	0-200mm	0.02mm
102-2191	102-2195	0-200mm	0.05mm
102-2192	102-2196	0-200mm/0-8"	0.02mm (1/1000")
102-2193	102-2197	0-200mm/0-8"	0.05mm (1/128")



PRECISION VERNIER CALIPER

500mm Series

Carbon Steel	Stainless Steel	Range	Reading
102-2214	102-2218	0-450mm	0.02mm
102-2215	102-2219	0-450mm	0.05mm
102-2216	102-2220	0-450mm/0-18"	0.02mm (1/1000")
102-2217	102-2221	0-450mm/0-18"	0.05mm (1/128")
102-2222	102-2226	0-500mm	0.02mm
102-2223	102-2227	0-500mm	0.05mm
102-2224	102-2228	0-500mm/0-20"	0.02mm (1/1000")
102-2225	102-2229	0-500mm/0-20"	0.05mm (1/128")
102-2230	102-2234	0-600mm	0.02mm
102-2231	102-2235	0-600mm	0.05mm
102-2232	102-2236	0-600mm/0-24"	0.02mm (1/1000")
102-2233	102-2237	0-600mm/0-24"	0.05mm (1/128")

1000mm Series

Order No.	Range	Reading
102-2238	0-1000mm	0.02mm
102-2239	0-1000mm	0.05mm
102-2240	0-1000mm/0-40"	0.02mm (1/1000")
102-2241	0-1000mm/0-40"	0.05mm (1/128")
102-2242	0-1500mm	0.02mm
102-2243	0-1500mm	0.05mm
102-2244	0-1500mm/0-60"	0.02mm (1/1000")
102-2245	0-1500mm/0-60"	0.05mm (1/128")
102-2246	0-2000mm	0.02mm
102-2247	0-2000mm	0.05mm
102-2248	0-2000mm/0-80"	0.02mm (1/1000")
102-2249	0-2000mm/0-80"	0.05mm (1/128")

DIGITAL SCALE UNITS

Horizontal Type



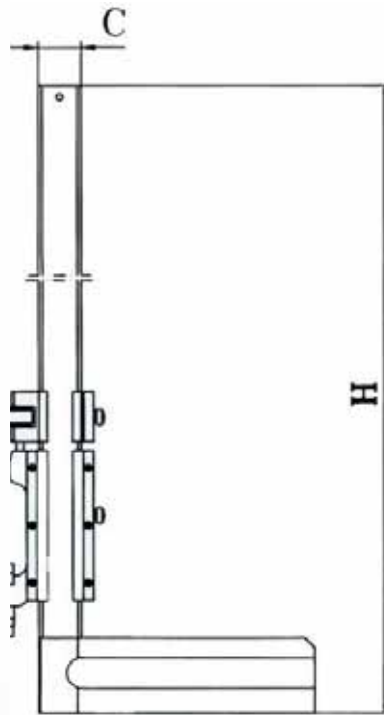
Vertical Type



Horizontal	Range	Accuracy	Width	Vortical	Range	Accuracy	Width
101-1004	100mm/4"	±0.02mm	16mm	101-2004	100mm/4"	±0.02mm	20mm
101-1006	150mm/6"	±0.03mm	16mm	101-2006	150mm/6"	±0.03mm	20mm
101-1008	200mm/8"	±0.03mm	16mm	101-2008	200mm/8"	±0.03mm	20mm
101-1012	300mm/12"	±0.04mm	16mm	101-2012	300mm/12"	±0.04mm	20mm
101-1016	400mm/16"	±0.05mm	16mm	101-2016	400mm/16"	±0.05mm	20mm
101-1020	500mm/20"	±0.05mm	24mm	101-2020	500mm/20"	±0.05mm	20mm
101-1024	600mm/24"	±0.08mm	24mm	101-2024	600mm/24"	±0.08mm	20mm
101-1030	700mm/28"	±0.08mm	24mm	101-2030	700mm/30"	±0.08mm	24mm
101-1032	800mm/32"	±0.10mm	24mm	101-2032	800mm/32"	±0.08mm	24mm
101-1036	900mm/36"	±0.10mm	24mm	101-2036	900mm/36"	±0.08mm	24mm
101-1040	1000mm/40"	±0.10mm	31mm	101-2040	1000mm/40"	±0.10mm	31mm
101-1048	1200mm/48"	±0.12mm	31mm	101-2048	1200mm/48"	±0.12mm	31mm
101-1060	1500mm/60"	±0.14mm	31mm	101-2060	1500mm/60"	±0.12mm	31mm
101-1080	2000mm/80"	±0.20mm	31mm	101-2080	2000mm/80"	±0.20mm	31mm

VERNIER HEIGHT GAUGE

Open Type



Mono-Block

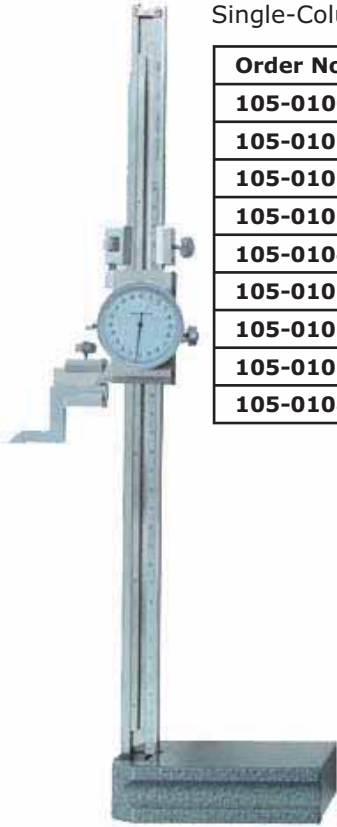


- Carbide Tipped scriber
- With fine adjustment
- Made of stainless steel or carbon steel.

Open Type		Mono-Block		Range (mm)	Grad. (mm)	H (mm)	C (mm)	Accuracy
Stainless Steel	Carbon Steel	Stainless Steel	Carbon Steel					
101-2747	101-2727	101-2915	101-2895	0-200	0.05	330	20	±0.05mm
101-2748	101-2728	101-2916	101-2896	0-300	0.05	430	20	±0.08mm
101-2749	101-2729	101-2917	101-2897	0-500	0.05	658	25	
101-2750	101-2730	101-2918	101-2898	0-600	0.05	758	25	±0.01mm
101-2751	101-2731	101-2919	101-2899	0-1000	0.05	1205	32	
101-2737	101-2717	101-2905	101-2885	0-200	0.02	330	20	±0.03mm
101-2738	101-2718	101-2906	101-2886	0-300	0.02	430	20	±0.04mm
101-2739	101-2719	101-2907	101-2887	0-500	0.02	658	25	±0.05mm
101-2740	101-2720	101-2908	101-2888	0-600	0.02	758	25	±0.07mm
101-2741	101-2721	101-2909	101-2889	0-1000	0.02	1205	32	
101-2752	101-2732	101-2920	101-2900	0-200/8"	0.05/1/128"	330	20	±1 Grad.
101-2753	101-2733	101-2921	101-2901	0-300/12"	0.05/1/128"	430	20	±1.6 Grad.
101-2754	101-2734	101-2922	101-2902	0-500/20"	0.05/1/128"	658	25	
101-2755	101-2735	101-2923	101-2903	0-600/24"	0.05/1/128"	758	25	±2 Grad.
101-2756	101-2736	101-2924	101-2904	0-1000/40"	0.05/1/128"	1205	32	
101-2742	101-2722	101-2910	101-2890	0-200/8"	0.02/0.001"	330	20	±1.5 Grad.
101-2743	101-2723	101-2911	101-2891	0-300/12"	0.02/0.001"	430	20	±2 Grad.
101-2744	101-2724	101-2912	101-2892	0-500/20"	0.02/0.001"	658	25	±2.5 Grad.
101-2745	101-2725	101-2913	101-2893	0-600/24"	0.02/0.001"	758	25	±3 Grad.
101-2746	101-2726	101-2914	101-2894	0-1000/40"	0.02/0.001"	1205	32	

DIAL HEIGHT GAUGE

Single-Column



Order No.	Range	Grad.	Accuracy
105-0100	0-150mm	0.01mm	0-200mm ±0.03mm;
105-0101	0-200mm	0.01mm	
105-0102	0-300mm	0.01mm	
105-0103	0-150mm	0.02mm	>200-400mm ±0.04mm
105-0104	0-200mm	0.02mm	
105-0105	0-300mm	0.02mm	0-8in±0.0012in; >8-16in± 0.0015in
105-0106	0-6"	0.001in	
105-0107	0-8"	0.001in	
105-0108	0-12"	0.001in	

Double-Column



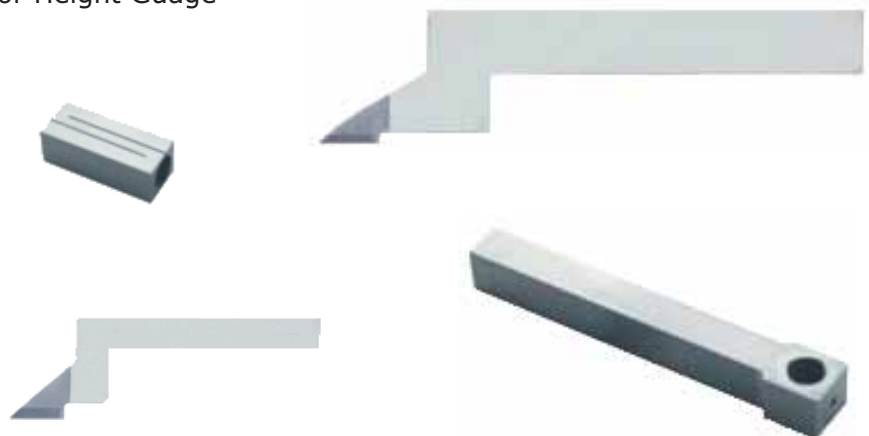
Order No.	Range	Grad.	Accuracy
105-0109	0-300mm	0.01mm	0-200mm±0.03mm >200-400mm±0.04mm >400-600mm±0.05mm
105-0110	0-450mm	0.01mm	
105-0111	0-500mm	0.01mm	
105-0112	0-600mm	0.01mm	
105-0113	0-12in	0.001in	0-8in±0.0012in >8-16in±0.0015in >16-24in±0.0020in
105-0114	0-18in	0.001in	
105-0115	0-20in	0.001in	
105-0116	0-24in	0.001in	

Three-Column



Order No.	Range	Grad.	Accuracy
105-0117	0-800mm	0.01mm	>600-800mm+0.06mm >800-1000mm+0.07mm >24-32in+0.0025in >32-40in+0.0030in
105-0118	0-1000mm	0.01mm	
105-0119	0-32in	0.001in	
105-0120	0-40in	0.001in	

Accessories for Height Gauge



DIGITAL HEIGHT GAUGE



- Manual power on/off
- Metric/Inch conversion.
- Zero setting at any position
- Carbide tipped scriber
- Fine adjustment device
- High contrast LCD
- Hardened and ground steel base.
- Two standard 1.5V battery.

Order No.	Range	Resolution
105-0006	150mm/6"	0.01mm/.0005"
105-0008	200mm/8"	0.01mm/.0005"
105-0012	300mm/12"	0.01mm/.0005"
105-0020	500mm/20"	0.01mm/.0005"
105-0024	600mm/24"	0.01mm/.0005"
105-0032	800mm/32"	0.01mm/.0005"
105-0040	1000mm/40"	0.01mm/.0005"
105-0060	1500mm/60"	0.01mm/.0005"
105-0080	2000mm/80"	0.01mm/.0005"

DIGITAL TWIN BEAM HEIGHT GAUGE

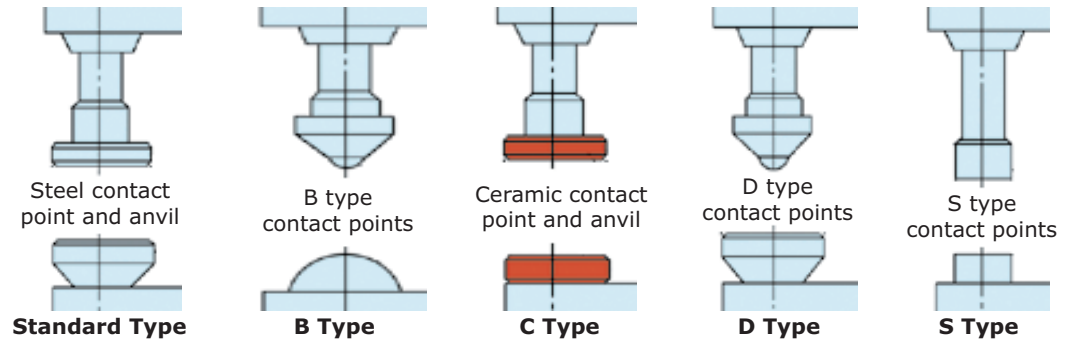


- Manual on/off
- Metric/Inch conversion.
- Zero setting at any position
- Carbide tipped scriber
- Dual Beam structure.
- Made of stainless steel
- Hardened and ground steel base.
- Preset switch
- Hold switch

Order No.	Range	Resolution
105-1012	300mm/12"	0.01mm/.001"
105-1018	400mm/18"	0.01mm/.001"
105-1020	500mm/20"	0.01mm/.001"
105-1024	600mm/24"	0.01mm/.001"
105-1032	800mm/32"	0.01mm/.001"

DIAL THICKNESS GAUGE

Type of Contact Points



Order No.	Range	Resolution	Indicator	Points
103-0080	0-10mm	0.01mm	Shock-proof Dial Indicator	Standard type
103-0081	0-10mm	0.01mm		C type
103-0082	0-10mm	0.01mm		B type
103-0083	0-10mm	0.01mm		D type
103-0084	0-10mm	0.01mm	Universal Dial Indicator	Standard Type
103-0085	0-10mm	0.01mm		C type
103-0086	0-10mm	0.01mm		B type
103-0087	0-10mm	0.01mm		D type
103-0464	0-20mm	0.01mm		Standard Type
103-0465	0-20mm	0.01mm		C type
103-0466	0-20mm	0.01mm		B type
103-0467	0-20mm	0.01mm	D type	
103-0484	0-12.5mm	0.01mm	Digital Indicator	Standard Type
103-0485	0-12.5mm	0.01mm		C type
103-0486	0-12.5mm	0.01mm		B type
103-0487	0-12.5mm	0.01mm		D type
103-0400	0-0.5"	0.001"	Inch Dial Indicator	Standard Type
103-0401	0-0.5"	0.001"		C type
103-0402	0-0.5"	0.001"		B type
103-0403	0-0.5"	0.001"		D type
103-0404	0-0.5"	0.0005"		Standard Type
103-0405	0-0.5"	0.0005"		C type
103-0406	0-0.5"	0.0005"		B type
103-0407	0-0.5"	0.0005"	D type	



- Integrative main body machined from aluminum
- Somatological lifting handle
- Upward shock-proof

Order No.	Range	Resolution	Indicator	Points
103-0096	0-10mm	0.01mm	Universal Dial Indicator	Standard type
103-0097	0-10mm	0.01mm		C type
103-0423	0-0.5"	0.001"	Inch Dial Indicator	Standard type
103-0424	0-0.5"	0.001"		C type
103-0425	0-0.5"	0.0005"		Standard type
103-0426	0-0.5"	0.0005"		C type



Order No.	Range	Resolution	Indicator	Points
103-0468	0-10mm	0.01mm	Shock-proof Dial Indicator	Standard type
103-0469	0-10mm	0.01mm		C type
103-0470	0-10mm	0.01mm		B type
103-0471	0-10mm	0.01mm		D type
103-0472	0-10mm	0.01mm	Universal Dial Indicator	Standard Type
103-0473	0-10mm	0.01mm		C type
103-0474	0-10mm	0.01mm		B type
103-0475	0-10mm	0.01mm		D type
103-0491	0-12.5mm	0.01mm	Digital Indicator	Standard Type
103-0492	0-12.5mm	0.01mm		C type
103-0493	0-12.5mm	0.01mm		B type
103-0494	0-12.5mm	0.01mm		D type
103-0476	0-0.5"	0.001"	Inch Dial Indicator	Standard Type
103-0477	0-0.5"	0.001"		C type
103-0478	0-0.5"	0.001"		B type
103-0479	0-0.5"	0.001"		D type
103-0480	0-0.5"	0.0005"		Standard Type
103-0481	0-0.5"	0.0005"		C type
103-0482	0-0.5"	0.0005"		B type
103-0483	0-0.5"	0.0005"		D type



Order No.	Range	Resolution	Indicator	Points
103-0440	0-25mm	0.01mm	Shock-proof Dial Indicator	Standard type
103-0441	0-25mm	0.01mm		C type
103-0442	0-25mm	0.01mm		B type
103-0443	0-25mm	0.01mm		D type
103-0444	0-30mm	0.01mm		Standard type
103-0445	0-30mm	0.01mm		C type
103-0446	0-30mm	0.01mm		B type
103-0447	0-30mm	0.01mm		D type
103-0448	0-25mm	0.01mm	Universal Dial Indicator	Standard type
103-0449	0-25mm	0.01mm		C type
103-0450	0-25mm	0.01mm		B type
103-0451	0-25mm	0.01mm		D type
103-0452	0-30mm	0.01mm		Standard type
103-0453	0-30mm	0.01mm		C type
103-0454	0-30mm	0.01mm		B type
103-0455	0-30mm	0.01mm		D type
103-0456	0-1"	0.001"	Inch Dial Indicator	Standard Type
103-0457	0-1"	0.001"		C type
103-0458	0-1"	0.001"		B type
103-0459	0-1"	0.001"		D type
103-0460	0-1"	0.0005"		Standard Type
103-0461	0-1"	0.0005"		C type
103-0462	0-1"	0.0005"		B type
103-0463	0-1"	0.0005"		D type



Order No.	Range	Resolution	Indicator	Points
103-0090	0-10mm	0.01mm	Shock-proof Dial Indicator	Standard type
103-0091	0-10mm	0.01mm		C type
103-0092	0-10mm	0.01mm		S type
103-0093	0-10mm	0.01mm	Universal Dial Indicator	Standard type
103-0094	0-10mm	0.01mm		C type
103-0095	0-10mm	0.01mm		S type
103-0488	0-12.5mm	0.01mm	Digital Indicator	Standard type
103-0489	0-12.5mm	0.01mm		C type
103-0490	0-12.5mm	0.01mm		S type
103-0410	0-0.5"	0.001"	Inch Dial Indicator	Standard type
103-0411	0-0.5"	0.001"		C type
103-0412	0-0.5"	0.001"		S type
103-0413	0-0.5"	0.0005"		Standard type
103-0414	0-0.5"	0.0005"		C type
103-0415	0-0.5"	0.0005"		S type

103-0439



103-0437

103-0005



Order No.	Range	Resolution	Permissible Error
103-0005	0-12mm (0-0.5")	0.01mm (.0005")	±0.03mm
103-0437	0-25mm (0-1")	0.01mm (.0005")	±0.04mm
103-0438	0-5mm (0-0.2")	0.001mm (.00005")	±0.009mm
103-0439	0-30mm (0-1.2")	0.01mm (.0005")	±0.03mm

POCKET DIAL THICKNESS GAUGE

- The very compact thickness gauges are designed for carrying convenience and ideally suited for quick inspection of paper, leather, wire, plastic, sheet metal and similar materials.
- Aluminum main body, stainless steel contact point and anvil.

Order No.	Range	Resolution	Indicator
103-0099	0-10mm	0.01mm	Metric Dial Indicator
103-0430	0-0.5"	0.001"	Inch Dial Indicator
103-0431	0-0.5"	0.0005"	Inch Dial Indicator



DIAL PIPE GAUGE

- Integrative main body machined from aluminum.
- Somatological lifting handle.
- Upward shock-proof.
- The dial pipe gauge specializes in the measurement of the wall thickness of pipe or the thickness of bend plates.

Order No.	Range	Resolution	Indicator
103-0098	0-10mm	0.01mm	Metric Dial Indicator
103-0435	0-0.5"	0.001"	Inch Dial Indicator
103-0436	0-0.5"	0.0005"	Inch Dial Indicator



ELECTRONIC DIGITAL INDICATOR



104-0017



104-0019



104-0018

- Non-contact Linear CAP measuring system
- Tolerance setting and indication of tolerance judgement
- Date output
- Direction switch
- Measure jumpiness
- The display can be turned 330°/360°
- Max response speed: 1000mm/sec
- Max measuring force: ≤1.2N
- LCD 6-digit display
- Power source: 1.5V SR44 1pc
- Presetting

Order No.	Range	Resolution	Accuracy	Turned
104-0017	0-12.5mm/ 0.5"	0.01mm/.0005"	≤0.02mm/.0008"	330°
104-0018				330°
104-0019		0.002mm/.00005"	≤0.012mm/.0005"	360°

UNIVERSAL DIAL INDICATOR

104-0001

104-0004

Fine Bezel	Broad Bezel	Range	Resolution	Remarks
104-0007	104-0010	0-10mm	0.01mm	Without tolerance hand
104-0008	104-0011	0-5mm	0.01mm	
104-0009	104-0012	0-3mm	0.01mm	
104-0001	104-0004	0-10mm	0.01mm	Inside tolerance hand
104-0002	104-0005	0-5mm	0.01mm	
104-0003	104-0006	0-3mm	0.01mm	



104-0015

- Outside tolerance hand



104-0014

- Steel Body
- Jeweled
- Rack shock-proof
- Semi-seal cap
- Plastic flat back is valid for standard
- The metal lug back can be supplier as order
- Broad and Fine knurl metal bezel

Fine Bezel	Broad Bezel	Range	Resolution	Remarks
104-0013	104-0015	0-10mm	0.01mm	Lifting screw
104-0014	104-0016	0-3mm	0.01mm	Semi-seal cap

MICROMETER DIAL INDICATOR

- Steel Body
- Jeweled
- Anti-dirty cap
- With Dial locked screw
- Plastic flat back is valid for standard

Order No.	Range	Resolution	Remarks
104-0020	0-1mm	0.001mm	Outside tolerance hand
104-0021	0-2mm	0.001mm	
104-0022	0-1mm	0.001mm	Broad knurl metal bezel, Inside tolerance hand
104-0023	0-2mm	0.001mm	
104-0024	0-1mm	0.001mm	Inside tolerance hand
104-0025	0-2mm	0.001mm	



SHOCKPROOF DIAL INDICATOR

- Steel Body
- Jeweled
- Rack shock-proof
- Semi-seal cap
- Plastic flat back is valid for standard
- The metal lug back can be supplier as order
- Broad and Fine knurl metal bezel

Fine Bezel	Broad Bezel	Range	Resolution	Remarks
104-0056	104-0059	0-10mm	0.01mm	Without tolerance hand
104-0057	104-0060	0-5mm	0.01mm	
104-0058	104-0061	0-3mm	0.01mm	
104-0050	104-0053	0-10mm	0.01mm	Inside tolerance hand
104-0051	104-0054	0-5mm	0.01mm	
104-0052	104-0055	0-3mm	0.01mm	

104-0050

104-0053



SPECIAL INDICATOR FOR SHORE DUROMETER



Order No.: 104-0028

- Steel Body
- Screw stem M8x0.75
- Measuring Range: 2.5mm
- Graduation: 0.025mm

SPECIAL INDICATOR FOR ROCKWELL DUROMETER



Order No.: 104-0029

- Bezel Diameter: 100mm
- Base Diameter: 114mm
- Fix Diameter: 108mm
- Measuring Range: 5mm
- Graduation: 0.005mm

LONG RANGE DIAL INDICATOR

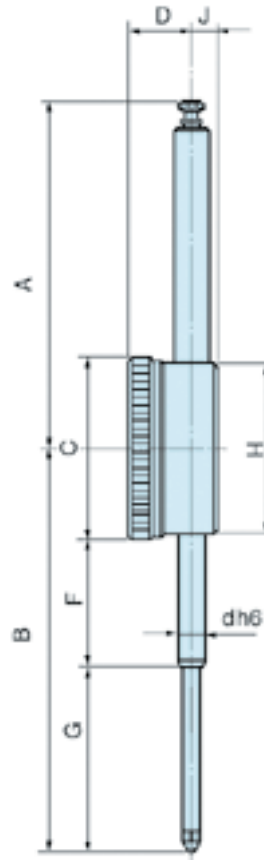
Order No.	Range	Resolution	A(mm)	B(mm)	C(mm)
104-0070	0-30mm	0.01mm	37.5	89.5	Ø58
104-0071	0-50mm	0.01mm	108.3	126.2	Ø58
104-0072	0-80mm	0.01mm	138.4	168.4	Ø58
104-0073	0-100mm	0.01mm	167.6	207.8	Ø78

- Steel Body
- Jeweled
- With shock-proof device
- With revolution counter
- Lifting screw
- Inside tolerance hand
- White or black steel bezel
- Plastic flat back is valid for standard
- The metal lug back can be supplied

104-0070



104-0071



104-0077

- Steel or aluminium body
- Lifting screw with cushion rubber
- With dial lock screw
- Fine knurl metal bezel items with outside tolerance hand, broad bezel items with inside tolerance hand
- Plastic flat back is valid for standard
- The metal lug back can be supplied

Fine Bezel	Broad Bezel	Range	Resolution	A(mm)	B(mm)	Remarks
104-0077	104-0079	0-25mm	0.01mm	37.5	80.5	Lifting screw
104-0078	104-0080	0-30mm	0.01mm	37.5	88	Semi-seal cap

DIAL INDICATOR-DOUBLE FACE



Order No.: 104-0030

- Steel Body
- Jeweled
- Double measuring faces
- Black and white bezel
- Measuring Range: 0-10mm
- Graduation: 0.01mm

DIAL INDICATOR-SMALL SIZE



- Steel body
- Jeweled
- Semi-seal cap
- Plastic flat back

Order No.	Range	Resolution	Dial Dia.
104-0026	0-3mm	0.01mm	42mm
104-0027	0-5mm	0.01mm	42mm

INCH DIAL INDICATOR



- Aluminium Body
- Jeweled
- Anti-dirty cap
- With dial lock screw
- Broad bezel with outside tolerance hand.
- Fine bezel with inside tolerance hand
- Metal lug back is valid for standard

Range: 0-0.05"
Resolution: 0.0001"

Order No.: **104-0113**
(Fine knurl metal bezel)
104-0114
(Broad knurl metal bezel)

**INCH DIAL INDICATOR-
SMALL SIZE**



- Steel body
- Jeweled
- No revolution counter
- Semi-seal cap
- Metal lug back
- Dial diameter: 1.57"

Order No.	Range	Resolution
104-0115	0-0.25"	0.001"
104-0116	0-0.25"	0.0005"

INCH DIAL INDICATOR



104-0101



104-0107

- Aluminium Body
- Lifting screw with cushion rubber
- With dial lock screw
- Broad bezel with outside tolerance hand.
- Fine bezel with inside tolerance hand
- Metal lug back is valid for standard

Fine bezel	Broad bezel	Range	Resolution
104-0101	104-0104	0-0.25"	0.001"
104-0102	104-0105	0-0.5"	0.001"
104-0103	104-0106	0-1"	0.001"
104-0107	104-0110	0-0.25"	0.0005"
104-0108	104-0111	0-0.5"	0.0005"
104-0109	104-0112	0-1"	0.0005"

**LONG RANGE
INCH DIAL INDICATOR**



- Steel Body
- Jeweled
- With revolution counter
- With dial lock screw
- Anti-dirty cap
- White or black steel bezel
- The metal lug back

Order No.: **104-0150**

Range: 0-2"
Graduation: 0.001"

DIAL TEST INDICATOR



104-0202



104-0208



104-0207



104-0206

Order No.	Range	Grad.	Dial Dia.	Probe Length
104-0201	0.8mm	0.01mm	30mm	16.5mm
104-0202	0.8mm	0.01mm	37.5mm	16.5mm
104-0203	0.2mm	0.002mm	30mm	16.0mm
104-0204	0.2mm	0.002mm	37.5mm	16.0mm
104-0205	0.8mm	0.01mm	30mm	46.4mm
104-0206	0.8mm	0.01mm	37.5mm	46.4mm
104-0207	0.8mm	0.001mm	44mm	16.5mm
104-0211	0.03"	0.001"	1.18"	0.62"
104-0209	0.03"	0.001"	1.48"	0.62"
104-0210	0.03"	0.0005"	1.18"	0.62"
104-0208	0.03"	0.0005"	1.48"	0.62"
104-0212	0.03"	0.0005"	1.48"	1.74"
104-0213	0.03"	0.0005"	1.48"	1.74"
104-0214	0.03"	0.0001"	1.18"	0.64"
104-0215	0.03"	0.0001"	1.48"	0.64"
104-0220	0.6mm/0.03"	0.01mm/0.0005"	1.48"	0.62"

104-0220



- High quality brass main body, high resistance to magnetism
- Jeweled, vibration-proof, durable
- Pivot ball bearing
- Carbide, jewelball or steel contact point
- Three dovetails

SHAFT BALANCE LEVEL



The shaft balance level is used to check the straightness of various machines and guidance of other equipment, and the correctness of horizontal installing positions. And it can be used to check small inclination angle.

Order No.	Metric	Inch	Accuracy
115-0400	84mm	3.3"	0.45mm/m(0.0045"/10")
115-0401	100mm	4"	0.02mm/m(0.0002"/10") 0.05mm/m(0.0005"/10")
115-0402	150mm	6"	
115-0403	200mm	8"	
115-0404	250mm	10"	
115-0405	300mm	12"	

FRAME BALANCE LEVEL



This product is used to check the straightness of various machines and guidance of other equipment, and the correctness of horizontal and vertical installing positions. And it can be used to check small inclination angle.

Order No.	Metric	Inch	Accuracy
115-0406	100×100mm	4"×4"	0.02mm/m(0.0002"/10") 0.05mm/m(0.0005"/10")
115-0407	150×150mm	6"×6"	
115-0408	200×200mm	8"×8"	
115-0409	250×250mm	10"×10"	
115-0410	300×300mm	12"×12"	

METRIC INSIDE DIAL CALIPER GAUGE

Order No.	Range	Grad.	Throat Depth
103-0030	15-35mm	0.01mm	50mm
103-0031	35-55mm	0.01mm	80mm
103-0032	55-75mm	0.01mm	90mm
103-0033	75-95mm	0.01mm	100mm
103-0034	95-115mm	0.01mm	150mm
103-0035	115-135mm	0.01mm	150mm



METRIC OUTSIDE DIAL CALIPER GAUGE

Order No.	Range	Grad.	Throat Depth
103-0050	0-20mm	0.01mm	60mm
103-0051	20-40mm	0.01mm	60mm
103-0052	40-60mm	0.01mm	55mm
103-0053	60-80mm	0.01mm	55mm
103-0054	80-100mm	0.01mm	55mm



INCH INSIDE DIAL CALIPER GAUGE

Order No.	Range	Grad.	Throat Depth
103-0040	0.6-1.4"	0.0005"	1.9"
103-0041	1.4-2.2"	0.0005"	3.1"
103-0042	2.2-3.0"	0.0005"	3.1"
103-0043	3.0-3.8"	0.0005"	3.9"
103-0044	0.6-1.4"	0.001"	1.9"
103-0045	1.4-2.2"	0.001"	3.1"
103-0046	2.2-3.0"	0.001"	3.1"
103-0047	3.0-3.8"	0.001"	3.9"



INCH OUTSIDE DIAL CALIPER GAUGE

Order No.	Range	Grad.	Throat Depth
103-0060	0-0.8"	0.0005"	2.3"
103-0061	0.8-1.6"	0.0005"	2.3"
103-0062	1.6-2.4"	0.0005"	2.1"
103-0063	2.4-3.2"	0.0005"	2.1"
103-0064	3.2-4.0"	0.0005"	2.1"
103-0065	0-0.8"	0.001"	2.3"
103-0066	0.8-1.6"	0.001"	2.3"
103-0067	1.6-2.4"	0.001"	2.1"
103-0068	2.4-3.2"	0.001"	2.1"
103-0069	3.2-4.0"	0.001"	2.1"



DIAL BORE GAUGE



Wheel Guide Type



Without Guide Type



Plate Guide Type



Canister Guide Type



Ball Guide Type

Order No.	Range	Grad.	Depth	Accessories			Guide Type	Anvil Type
				Anvil	Washer	Sub-anvil		
105-5111	6-10mm	0.001mm	40mm	9			Without	Fixed or inserting
105-5112	10-18mm	0.001mm	100mm	9	1		Plate	
105-5113	18-35mm	0.001mm	150mm	9	2		Canister	
105-5114	35-50mm	0.001mm	150mm	4	4		Wheel	
105-5115	50-160mm	0.001mm	150mm	12	4	1		
105-5116	160-250mm	0.001mm	250mm	5	5	1		
105-5117	250-450mm	0.001mm	250mm	5	5	2		
105-5042	0.24-0.40"	0.0001"	1.57"	9			Without	Fixed or inserting
105-5043	0.40-0.70"	0.0001"	4"	9	1		Plate	
105-5044	0.70-1.5"	0.0001"	6"	10	2		Canister	
105-5045	1.4-2.4"	0.0001"	6"	6	3		Wheel	
105-5046	2.0-6.0"	0.0001"	6"	11	3	1		
105-5047	6.0-10.0"	0.0001"	16"	6	5	1		
105-5048	10.0-16.0"	0.0001"	16"	6	5	2		
105-5100	6-10mm	0.01mm	40mm	9			Without	Fixed
105-5101	10-18mm	0.01mm	100mm	9	1		Plate	
105-5102	18-35mm	0.01mm	150mm	9	2		Canister	
105-5103	18-35mm	0.01mm	125mm	7			Plate	Screw
105-5104	35-50mm	0.01mm	150mm	3			Wheel	
105-5105	50-100mm	0.01mm	150mm	5				
105-5106	50-160mm	0.01mm	150mm	5		1		
105-5107	160-250mm	0.01mm	250mm	5				
105-5108	250-450mm	0.01mm	250mm	5		1		
105-5109	100-250mm	0.01mm	200mm	4		1		
105-5124	35-50mm	0.01mm	150mm	4	4		Wheel	Inserting
105-5125	50-100mm	0.01mm	150mm	11	4			
105-5126	50-160mm	0.01mm	150mm	12	4	1		
105-5127	160-250mm	0.01mm	250mm	5	5	1		
105-5128	250-450mm	0.01mm	250mm	5	5	2		
105-5144	35-50mm	0.01mm	150mm	3			Ball	Screw
105-5145	50-100mm	0.01mm	150mm	5				
105-5146	50-160mm	0.01mm	150mm	5		1		
105-5147	160-250mm	0.01mm	250mm	5				
105-5148	100-250mm	0.01mm	200mm	4		1		

DIGITAL DIAL BORE GAUGE

Order No.	Range	Grad.	Depth	Accessories			Guide Type	Anvil Type
				Anvil	Washer	Sub-anvil		
105-5192	6-10mm	0.002mm	40mm	9	0	0	Without	Fixed or inserting anvil; Equipped with 0-6.35mm digital indicator.
105-5193	10-18mm	0.002mm	100mm	9	1	0	Plate	
105-5194	18-35mm	0.002mm	150mm	9	2	0	Canister	
105-5195	35-50mm	0.002mm	150mm	4	4	0	Wheel	
105-5196	50-160mm	0.002mm	150mm	12	4	1		
105-5197	160-250mm	0.002mm	250mm	5	5	1		
105-5198	250-450mm	0.002mm	250mm	5	5	2		



EXTENSION LONG DIAL BORE GAUGE

Range	Depth			
Metric	500mm	1000mm	1500mm	2000mm
35-50mm	105-5155	105-5165	105-5175	105-5185
50-100mm	105-5156	105-5166	105-5176	105-5186
50-160mm	105-5157	105-5167	105-5177	105-5187
160-250mm	105-5158	105-5168	105-5178	105-5188
250-450mm	105-5159	105-5169	105-5179	105-5189
Inch	19.7"	39.4"	59.1"	78.7"
1.4-2.4"	105-5055	105-5065	105-5075	105-5085
2-4"	105-5056	105-5066	105-5076	105-5086
2-6"	105-5057	105-5067	105-5077	105-5087
6-10"	105-5058	105-5068	105-5078	105-5088
10-16"	105-5059	105-5069	105-5079	105-5089

INCH DIAL BORE GAUGE

Order No.	Range	Grad.	Depth	Accessories			Guide Type	Anvil Type
				Anvil	Washer	Sub-anvil		
105-5001	0.24-0.4"	0.0005"	1.57"	9			Without	Fixed
105-5002	0.4-0.7"	0.0005"	4"	1	1		Plate	
105-5003	0.7-1.5"	0.0005"	6"	10	2		Canister	
105-5004	0.7-1.5"	0.0005"	5"	8			Plate	Screw
105-5021	0.24-0.4"	0.001"	1.57"	9			Without	Fixed
105-5022	0.4-0.7"	0.001"	4"	1	1		Plate	
105-5023	0.7-1.5"	0.001"	6"	10	2		Canister	
105-5024	0.7-1.5"	0.001"	5"	8			Plate	Screw
105-5005	1.4-2.4"	0.0005"	6"	6	3		Wheel	Inserting
105-5006	2-4"	0.0005"	6"	11	3			
105-5007	2-6"	0.0005"	6"	11	3	1		
105-5008	6-10"	0.0005"	16"	6	5	1		
105-5009	10-16"	0.0005"	16"	6	5	2		
105-5025	1.4-2.4"	0.001"	6"	6	3			
105-5026	2-4"	0.001"	6"	11	3			
105-5027	2-6"	0.001"	6"	11	3	1		
105-5028	6-10"	0.001"	16"	6	5	1		
105-5029	10-16"	0.001"	16"	6	5	2		

METRIC GAGE BLOCK SET SIZES

Number	Length (mm)	Increment	Pieces	Standards	Number	Length (mm)	Increment	Pieces	Standards										
122	0.5	-	1	GB/T6093	47	1.005	-	1	DIN861										
	1	-	1			1.01-1.09	0.01	9											
	1.000	-	1			1.10-1.19	0.1	10											
	1.001-1.009	0.001	9			1.2-1.9	0.1	8											
	1.01-1.49	0.01	49			1-9	1	9											
	1.5-1.9	0.1	5			10-100	10	10											
	2-25	0.5	47			47	1.005	-		1	JIS B7506								
	30-70	10	5		1.01-1.09		0.01	9											
	75	-	1		1.1-1.9		0.1	9											
	80-100	10	3		1-24	1	24												
112	1.000	-	1	JIS B7506 DIN861	46	25-100	25	4	GB/T6093 DIN861										
	1.001-1.009	0.001	9			1.001-1.009	0.001	9											
	1.01-1.49	0.01	49			1.01-1.09	0.01	9											
	0.5-24.5	0.5	49			1.1-1.9	0.1	9											
	25-100	25	4			1-9	1	9											
103	1.005	-	1	JIS B7506 DIN861	38	10-100	10	10	GB/T6093										
	1.01-1.49	0.01	49			1.005	-	1											
	0.5-24.5	0.5	49			1.01-1.09	0.01	9											
	25-100	25	4			1.1-1.9	0.1	9											
91	0.5	-	1	GB/T6093	32	1-9	1	9	JIS B7506 DIN861										
	1	-	1			10-100	10	10											
	1.001-1.009	0.001	9			1.005	-	1											
	1.01-1.49	0.01	49			1.01-1.09	0.01	9											
	1.5-1.9	0.1	5			1.1-1.9	0.1	9											
	2-9.5	0.5	16			1-9	1	9											
	10-100	10	10			10-30	10	3											
88	1.000	-	1	DIN861	18	50	-	1	JIS B7506										
	1.001-1.009	0.001	9			0.991-0.999 1.001-1.009	0.001	18											
	1.01-1.49	0.01	49		10-(1mm)	0.991,0.992-1	0.001	10		GB/T6093									
	0.5-9.5	0.5	19																
	10-100	10	10																
87	1.001-1.009	0.001	9	JIS B7506 DIN861	10+(1mm)	1,1.001-1.009	0.001	10	GB/T6093										
	1.01-1.49	0.01	49							10-(2mm)	1.991-2	0.001	10	GB/T6093					
	0.5-9.5	0.5	19												10+(2mm)	2-2.009	0.01	10	GB/T6093
	10-100	10	10																
83	0.5	-	1	GB/T6093	10	2.5, 5.1, 7.7, 10.3, 12.9,15, 17.6, 20.2, 22.8, 25	-	10	GB/T6093 DIN861										
	1	-	1																
	1.005	-	1																
	1.01-1.49	0.01	49																
	1.5-1.9	0.1	5																
	2.0-9.5	0.5	16																
	10-100	10	10																
76	1.005	0	1	JIS B7506 DIN861	2	41.3, 131.4, 243.5	-	2	DIN861										
	1.01-1.49	0.01	49																
	0.5-9.5	0.5	19																
	10-50	10	5																
	75100	25	2																
47	1.005	-	1	JIS B7506 DIN861	3	41.3, 131.4, 243.5, 281.2	-	3	DIN861										
	1.01-1.09	0.01	9																
	1.1-1.9	0.1	9																
	1-24	1	24																
46	1.001-1.009	0.001	9	JIS B7506 DIN861	4	41.3, 131.4, 243.5, 281.2	-	4	DIN861										
	1.01-1.09	0.01	9																
	1.1-1.9	0.1	9																
	1-9	1	9																
38	1.005	-	1	JIS B7506 DIN861	5	41.3, 131.4, 243.5, 281.2,481.1	-	5	DIN861										
	1.01-1.09	0.01	9																
	1.1-1.9	0.1	9																
	1-9	1	9																



Steel	Carbide	Number	Grade	Steel	Carbide	Number	Grade
115-0101	115-0173	122	0	115-0137	115-0209	32	0
115-0102	115-0174		1	115-0138	115-0210		1
115-0103	115-0175		2	115-0139	115-0211		2
115-0104	115-0176	112	0	115-0140	115-0212	18	0
115-0105	115-0177		1	115-0141	115-0213		1
115-0106	115-0178		2	115-0142	115-0214		2
115-0107	115-0179	103	0	115-0143	115-0215	10-1mm	0
115-0108	115-0180		1	115-0144	115-0216		1
115-0109	115-0181		2	115-0145	115-0217		2
115-0110	115-0182	91	0	115-0146	115-0218	10+1mm	0
115-0111	115-0183		1	115-0147	115-0219		1
115-0112	115-0184		2	115-0148	115-0220		2
115-0113	115-0185	88	0	115-0149	115-0221	10-2mm	0
115-0114	115-0186		1	115-0150	115-0222		1
115-0115	115-0187		2	115-0151	115-0223		2
115-0116	115-0188	87	0	115-0152	115-0224	10+2mm	0
115-0117	115-0189		1	115-0153	115-0225		1
115-0118	115-0190		2	115-0154	115-0226		2
115-0119	115-0191	83	0	115-0155	115-0227	10 (25mm)	0
115-0120	115-0192		1	115-0156	115-0228		1
115-0121	115-0193		2	115-0157	115-0229		2
115-0122	115-0194	76	0	115-0158	115-0230	10 (50mm)	0
115-0123	115-0195		1	115-0159	115-0231		1
115-0124	115-0196		2	115-0160	115-0232		2
115-0125	115-0197	47 (DIN)	0	115-0161	115-0233	2	0
115-0126	115-0198		1	115-0162	115-0234		1
115-0127	115-0199		2	115-0163	115-0235		2
115-0128	115-0200	47 (JIS)	0	115-0164	115-0236	3	0
115-0129	115-0201		1	115-0165	115-0237		1
115-0130	115-0202		2	115-0166	115-0238		2
115-0131	115-0203	46	0	115-0167	115-0239	4	0
115-0132	115-0204		1	115-0168	115-0240		1
115-0133	115-0205		2	115-0169	115-0241		2
115-0134	115-0206	38	0	115-0170	115-0242	5	0
115-0135	115-0207		1	115-0171	115-0243		1
115-0136	115-0208		2	115-0172	115-0244		2

SPECIAL GAGE BLOCK FOR MICROMETERS

Grade 0	Grade 1	Grade 2	Number	Block Size	Micrometer	Standard
115-0245	115-0250	115-0255	10	2.5, 5.1, 7.7, 10.3, 12.9, 15, 17.6, 20.2, 22.8, 25	0-25mm	GB/T6093
115-0246	115-0251	115-0256	11	25,27.5,30.1,32.7,35.3,37.9,40,42.6,45.2,47.8,50	25-50mm	
115-0247	115-0252	115-0257	11	50,52.5,55.1,57.7,60.3,62.965,67.6,70.2,72.8,75	50-75mm	
115-0248	115-0253	115-0258	11	75,77.5,80.1,82.7,85.3,87.9,90,92.6,95.2,97.8,100	75-100mm	
115-0249	115-0254	115-0259	20	5.12,10.24,15.36,21.5,25,30.12,35.24,40.36,46.5,50 55.12,60.24,65.36,71.5,75,80.12,85.24,90.36,96.5,100	0-25,25-50,50-75,75-100mm	JB1078

SPECIAL GAGE BLOCK FOR CALIPERS

Grade 0	Grade 1	Grade 2	Number	Block Size	Calipers	Standard
115-0260	115-0264	115-0268	6	41.2,81.5,121.8,10,20,20	0-125,0-150	GB/T6093
115-0261	115-0265	115-0269	6	51.2,121.5,191.8,10,20,20	0-200	
115-0262	115-0266	115-0270	6	10,20,20,101.2,201.5,291.8	0-300	
115-0263	115-0267	115-0271	12	10,20,20,41.2,51.2,81.5,101.2, 121.5,121.8,191.8,201.5,291.8	0-125,0-150 0-200,0-300	

STEEL INCH GAGE BLOCK SET



Grade 2	Grade 3	Grade B	Number
115-0272	115-0275	115-0278	88
115-0273	115-0276	115-0279	81
115-0274	115-0277	115-0280	36

Number	Length	Increment	Pieces	Standard
88	.100025-.100075"	.000025"	3	GGG-G-15c GGG-G-15a
	.0625-.109375"	.15625"	4	
	.1001-.1009"	.0001"	9	
	.101-.149"	.001"	49	
	.050-.950"	.050"	19	
	1-4"	1"	4	
81	.1001-.1009"	.0001"	9	GGG-G-15c GGG-G-15a
	.101-.149"	.001"	49	
	.050-.950"	.050"	19	
	1-4"	1"	4	
36	.050"	-	1	GGG-G-15c GGG-G-15a
	.1001-.1009"	.0001"	9	
	.101-.109"	.001"	9	
	.110-.190"	.01"	9	
	.100-.500"	.10"	5	
	1,2,4"	-	3	

STEEL LARGE SIZE GAGE BLOCK SET



Grade 0	Grade 1	Grade 2	Number	Block Size	Increment	Standard
115-0281	115-0284	115-0287	8	125,150,175,200,250,300,400,500mm	/	GB/T6093
115-0282	115-0285	115-0288	8	25, 50, 75, 100, 125, 150, 175, 200mm	/	GB/T6093
115-0283	115-0286	115-0289	5	600-1000mm	100mm	GB/T6093

Remarks:

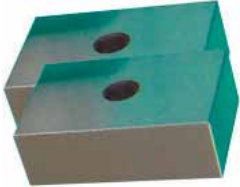
1. Single piece Gage Block can be supplied in large quantity.
2. The sizes and the numbers of the sets can be changed as the customers order.
3. Ceramic Gage Blocks are also available to supply.

1-2-3 BLOCK Precision Ground Coarse Hardened 1-2-3 Blocks-Five 3/8"-16 tapped holes are provided for clamping operation



Order No.	Specification	Parallel Range	Squareness	Size Range	Hole	Hardend
115-0300	1"-2"-3"	0.0002"	0.0003"/1"	±0.0005"	23	HRC55-62
115-0301				±0.0002"		
115-0302				±0.0002"		
115-0303				+0.0003"/0		
115-0304				0.0001"/1"		

1-2-3 BLOCK MATCHED PAIR Precision Ground Coarse Hardened 1-2-3 Blocks



Order No.	Specification	Parallel Range	Squareness	Size Range	Hole	Hardend
115-0305	1"-2"-3"	0.0002"	0.0003"/1"	±0.0002"	0	HRC55-62
115-0306				+0.0003"/0	1	
115-0307				±0.0002"	0	
115-0308				+0.0003"/0	1	

1-2-3 BLOCK MATCHED PAIR Precision Ground Coarse Hardened 1-2-3 Blocks-Five 5/16"-18 tapped holes for clamping operation

Order No.	Specification	Parallel Range	Squareness	Size Range	Hole	Hardend
115-0309	1"-2"-3"	0.0002"	0.0003"/1"	±0.0002"	11	HRC55-62
115-0310			0.0001"/1"	+0.0003"/0		



1-2-3 BLOCK MATCHED PAIR

Made of first grade tool steel, stabilized and through hardened 55 to 62 RC; Flatness and parallelism 0.005mm; To size ±0.005mm.



Order No.	Specification	Parallel Range	Size Range	Hole	Hardend
115-0311	25-50-75mm	0.005mm	±0.0125mm	23	HRC55-62
115-0312	25-50-75mm		±0.005mm		
115-0313	25-50-100mm		±0.0125mm		
115-0314	25-50-100mm		±0.005mm		
115-0315	50-100-150mm		±0.0125mm		
115-0316	50-100-150mm		±0.005mm		

2-3-4 BLOCK MATCHED AND MEASURE



Order No.	Specification	Parallel Range	Squareness	Size Range	Hole	Hardend
115-0317	2"-3"-4"	0.0003"	0.0003"/1"	±0.0002"	23	HRC55-62
115-0318				+0.0003"/0		
115-0319				+0.0003"/0		

2-4-6 BLOCK MATCHED AND MEASURE



Order No.	Specification	Parallel Range	Squareness	Size Range	Hole	Hardend
115-0320	2"-4"-6"	0.0003"	0.0003"/1"	±0.0003"	23	HRC55-62
115-0321				+0.0003"/0		
115-0322				+0.0003"/0		

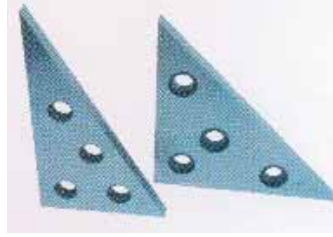
4-6-8 BLOCK MATCHED AND MEASURE



Order No.	Specification	Parallel Range	Squareness	Size Range	Hole	Hardend
115-0323	4"-6"-8"	0.0005"	0.0005"/1"	±0.0005"	23	HRC55-62
115-0324				±0.0005"		

2PC ANGLE PLATES

- Precision ground
 - Easy set-up
 - Four holes for easy mounting.
- 45°/90° 3"×3"×1/4"
30°/90° 2"×3-3/8"×1/4"



Order No.	Specification	Angle Range	Hardend
115-0330	30°/90°;45°/90°	±20"	HRC52-58
115-0331	30°/90°;45°/90°	±40"	HRC52-58
115-0332	30°/90°;45°/90°	±10'	HRC52-58
115-0333	30°/90°	±10'	HRC52-58
115-0334	45°/90°	±10'	HRC52-58

5PC,6PC ANGLE PLATES

- Precision ground
- Easy set-up
- Two holes for easy mounting.



Order No.	Specification	Angle Range	Hardend
115-0335	1/2°,1°,2°,3°,4°,5°	±10'	HRC40-45
115-0336	6°,7°,8°,9°,10°	±10'	HRC40-45

8PC,9PC ANGLE PLATES

- Precision ground
- Easy set-up



Order No.	Size	Specification	Angle Range	Hardend
115-0073	2-3/4"×1-3/16"×5/64" 3"×1-3/16"×1-3/16"	1°,2°,3°,4°, 5°,10°,15°,30°	±1'	HRC45-50
115-0072	4"×1-1/2"×3/16" 4"×1-1/2"×1-1/2"	1°,2°,3°,4°, 5°,10°,15°,30°		
115-0074		1/2°		

10PC,12PC ANGLE PLATES

- Precision ground
- Easy set-up



Order No.	Size	Specification	Angle Range	Hardend
115-0070	3"×1/4"	1°,2°,3°,4°,5°,10°, 15°,20°,25°,30°	±20"	HRC52-58
115-0075		1/4°,1/2°,1°,2°,3°,4°,5°, 10°,15°,20°,25°,30°		

17PC ANGLE PLATES

- Precision ground
- Easy set-up



Order No.	Size	Specification	Angle Range	Hardend
115-0071	3"×1/4"	0°,1/4°,1/2°,1°,2°,3°, 4°,5°,10°,15°,20°,25°, 30°,35°,40°,45°,0°	±20"	HRC52-58

CYLINDRICAL SQUARE

- Use in surface plates as 90°, reference angle
- Used for checking square, height gages and many instruments
- The square are hardened and the ends are lapped to 90° angular accuracy with the cylinders as follows:6" square to 0.00010" and 12" square to ±0.00015"

Order No.	Diameter	Height	Squarcness	Hardend
115-0076	3"	6"	+/-0.00010"	HRC55-62
115-0077	4"	12"	+/-0.00015"	



4 PCS COMBINATION SQUARE SET

- Contain Chrome Blade Type, Reversible Protractor, Center Head, Square Head.

Order No.	Length of blade	Graduation
TY02-16	300mm/12"	Double side with 4 graduation; 1.0mm/1/64"&0.5mm/1/32"



1/32" 20 PAIR PARALLEL SET

Order No.	Specification Size	Tolerance of Size	Parallelism	Hardend
115-1075	1/32" T×(1/2",9/16",5/8",11/16",3/4", 13/16",7/8",15/16",1",1-1/16",1-1/8", 1-3/16",1-1/4",1-5/16",1-3/8",1-7/16", 1-1/2",1-9/16",1-5/8",1-11/16")H×6"L	±0.0002"	0.0001"	HRC50

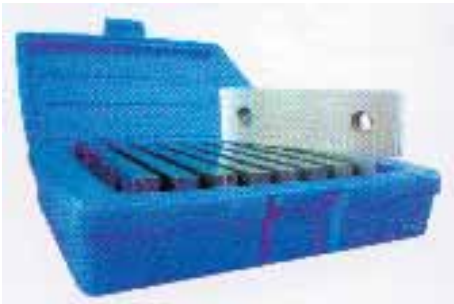


1/2" 8 PAIR PARALLEL SET



Order No.	Specification Size	Tolerance of Size	Parallelism	Hole Size	Hardend
115-0351	1/2"×7/8"×6"	±0.0002"	0.0002"	5/16"	HRC55-62
	1/2"×1"×6"			5/16"	
	1/2"×1-1/8"×6"			3/8"	
	1/2"×1-1/4"×6"			3/8"	
	1/2"×1-3/8"×6"			7/16"	
	1/2"×1-1/2"×6"			7/16"	
	1/2"×1-5/8"×6"			1/2"	
	1/2"×1-3/4"×6"			1/2"	

1/4" 9 PAIR PARALLEL SET



Order No.	Specification Size	Tolerance of Size	Parallelism	Hole Size	Hardend
115-0352	1/4"×3/4"×6"	±0.0002"	0.0002"	5/16"	HRC55-62
	1/4"×7/8"×6"			5/16"	
	1/4"×1"×6"			5/16"	
	1/4"×1-1/8"×6"			3/8"	
	1/4"×1-1/4"×6"			3/8"	
	1/4"×1-3/8"×6"			7/16"	
	1/4"×1-1/2"×6"			7/16"	
	1/4"×1-5/8"×6"			1/2"	
	1/4"×1-3/4"×6"			1/2"	

1/8" 10 PAIR PARALLEL SET



Order No.	Specification Size	Tolerance of Size	Parallelism	Hole Size	Hardend
115-1055	1/8"×1/2"×6"	±0.0002"	0.0002"	13/16"	HRC55-62
	1/8"×5/8"×6"			1/4"	
	1/8"×3/4"×6"			5/16"	
	1/8"×7/8"×6"			5/16"	
	1/8"×1"×6"			5/16"	
	1/8"×1-1/8"×6"			3/8"	
	1/8"×1-1/4"×6"			3/8"	
	1/8"×1-3/8"×6"			7/16"	
	1/8"×1-1/2"×6"			1/2"	
	1/8"×1-5/8"×6"			1/2"	

WAVY PARALLEL SET

Order No.	Specification Size	Tolerance of Size	Parallelism	Hardend
115-1020	0.012"×(1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2")×4-5/16"	±0.0002"	0.0002"	HRC40-45
115-0353	0.3mm×(9,11,13,15,17,19,21,23)×110mm	±0.005mm	0.005mm	
115-0354	0.3mm×(25,27,29,31,33,35,37,39)×110mm			



6 PCS ADJUSTABLE PARALLEL SET

- Length range: 3/8" to 2-1/4" closed. Quickly adjustable, and locked with set screws for micrometer measurement.
- For layout inspection, stop work, set-up etc.



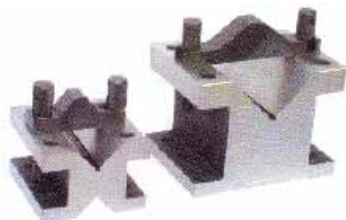
Order No.	Specification Size	Tolerance of Size	Parallelism	Hardend
115-1010	3/8"-1/2", 1/2"-11/16", 11/16"-15/16", 15/16"-1-5/16", 1-5/16"-1-3/4", 1-3/4"-2-1/4"	±0.0005"	0.0004"	HRC40-45

PAIR PARALLEL



Order No.	Specification Size	Tolerance of Size	Parallelism	Hardend
115-0360	1/4"×1/2"×6"	±0.0002"	0.0002"	HRC52-58
115-0361	1/4"×5/8"×6"			
115-0362	1/4"×3/4"×6"			
115-0363	3/8"×1/2"×6"			
115-0364	3/8"×3/4"×6"			
115-0365	1/2"×5/8"×6"			
115-0366	1/2"×3/4"×6"			
115-0367	1/2"×1"×6"			
115-0368	5/8"×7/8"×6"	±0.0004"	0.0003"	
115-0369	3/4"×1"×9"			
115-0370	3/4"×1-1/2"×9"			
115-0371	1/2"×3/4"×9"			
115-0372	1/2"×1"×9"	±0.0005"	0.0005"	
115-0373	3/4"×1"×12"			
115-0374	3/4"×1-1/4"×12"			
115-0375	1"×1-1/4"×12"			
115-0376	1"×1-1/2"×12"			
115-0377	1"×2"×12"			
115-0378	1-1/4"×1-1/2"×12"			
115-0379	1-1/4"×2"×12"			
115-0380	1-1/2"×2"×12"			

V-BLOCKS



All V-Blocks are parallel, square and centered within 0.0002 completely hardened and ground tool steel, wooden case.

Order No.	Specification	Accuracy	Hardend
115-0080	1-3/8"×1-3/8"×1-3/16"	//0.0002"; Squareness 0.0002"	HRC55-62
115-0081	2-3/8"×2-3/8"×2"		
115-0082	4-1/8"×4-1/8"×3-1/16"		
115-0083	3"×4"×3"		
115-0084	35×35×30mm	//0.005mm; Squareness 0.005mm	
115-0085	60×60×50mm		
115-0086	75×75×100mm		
115-0087	105×105×78mm		

V-BLOCKS & CLAMPS

- Designed for layout work or firmly holding circular workpiece during drilling, milling, and grinding.
- Made of hardened tool steel machined and ground to close tolerance.
- Sold in pair which includes 2 V-Blocks and 2 Clamps.



Order No.	Specification	Accuracy	Hardend
115-0340	40×30×50mm	//0.005mm; Squareness 0.005mm	HRC55-62
115-0341	35×35×45mm		
115-0342	50×40×50mm		
115-0344	41×35×44mm	Parallelism: 0.0002"; Squareness 0.0002"	
115-0346	1-5/8"×1-3/4"×2-3/4"		
115-0347	1-3/8"×1-5/8"×1-3/4"		
115-0348	2-1/2"×2-3/4"×2"	//0.005mm; Squareness 0.005mm	
115-0343	41×32×32mm		

METRIC PRECISION PARALLEL SETS



Order No.	Pairs	Specification Size	Parallel	Hardened
115-0381	6	4T×(10,15,20,25,30,35)H×120mmL	±0.005mm	HRC58-62
115-0382	7	8T×(10,15,20,25,30,35,40)H×120mmL		
115-0383	7	4T×(10,15,20,25,30,35,40)H×160mmL		
115-0384	7	8T×(10,15,20,25,30,35,40)H×160mmL		
115-0385	7	8T×(10,15,20,25,30,35,40)H×200mmL	±0.01mm	
115-0386	7	3T×(10,12)H×95mmL, 4T×14H×95mmL,6T×(18,24)H×95mmL,8T×(30,38)H×95mmL	±0.005mm	
115-0387	7	8.5T×(10,15,20,24,30)H×150mmL, 12.6T×(38,44)H×150mmL	±0.005mm	HRC58-62
115-0388	8	8T×(12,17,22,25,28,32,36,38)H×(120,160)mmL	±0.005mm	
115-0389	8	8T×(17,22,25,28,32,36,38,43)H×200mmL	±0.01mm	
115-0390	9	4T×(10,14,18,22,26,30,34,38,42)H×(100,160)mmL	±0.005mm	
115-0391	9	8.5T×(14,16,20,24,30,32,36,40,44)H×150mmL		
115-0392	9	4T×(10,14,18,22,26,30,34,38,42)H×160mmL		
115-0393	9	5×16×100mm,6×18×100mm,8×24×100mm,10×30×100mm, 12×36×150mm,14×48×150mm,18×60×150mm,22×62×150mm,31×15×200mm	±0.01mm	HRC58-62
115-0394	10	10×(14,16,18,20,22,24,26,28,30,32)×150mm	±0.005mm	
115-0395	12	10×(14,16,18,20,22,24,26,28,30,32,35,40)×(120,150)mm		
115-0396	14	(3,4,5)×(14,16,18,20,22,24,26,28,30,32,35,40,45,50)×150mm		
115-0397	20	2×(5,10,15,20)×100mm,3×(6,11,16,21)×100mm, 4×(7,12,17,22)×100mm,5×(8,13,18,23)×100mm,6×(9,14,19,24)×100mm	±0.01mm	
115-0398	24	8×(11,16,21,26,31,36)×(125,150)mm,10×(13,18,23,28,33,38)×(125,150)mm 12×(15,20,25,30,35,40)×(125,150)mm, 14×(17,22,27,32,37,42)×(125,150)mm		

4 PAIR PARALLEL SET



Order No.	Specification Size	Tolerance of Size	Parallelism	Hole Size	Hardend
115-1045	1/2"×1"×6"	±0.0002"	0.0002"	5/16"	HRC55-62
	1/2"×1-1/4"×6"			3/8"	
	1/2"×1-1/2"×6"			7/16"	
	1/2"×1-3/4"×6"			1/2"	
115-1040	3/16"×1"×6"	±0.0002"	0.0002"	5/16"	HRC55-62
	3/16"×1-1/4"×6"			3/8"	
	3/16"×1-1/2"×6"			7/16"	
	3/16"×1-3/4"×6"			1/2"	
115-1050	1/2"×1-1/2"×6"	±0.0002"	0.0002"	7/16"	HRC55-62
	1/2"×1-3/4"×6"			1/2"	
	3/16"×1"×6"			5/16"	
	3/16"×1-1/4"×6"			3/8"	

5/32" 4 & 5 PAIR PARALLEL SETS



Order No.	Specification Size	Tolerance of Size	Parallelism	Hole Size	Hardend
115-1030	5/32"×1/2"×3-1/2"	±0.0002"	0.0002"	1/4"	HRC50
	5/32"×5/8"×3-1/2"				
	5/32"×3/4"×3-1/2"				
	5/32"×7/8"×3-1/2"				
115-1035	5/32"×1"×3-1/2"				



Features:

1. Protection level: IP65.
2. Carbide measuring faces. Painted frames.
3. Criterion: DIN863/1, DIN40050/IEC529
4. Resolution of digit: 0.001mm/0.00005"
5. Resolution of micrometer head: 0.01mm(metric). 0.0001" (inch).
6. Ratchet stop and ratchet friction thimble.

Electronic outside micrometer

Metric			Inch			
Type A	Type B		Type A	Type B		
Order No.	Order No.	Range	Order No.	Order No.	Range	Accuracy
106-4001	106-4013	0-25mm	106-4025	106-4037	0-1"	0.004mm
106-4002	106-4014	25-50mm	106-4026	106-4038	1"-2"	0.004mm
106-4003	106-4015	50-75mm	106-4027	106-4039	2"-3"	0.005mm
106-4004	106-4016	75-100mm	106-4028	106-4040	3"-4"	0.005mm
106-4005	106-4017	100-125mm	106-4029	106-4041	4-5"	0.006mm
106-4006	106-4018	125-150mm	106-4030	106-4042	5-6"	0.006mm
106-4007	106-4019	150-175mm	106-4031	106-4043	6-7"	0.007mm
106-4008	106-4020	175-200mm	106-4032	106-4044	7-8"	0.007mm
106-4009	106-4021	200-225mm	106-4033	106-4045	8-9"	0.008mm
106-4010	106-4022	225-250mm	106-4034	106-4046	9-10"	0.008mm
106-4011	106-4023	250-275mm	106-4035	106-4047	10-11"	0.009mm
106-4012	106-4024	275-300mm	106-4036	106-4048	11"-12"	0.009mm

IP54	Type A	Type B
RS232 output	√	×
Power on/off	√	√
Abs. and inc. conversion	√	√
Metric/inch conversion	√	×
Data output	√	×
Origin data set	√	√
Battery	SR44	SR44
Clock	√	×
Auto power off	√	√
Power consumption	less 35uA	less35uA
Connecting cable	P1102	×



Features:

1. Protection level: IP65.
2. Carbide measuring faces. Painted frames.
3. Criterion: DIN863/1, DIN40050/IEC529
4. Resolution of digit: 0.001mm/0.00005"
5. Resolution of micrometer head: 0.01mm(metric). 0.0001" (inch).
6. Ratchet stop and ratchet friction thimble.

Electronic outside micrometer

Metric			Inch			
Type A	Type B		Type A	Type B		
Order No.	Order No.	Range	Order No.	Order No.	Range	Accuracy
106-4049	106-4061	0-25mm	106-4073	106-4085	0-1"	0.001mm
106-4050	106-4062	25-50mm	106-4074	106-4086	1"-2"	0.001mm
106-4051	106-4063	50-75mm	106-4075	106-4087	2"-3"	0.001mm
106-4052	106-4064	75-100mm	106-4076	106-4088	3"-4"	0.002mm
106-4053	106-4065	100-125mm	106-4077	106-4089	4-5"	0.002mm
106-4054	106-4066	125-150mm	106-4078	106-4090	5-6"	0.002mm
106-4055	106-4067	150-175mm	106-4079	106-4091	6-7"	0.003mm
106-4056	106-4068	175-200mm	106-4080	106-4092	7-8"	0.003mm
106-4057	106-4069	200-225mm	106-4081	106-4093	8-9"	0.003mm
106-4058	106-4070	225-250mm	106-4082	106-4094	9-10"	0.004mm
106-4059	106-4071	250-275mm	106-4083	106-4095	10-11"	0.004mm
106-4060	106-4072	275-300mm	106-4084	106-4096	11"-12"	0.004mm

IP65	Type A	Type B
RS232 output	√	×
Power on/off	√	√
Abs. and inc. conversion	√	√
Metric/inch conversion	√	×
Data output	√	×
Origin data set	√	√
Battery	SR44	SR44
Clock	√	×
Auto power off	√	√
Power consumption	less 35uA	less35uA
Connecting cable	P1102	×



Electronic outside micrometers set

Metric		IP54	Inch		IP54	
Type A	Type B		Type A	Type B		
Order No.	Order No.	Range	Order No.	Order No.	Range	Pieces
106-4097	106-4100	0-75mm	106-4103	106-4106	0-3"	3
106-4098	106-4101	0-100mm	106-4104	106-4107	0-4"	4
106-4099	106-4102	0-150mm	106-4105	106-4108	0-6"	6



Electronic outside micrometers set

Metric IP65			Inch IP54			
Type A	Type B		Type A	Type B		
Order No.	Order No.	Range	Order No.	Order No.	Range	Pieces
106-4109	106-4112	0-75mm	106-4115	106-4118	0-3"	3
106-4110	106-4113	0-100mm	106-4116	106-4119	0-4"	4
106-4111	106-4114	0-150mm	106-4117	106-4120	0-6"	6

Electronic outside micrometer

Features:

1. Protection level: IP54.
2. Chrome-plated or painted frame. Carbide measuring faces.
3. Criterion: DIN863/1, DIN40050/IEC529
4. Resolution: 0.001mm/0.00005"
5. Double measuring forces.

Metric			Inch			
Chrome-plated frame	Painted frame		Chrome-plated frame	Painted frame		
Order No.	Order No.	Range	Order No.	Order No.	Range	Accuracy
106-4121	106-4129	0-25mm	106-4137	106-4145	0-1"	0.004mm
106-4122	106-4130	25-50mm	106-4138	106-4146	1"-2"	0.004mm
106-4123	106-4131	50-75mm	106-4139	106-4147	2"-3"	0.005mm
106-4124	106-4132	75-100mm	106-4140	106-4148	3"-4"	0.005mm
106-4125	106-4133	100-125mm	106-4141	106-4149	4-5"	0.006mm
106-4126	106-4134	125-150mm	106-4142	106-4150	5-6"	0.006mm
106-4127	106-4135	150-175mm	106-4143	106-4151	6-7"	0.007mm
106-4128	106-4136	175-200mm	106-4144	106-4152	7-8"	0.007mm

IP54	
RS232 output	✓
Power on/off	✓
Abs. and inc. conversion	✓
Metric/inch conversion	✓
Data output	✓
Origin data set	✓
Battery	SR44
Clock	✓
Auto power off	✓
Power consumption	less 35uA
Connecting cable	P1103/P1104

Electronic outside micrometers set



Metric			Inch			
Chrome-plated frame	Painted frame		Chrome-plated frame	Painted frame		
Order No.	Order No.	Range	Order No.	Order No.	Range	Pieces
106-4153	106-4157	0-75mm	106-4161	106-4165	0-3"	3
106-4154	106-4158	0-100mm	106-4162	106-4166	0-4"	4
106-4155	106-4159	0-150mm	106-4163	106-4167	0-6"	6
106-4156	106-4160	0-200mm	106-4164	106-4168	0-8"	8



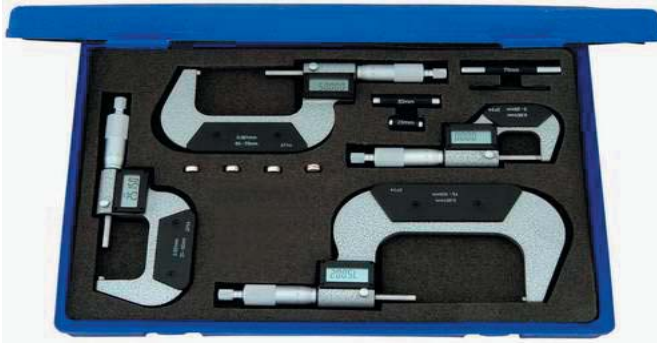
Features:

1. Protection level: IP54.
2. Carbide measuring faces. Painted frames.
3. Criterion: DIN863/1, DIN40050/IEC529
4. Resolution of digit: 0.001mm/0.00005"
5. Resolution of micrometer head: 0.01mm(metric).
6. Resolution of micrometer head: 0.0001" (inch).

IP54	
Power on/off	×
Abs. and inc. conversion	×
Metric/inch conversion	✓
Data output	×
Origin data set	✓
Battery	SR44
Auto power off	✓
Power consumption	less 35uA

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4169	0-25mm	106-4181	0-1"	0.004mm
106-4170	25-50mm	106-4182	1"-2"	0.004mm
106-4171	50-75mm	106-4183	2"-3"	0.005mm
106-4172	75-100mm	106-4184	3"-4"	0.005mm
106-4173	100-125mm	106-4185	4-5"	0.006mm
106-4174	125-150mm	106-4186	5-6"	0.006mm
106-4175	150-175mm	106-4187	6-7"	0.007mm
106-4176	175-200mm	106-4188	7-8"	0.007mm
106-4177	200-225mm	106-4189	8-9"	0.008mm
106-4178	225-250mm	106-4190	9-10"	0.008mm
106-4179	250-275mm	106-4191	10-11"	0.009mm
106-4180	275-300mm	106-4192	11"-12"	0.009mm

Electronic outside micrometers set



Electronic outside micrometer
Single function key



Electronic outside micrometer
Double function key



Features:

1. Easy operation.
2. Carbide measuring faces.
3. Criterion: DIN863/1, DIN40050/IEC529
4. Resolution: 0.001mm/0.00005"
5. Double measuring forces.
6. Ratchet friction thimble

Electronic outside micrometers set



Order No.	Range	Order No.	Range	Pieces
106-4193	0-75mm	106-4196	0-3"	3
106-4194	0-100mm	106-4197	0-4"	4
106-4195	0-150mm	106-4198	0-6"	6

Metric		Inch			
Order No.	Range	Order No.	Range	Accuracy	Resolution
106-4199	0-25mm	106-4207	0-1"	0.004mm	0.001mm
106-4200	25-50mm	106-4208	1"-2"	0.004mm	0.001mm
106-4201	50-75mm	106-4209	2"-3"	0.005mm	0.001mm
106-4202	75-100mm	106-4210	3"-4"	0.005mm	0.001mm
106-4203	100-125mm	106-4211	4-5"	0.006mm	0.001mm
106-4204	125-150mm	106-4212	5-6"	0.006mm	0.001mm
106-4205	150-175mm	106-4213	6-7"	0.007mm	0.001mm
106-4206	175-200mm	106-4214	7-8"	0.007mm	0.001mm

Metric		Inch			
Order No.	Range	Order No.	Range	Accuracy	Resolution
106-4215	0-25mm	106-4223	0-1"	0.004mm	0.001mm
106-4216	25-50mm	106-4224	1"-2"	0.004mm	0.001mm
106-4217	50-75mm	106-4225	2"-3"	0.005mm	0.001mm
106-4218	75-100mm	106-4226	3"-4"	0.005mm	0.001mm
106-4219	100-125mm	106-4227	4-5"	0.006mm	0.001mm
106-4220	125-150mm	106-4228	5-6"	0.006mm	0.001mm
106-4221	150-175mm	106-4229	6-7"	0.007mm	0.001mm
106-4222	175-200mm	106-4230	7-8"	0.007mm	0.001mm

Metric			
Single function key	Double function keys	Range	Pieces
106-4231	106-4237	0-75mm	3
106-4232	106-4238	0-100mm	4
106-4233	106-4239	0-150mm	6
Inch		Range	Pieces
106-4234	106-4240	0-3"	3
106-4235	106-4243	0-4"	4
106-4236	106-4244	0-6"	6

	Single function key	Double function keys
Power on/off	√	√
Abs. and inc. conversion	×	√
Metric/inch conversion	×	√
Data output	×	×
Origin data set	√	√
Battery	SR44	SR44
Auto power off	√	√
Power consumption	less 35uA	less 35uA

Electronic outside micrometer



Metric			Inch				
Order No.			Order No.				
Chrome-plated frame	Painted frame	Range	Chrome-plated frame	Painted frame	Range	Accuracy	
106-4245	106-4253	0-25mm	106-4261	106-4269	0-1"	0.004mm	
106-4246	106-4254	25-50mm	106-4262	106-4270	1"-2"	0.004mm	
106-4247	106-4255	50-75mm	106-4263	106-4271	2"-3"	0.005mm	
106-4248	106-4256	75-100mm	106-4264	106-4272	3"-4"	0.005mm	
106-4249	106-4257	100-125mm	106-4265	106-4273	4-5"	0.006mm	
106-4250	106-4258	125-150mm	106-4266	106-4274	5-6"	0.006mm	
106-4251	106-4259	150-175mm	106-4267	106-4275	6-7"	0.007mm	
106-4252	106-4260	175-200mm	106-4268	106-4276	7-8"	0.007mm	

Electronic outside micrometers set



IP54	
Power on/off	✓
Abs. and inc. conversion	✓
Metric/inch conversion	✓
Data output	✓
Origin data set	✓
Battery	SR44
Auto power off	✓
Power consumption	less 35uA
Connecting cable	P1102

Metric			
Order No.			
Chrome-plated frame	Painted frame	Range	Pieces
106-4277	106-4280	0-75mm	3
106-4278	106-4281	0-100mm	4
106-4279	106-4282	0-150mm	6
Inch			
Order No.			
Chrome-plated frame	Painted frame	Range	Pieces
106-4283	106-4286	0-3"	3

Double display digit micrometer



Type A Chrome-plated frame

Type B Chrome-plated frame

Metric		Inch					
Type A	Type B	Type A	Type B				
Order No.	Order No.	Range	Order No.	Order No.	Range	Accuracy	
106-4289	106-4297	0-30mm	106-4305	106-4313	0-1.2"	0.004mm	
106-4290	106-4298	25-55mm	106-4306	106-4314	1-2.2"	0.004mm	
106-4291	106-4299	50-80mm	106-4307	106-4315	2-3.2"	0.005mm	
106-4292	106-4300	75-105mm	106-4308	106-4316	3-4.2"	0.005mm	
106-4293	106-4301	100-130mm	106-4309	106-4317	4-5.2"	0.006mm	
106-4294	106-4302	125-155mm	106-4310	106-4318	5-6.2"	0.006mm	
106-4295	106-4303	150-180mm	106-4311	106-4319	6-7.2"	0.007mm	
106-4296	106-4304	175-205mm	106-4312	106-4320	7-8.2"	0.007mm	

Features:

1. Protection level: IP54.
2. Double display. LCD direction can be changed by key for easy reading in all kinds of measuring conditions and left or right hand using.
3. Carbide measuring faces.
4. Criterion: DIN863/1, DIN40050/IEC529
5. Resolution: 0.001mm/0.00005"
6. Ratchet friction thimble.
7. Resist water splash. Resist splash.



Fine cast frame

IP54	
RS232 output	✓
Power on/off	✓
Abs. and inc. conversion	✓
Metric/inch conversion	✓
Data output	✓
Origin data set	✓
Battery	CR2032
Auto power off	✓
Power consumption	less 50uA
Connecting cable	P1101

Metric		Inch			
Order No.	Range	Order No.	Range	Accuracy	
106-4321	0-30mm	106-4333	0-1.2"	0.004mm	
106-4322	20-50mm	106-4334	0.8-2"	0.004mm	
106-4323	45-75mm	106-4335	1.8-3"	0.005mm	
106-4324	70-100mm	106-4336	2.8-4"	0.005mm	
106-4325	95-125mm	106-4337	3.8-5"	0.006mm	
106-4326	120-150mm	106-4338	4.8-6"	0.006mm	
106-4327	145-175mm	106-4339	5.8-7"	0.007mm	
106-4328	170-200mm	106-4340	6.8-8"	0.007mm	
106-4329	195-225mm	106-4341	7.8-9"	0.008mm	
106-4330	220-250mm	106-4342	8.8-10"	0.008mm	
106-4331	245-275mm	106-4343	9.8-11"	0.009mm	
106-4332	270-300mm	106-4344	10.8-12"	0.009mm	

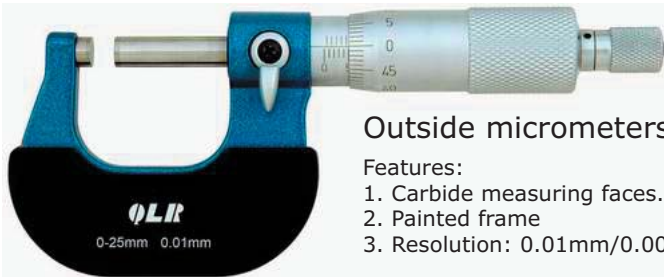
Double display digit micrometers set



Double display digit micrometers

Features:

1. Protection level: IP54.
2. Travel of micrometer head: 50mm/2". Non-Rotating spindle.
3. Carbide measuring faces. Chrome-plated frame.
4. Criterion: DIN863/1, DIN40050/IEC529
5. Resolution: 0.001mm/0.00005"
6. Ratchet friction thimble.



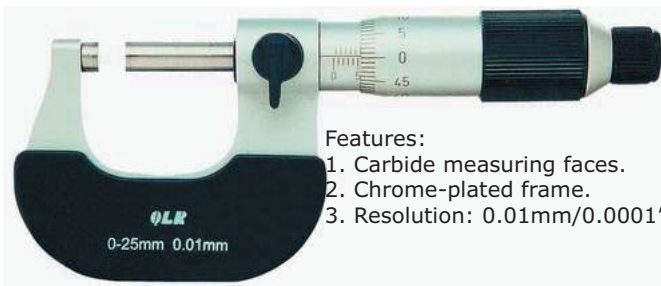
Outside micrometers

Features:

1. Carbide measuring faces.
2. Painted frame
3. Resolution: 0.01mm/0.0001"



Outside micrometers



Features:

1. Carbide measuring faces.
2. Chrome-plated frame.
3. Resolution: 0.01mm/0.0001"

Metric	Range	Inch	Range	Pieces
Order No.	Range	Order No.	Range	Pieces
106-4345	0-80mm	106-4348	0-3.2"	3
106-4346	0-105mm	106-4349	0-4.2"	4
106-4347	0-155mm	106-4350	0-6.2"	6
Metric	Range	Inch	Range	Pieces
Order No.	Range	Order No.	Range	Pieces
106-4351	0-80mm	106-4354	0-3.2"	3
106-4352	0-105mm	106-4355	0-4.2"	4
106-4353	0-155mm	106-4356	0-6.2"	6
Metric	Range	Inch	Range	Pieces
Order No.	Range	Order No.	Range	Pieces
106-4357	0-80mm	106-4361	0-3"	3
106-4358	0-105mm	106-4362	0-4"	4
106-4359	0-155mm	106-4363	0-6"	6
106-4360	145-300mm	106-4364	5.8-12"	6

Metric	Range	Inch	Range	Accuracy
Order No.	Range	Order No.	Range	Accuracy
106-4365	0-50mm	106-4369	0-2"	0.005mm
106-4366	50-100mm	106-4370	2-4"	0.006mm
106-4367	100-150mm	106-4371	4-6"	0.007mm
106-4368	150-200mm	106-4372	6-8"	0.008mm

Metric	Range	Inch	Range	Accuracy
Order No.	Range	Order No.	Range	Accuracy
106-4373	0-25mm	106-4381	0-1"	0.004mm
106-4374	25-50mm	106-4382	1"-2"	0.004mm
106-4375	50-75mm	106-4383	2"-3"	0.005mm
106-4376	75-100mm	106-4384	3"-4"	0.005mm
106-4377	100-125mm	106-4385	4-5"	0.006mm
106-4378	125-150mm	106-4386	5-6"	0.006mm
106-4379	150-175mm	106-4387	6-7"	0.007mm
106-4380	175-200mm	106-4388	7-8"	0.007mm

Outside micrometers set

Metric	Range	Inch	Range	Pieces
Order No.	Range	Order No.	Range	Pieces
106-4389	0-75mm	106-4393	0-3"	3
106-4390	0-100mm	106-4394	0-4"	4
106-4391	0-150mm	106-4395	0-6"	6
106-4392	0-200mm	106-4396	0-8"	8

Metric	Range	Inch	Range	Accuracy
Order No.	Range	Order No.	Range	Accuracy
106-4397	0-25mm	106-4405	0-1"	0.004mm
106-4398	25-50mm	106-4406	1"-2"	0.004mm
106-4399	50-75mm	106-4407	2"-3"	0.005mm
106-4400	75-100mm	106-4408	3"-4"	0.005mm
106-4401	100-125mm	106-4409	4-5"	0.006mm
106-4402	125-150mm	106-4410	5-6"	0.006mm
106-4403	150-175mm	106-4411	6-7"	0.007mm
106-4404	175-200mm	106-4412	7-8"	0.007mm



Outside micrometers sets

Metric		Inch		
Order No.	Range	Order No.	Range	Pieces
106-4413	0-75mm	106-4417	0-3"	3
106-4414	0-100mm	106-4418	0-4"	4
106-4415	0-150mm	106-4419	0-6"	6
106-4416	0-200mm	106-4420	0-8"	8



Outside micrometers

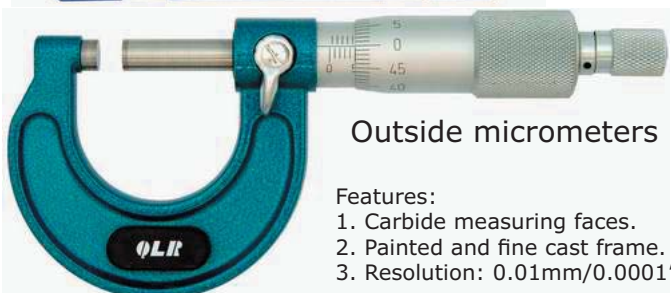
- Features:
1. Carbide measuring faces.
 2. Painted and fine cast frame.
 3. Resolution: 0.01mm/0.0001"

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4421	0-25mm	106-4433	0-1"	0.004mm
106-4422	25-50mm	106-4434	1"-2"	0.004mm
106-4423	50-75mm	106-4435	2"-3"	0.005mm
106-4424	75-100mm	106-4436	3"-4"	0.005mm
106-4425	100-125mm	106-4437	4-5"	0.006mm
106-4426	125-150mm	106-4438	5-6"	0.006mm
106-4427	150-175mm	106-4439	6-7"	0.007mm
106-4428	175-200mm	106-4440	7-8"	0.007mm
106-4429	200-225mm	106-4441	8-9"	0.008mm
106-4430	225-250mm	106-4442	9-10"	0.008mm
106-4431	250-275mm	106-4443	10-11"	0.009mm
106-4432	275-300mm	106-4444	11"-12"	0.009mm



Outside micrometers set

Metric		Inch		
Order No.	Range	Order No.	Range	Pieces
106-4445	0-75mm	106-4450	0-3"	3
106-4446	0-100mm	106-4451	0-4"	4
106-4447	0-150mm	106-4452	0-6"	6
106-4448	150-300mm	106-4453	6-12"	6
106-4449	0-300mm	106-4454	0-12"	12



Outside micrometers

- Features:
1. Carbide measuring faces.
 2. Painted and fine cast frame.
 3. Resolution: 0.01mm/0.0001"

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4455	0-25mm	106-4461	0-1"	0.004mm
106-4456	25-50mm	106-4462	1"-2"	0.004mm
106-4457	50-75mm	106-4463	2"-3"	0.005mm
106-4458	75-100mm	106-4464	3"-4"	0.005mm
106-4459	100-125mm	106-4465	4-5"	0.006mm
106-4460	125-150mm	106-4466	5-6"	0.006mm



Outside micrometers set

Metric		Inch		
Order No.	Range	Order No.	Range	Pieces
106-4467	0-75mm	106-4470	0-3"	3
106-4468	0-100mm	106-4471	0-4"	4
106-4469	0-150mm	106-4472	0-6"	6

Micrometer with anvil attachment

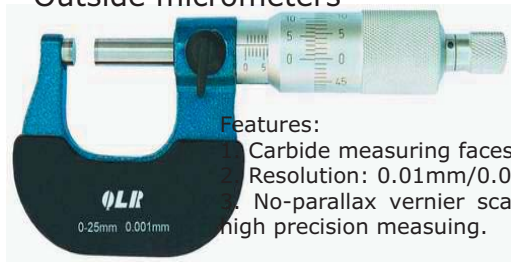
- Features:
1. Carbide measuring faces. Chrome-plated frame.
 2. Cap-type anvil attachment for a wide range.
 3. Resolution: 0.01mm/0.0001"



Ratchet stop

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4473	50mm	106-4474	0-2"	0.004mm

Outside micrometers



Features:
 1. Carbide measuring faces.
 2. Resolution: 0.01mm/0.0001"
 3. No-parallax vernier scale for high precision measuring.

Metric			Inch		
Order No.			Order No.		
Chrome-plated frame	Painted frame	Range	Chrome-plated frame	Painted frame	Accuracy
106-4475	106-4483	0-25mm	106-4491	106-4499	0-1" 0.004mm
106-4476	106-4484	25-50mm	106-4492	106-4500	1"-2" 0.004mm
106-4477	106-4485	50-75mm	106-4493	106-4501	2"-3" 0.005mm
106-4478	106-4486	75-100mm	106-4494	106-4502	3"-4" 0.005mm
106-4479	106-4487	100-125mm	106-4495	106-4503	4-5" 0.006mm
106-4480	106-4488	125-150mm	106-4496	106-4504	5-6" 0.006mm
106-4481	106-4489	150-175mm	106-4497	106-4505	6-7" 0.007mm
106-4482	106-4490	175-200mm	106-4498	106-4506	7-8" 0.007mm

Outside micrometers set



Metric			Inch		
Order No.			Order No.		
Chrome-plated frame	Painted frame	Range	Chrome-plated frame	Painted frame	Pieces
106-4507	106-4511	0-25mm	106-4515	106-4519	0-1" 3
106-4508	106-4512	25-50mm	106-4516	106-4520	1"-2" 4
106-4509	106-4513	50-75mm	106-4517	106-4521	2"-3" 6
106-4510	106-4514	75-100mm	106-4518	106-4522	3"-4" 8

Outside micrometers



Metric			Inch		
Order No.			Order No.		
Chrome-plated frame	Painted frame	Range	Chrome-plated frame	Painted frame	Range Accuracy
106-4523	106-4531	0-25mm	106-4539	106-4547	0-1" 0.004mm
106-4524	106-4532	25-50mm	106-4540	106-4548	1"-2" 0.004mm
106-4525	106-4533	50-75mm	106-4541	106-4549	2"-3" 0.005mm
106-4526	106-4534	75-100mm	106-4542	106-4550	3"-4" 0.005mm
106-4527	106-4535	100-125mm	106-4543	106-4551	4-5" 0.006mm
106-4528	106-4536	125-150mm	106-4544	106-4552	5-6" 0.006mm
106-4529	106-4537	150-175mm	106-4545	106-4553	6-7" 0.007mm
106-4530	106-4538	175-200mm	106-4546	106-4554	7-8" 0.007mm

Outside micrometers set



Metric			Inch		
Order No.			Order No.		
Chrome-plated frame	Painted frame	Range	Chrome-plated frame	Painted frame	Range Pieces
106-4555	106-4559	0-75mm	106-4563	106-4567	0-3" 3
106-4556	106-4560	0-100mm	106-4564	106-4568	0-4" 4
106-4557	106-4561	0-150mm	106-4565	106-4569	0-6" 6
106-4558	106-4562	0-200mm	106-4566	106-4570	0-8" 8

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4571	0-25mm	106-4583	0-1"	0.004mm
106-4572	25-50mm	106-4584	1"-2"	0.004mm
106-4573	50-75mm	106-4585	2"-3"	0.005mm
106-4574	75-100mm	106-4586	3"-4"	0.005mm
106-4575	100-125mm	106-4587	4-5"	0.006mm
106-4576	125-150mm	106-4588	5-6"	0.006mm
106-4577	150-175mm	106-4589	6-7"	0.007mm
106-4578	175-200mm	106-4590	7-8"	0.007mm
106-4579	200-225mm	106-4591	8-9"	0.008mm
106-4580	225-250mm	106-4592	9-10"	0.008mm
106-4581	250-275mm	106-4593	10-11"	0.009mm
106-4582	275-300mm	106-4594	11"-12"	0.009mm

Digit outside micrometer



Ratchet stop

Features:
 1. Carbide measuring faces. Painted frame.
 2. Resolution: 0.01mm/0.0001"
 3. Mechanical digit counter for quick and error-free reading.
 4. Couler readout: 0.01mm/0.001"



Digit outside micrometers set

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4595	0-75mm	106-4600	0-3"	3
106-4596	0-100mm	106-4601	0-4"	4
106-4597	0-150mm	106-4602	0-6"	6
106-4598	150-300mm	106-4603	6-12"	6
106-4599	0-300mm	106-4604	0-12"	12



U-digit outside micrometers

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4605	0-25mm	106-4613	0-1"	0.004mm
106-4606	25-50mm	106-4614	1"-2"	0.004mm
106-4607	50-75mm	106-4615	2"-3"	0.005mm
106-4608	75-100mm	106-4616	3"-4"	0.005mm
106-4609	100-125mm	106-4617	4-5"	0.006mm
106-4610	125-150mm	106-4618	5-6"	0.006mm
106-4611	150-175mm	106-4619	6-7"	0.007mm
106-4612	175-200mm	106-4620	7-8"	0.007mm

Features:

1. Carbide measuring faces. Painted frame.
2. Resolution: 0.001mm/0.0001"
3. High resolution mechanical digit counter for quick and error-free reading.
4. Micrometer head: 0.01mm/0.0001"



U-digit outside micrometers sets

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4621	0-75mm	106-4625	0-3"	3
106-4622	0-100mm	106-4626	0-4"	4
106-4623	0-150mm	106-4627	0-6"	6
106-4624	0-200mm	106-4628	0-8"	8

Features:

1. Carbide measuring faces. Painted frame.
2. Resolution: 0.01mm/0.0001".



Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4629	100-125mm	106-4637	4"-5"	0.006mm
106-4630	125-150mm	106-4638	5"-6"	0.006mm
106-4631	150-175mm	106-4639	6"-7"	0.007mm
106-4632	175-200mm	106-4640	7"-8"	0.007mm
106-4633	200-225mm	106-4641	8"-9"	0.008mm
106-4634	225-250mm	106-4642	9-10"	0.008mm
106-4635	250-275mm	106-4643	10-11"	0.009mm
106-4636	275-300mm	106-4644	11-12"	0.009mm



Outside micrometers set

Metric		Inch		
Order No.	Range	Order No.	Range	Pieces
106-4645	150-300mm	106-4647	6"-12"	6
106-4646	0-300mm	106-4648	0-12"	12



Outside micrometer

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4649	0-25mm	106-4657	0-1"	0.004mm
106-4650	25-50mm	106-4658	1"-2"	0.004mm
106-4651	50-75mm	106-4659	2"-3"	0.005mm
106-4652	75-100mm	106-4660	3"-4"	0.005mm
106-4653	100-125mm	106-4661	4-5"	0.006mm
106-4654	125-150mm	106-4662	5-6"	0.006mm
106-4655	150-175mm	106-4663	6-7"	0.007mm
106-4656	175-200mm	106-4664	7-8"	0.007mm

Features:

1. Carbide measuring faces. Chrome-plated frame.
2. Resolution: 0.001mm/0.0001"
3. Two group graduations for right and left hand using.

Slide anvil micrometers with dial indicator

Features:

1. Slide anvil with a dial indicator for wide measuring range and high measuring accuracy.
2. Anvil with dial indicator
3. Resolution of dial indicator: 0.01mm;0.0005"
4. Max measuring-force:10N; Travel of dial indicator: 5mm.
5. Protection level: IP54. Criterion: DIN40050/IEC529.



Resolution: 0.01mm/0.001"



Micrometer with interchangeable anvils



Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4665	0-100mm	106-4675	0-4"	0.006mm
106-4666	100-200mm	106-4676	4-8"	0.007mm
106-4667	200-300mm	106-4677	8-12"	0.008mm
106-4668	300-400mm	106-4678	12-16"	0.009mm
106-4669	400-500mm	106-4679	16-20"	0.010mm
106-4670	500-600mm	106-4680	20-24"	0.011mm
106-4671	600-700mm	106-4681	24-28"	0.012mm
106-4672	700-800mm	106-4682	28-32"	0.013mm
106-4673	800-900mm	106-4683	32-36"	0.014mm
106-4674	900-1000mm	106-4684	36-40"	0.015mm

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4685	0-100mm	106-4695	0-4"	0.006mm
106-4686	100-200mm	106-4696	4-8"	0.007mm
106-4687	200-300mm	106-4697	8-12"	0.008mm
106-4688	300-400mm	106-4698	12-16"	0.009mm
106-4689	400-500mm	106-4699	16-20"	0.010mm
106-4690	500-600mm	106-4700	20-24"	0.011mm
106-4691	600-700mm	106-4701	24-28"	0.012mm
106-4692	700-800mm	106-4702	28-32"	0.013mm
106-4693	800-900mm	106-4703	32-36"	0.014mm
106-4694	900-1000mm	106-4704	36-40"	0.015mm

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4705	0-100mm	106-4715	0-4"	0.006mm
106-4706	100-200mm	106-4716	4-8"	0.007mm
106-4707	200-300mm	106-4717	8-12"	0.008mm
106-4708	300-400mm	106-4718	12-16"	0.009mm
106-4709	400-500mm	106-4719	16-20"	0.010mm
106-4710	500-600mm	106-4720	20-24"	0.011mm
106-4711	600-700mm	106-4721	24-28"	0.012mm
106-4712	700-800mm	106-4722	28-32"	0.013mm
106-4713	800-900mm	106-4723	32-36"	0.014mm
106-4714	900-1000mm	106-4724	36-40"	0.015mm

Features:

1. Wide measuring range with adjustable anvil.
2. High accuracy interchangeable anvils enable that reading does not have to be reset when changing anvils.
3. Carbide-tripped measuring faces. Fine cast frame.
4. Pipe combined frame for light weight and high rigidity(over 200mm/8" range)
5. Protection level: IP54. Criterion: DIN40050/IEC529.
6. Ratchet stop

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4725	0-50mm	106-4727	0-2"	0.004mm
106-4726	50-100mm	106-4728	2-4"	0.005mm

Measuring Tools

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4749	0-150mm	106-4756	0-6"	0.006mm
106-4750	150-300mm	106-4757	6-12"	0.009mm
106-4751	300-450mm	106-4758	12-18"	0.011mm
106-4752	450-600mm	106-4759	18-24"	0.015mm
106-4753	600-750mm	106-4760	24-30"	0.016mm
106-4754	750-900mm	106-4761	30-36"	0.020mm
106-4755	900-1050mm	106-4762	36-42"	0.021mm

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4729	0-100mm	106-4739	0-4"	0.005mm
106-4730	100-200mm	106-4740	4-8"	0.007mm
106-4731	200-300mm	106-4741	8-12"	0.009mm
106-4732	300-400mm	106-4742	12-16"	0.011mm
106-4733	400-500mm	106-4743	16-20"	0.013mm
106-4734	500-600mm	106-4744	20-24"	0.015mm
106-4735	600-700mm	106-4745	24-28"	0.016mm
106-4736	700-800mm	106-4746	28-32"	0.018mm
106-4737	800-900mm	106-4747	32-36"	0.020mm
106-4738	900-1000mm	106-4748	36-40"	0.020mm

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4763	0-50mm	106-4765	0-2"	0.004mm
106-4764	50-100mm	106-4766	2-4"	0.005mm

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4767	0-100mm	106-4777	0-4"	0.005mm
106-4768	100-200mm	106-4778	4-8"	0.007mm
106-4769	200-300mm	106-4779	8-12"	0.009mm
106-4770	300-400mm	106-4780	12-16"	0.011mm
106-4771	400-500mm	106-4781	16-20"	0.013mm
106-4772	500-600mm	106-4782	20-24"	0.015mm
106-4773	600-700mm	106-4783	24-28"	0.016mm
106-4774	700-800mm	106-4784	28-32"	0.018mm
106-4775	800-900mm	106-4785	32-36"	0.020mm
106-4776	900-1000mm	106-4786	36-40"	0.020mm



- Features:
1. Double measuring forces.
 2. Steel-plated frame.

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4787	0-150mm	106-4794	0-6"	0.006mm
106-4788	150-300mm	106-4795	6-12"	0.009mm
106-4789	300-450mm	106-4796	12-18"	0.011mm
106-4790	450-600mm	106-4797	18-24"	0.015mm
106-4791	600-750mm	106-4798	24-30"	0.016mm
106-4792	750-900mm	106-4799	30-36"	0.020mm
106-4793	900-1050mm	106-4800	36-42"	0.021mm

Micrometer with interchangeable anvils

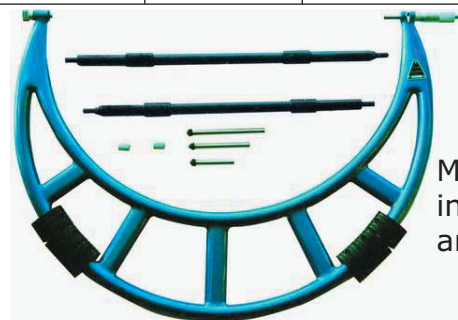


Ratchet stop

Features:

1. Within 300mm: steel-plated frame. Resolution: 0.01mm;0.0001".
2. Over 300mm: pipe combined frame. Resolution: 0.01mm;0.001".

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4805	0-100mm	106-4815	0-4"	0.005mm
106-4806	100-200mm	106-4816	4-8"	0.007mm
106-4807	200-300mm	106-4817	8-12"	0.009mm
106-4808	300-400mm	106-4818	12-16"	0.011mm
106-4809	400-500mm	106-4819	16-20"	0.013mm
106-4810	500-600mm	106-4820	20-24"	0.015mm
106-4811	600-700mm	106-4821	24-28"	0.016mm
106-4812	700-800mm	106-4822	28-32"	0.018mm
106-4813	800-900mm	106-4823	32-36"	0.020mm
106-4814	900-1000mm	106-4824	36-40"	0.020mm



Micrometer with interchangeable anvils

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4801	0-50mm	106-4803	0-2"	0.004mm
106-4802	50-100mm	106-4804	2-4"	0.005mm

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4825	0-150mm	106-4832	0-6"	0.006mm
106-4826	150-300mm	106-4833	6-12"	0.009mm
106-4827	300-450mm	106-4834	12-18"	0.011mm
106-4828	450-600mm	106-4835	18-24"	0.015mm
106-4829	600-750mm	106-4836	24-30"	0.016mm
106-4830	750-900mm	106-4837	30-36"	0.020mm
106-4831	900-1050mm	106-4838	36-42"	0.021mm

Micrometer with interchangeable anvils



Fine cast frame



Micrometer with adjustable anvils

Features:

1. Wide measuring range with adjustable anvil. High accuracy interchangeable anvils enable that reading does not have to be reset when changing anvils.
2. Carbide measuring faces. Painted frame.
3. Pipe combined frame for light weight and high quality.
4. Resolution: 0.01mm;0.001"

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4853	300-400mm	106-4860	12-16"	0.011mm
106-4854	400-500mm	106-4861	16-20"	0.013mm
106-4855	500-600mm	106-4862	20-24"	0.015mm
106-4856	600-700mm	106-4863	24-28"	0.016mm
106-4857	700-800mm	106-4864	28-32"	0.018mm
106-4858	800-900mm	106-4865	32-36"	0.020mm
106-4859	900-1000mm	106-4866	36-40"	0.020mm

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4867	1000-1200mm	106-4877	40-48"	0.020mm
106-4868	1200-1400mm	106-4878	48-56"	0.024mm
106-4869	1400-1600mm	106-4879	56-64"	0.028mm
106-4870	1600-1800mm	106-4880	64-72"	0.031mm
106-4871	1800-2000mm	106-4881	72-80"	0.034mm
106-4872	2000-2200mm	106-4882	80-88"	0.040mm
106-4873	2200-2400mm	106-4883	88-96"	0.044mm
106-4874	2400-2600mm	106-4884	96-104"	0.048mm
106-4875	2600-2800mm	106-4885	104-112"	0.052mm
106-4876	2800-3000mm	106-4886	112-120"	0.056mm

Features:

1. Can be used a GO/NG as gage by setting the upper and lower limits.
2. Carbide measuring faces. Painted frame.
3. Resolution: 0.002mm;0.0001"

Metric			Inch		
Order No.	Range	Accuracy	Order No.	Range	Accuracy
106-4935	0-25mm	0.003mm	106-4937	0-1"	0.00012"
106-4936	25-50mm	0.003mm	106-4938	1-2"	0.00012"

Features:

1. Resolution: 0.01mm;0.0001"

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4839	0-50mm	106-4846	0-2"	0.004mm
106-4840	50-100mm	106-4847	2-4"	0.005mm
106-4841	0-100mm	106-4848	0-4"	0.005mm
106-4842	100-200mm	106-4849	4-8"	0.007mm
106-4843	200-300mm	106-4850	8-12"	0.009mm
106-4844	0-150mm	106-4851	0-6"	0.006mm
106-4845	150-300mm	106-4852	6-12"	0.009mm



Features:

1. Similar to caliper in outside measurement.
2. Wide measuring range with adjustable anvil. High accuracy interchangeable anvils enable that reading does not have to be reset when changing anvils.
3. Carbide-tripped measuring faces.
4. Travel of micrometer head: 50mm; micrometer thread pitch: 1mm.
5. Standard collars: 50mm/2",100mm/4"
6. Resolution: 0.01mm;0.001"
7. Caliper-type pipe combined frame for light weight and high rigidity.

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4887	1000-1200mm	106-4897	40-48"	0.020mm
106-4888	1200-1400mm	106-4898	48-56"	0.024mm
106-4889	1400-1600mm	106-4899	56-64"	0.028mm
106-4890	1600-1800mm	106-4900	64-72"	0.031mm
106-4891	1800-2000mm	106-4901	72-80"	0.034mm
106-4892	2000-2200mm	106-4902	80-88"	0.040mm
106-4893	2200-2400mm	106-4903	88-96"	0.044mm
106-4894	2400-2600mm	106-4904	96-104"	0.048mm
106-4895	2600-2800mm	106-4905	104-112"	0.052mm
106-4896	2800-3000mm	106-4906	112-120"	0.056mm



Limit micrometers



Micrometer with dial indicator

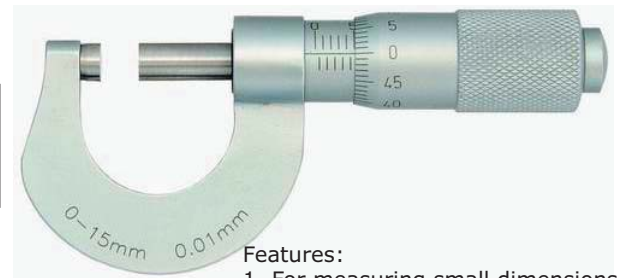
Features:

1. Direct GO/NG judgment for mass-produced parts.
2. Anvil retracting range: 8mm
3. Carbide measuring faces.
4. Resolution of micrometer head: 0.01mm;0.0001"
5. Resolution of dial indicator: 0.01mm;0.0005"

Metric			Inch			
Order No.	Painted frame	Range	Order No.	Painted frame	Range	Pieces
106-4907	106-4914	0-25mm	106-4921	106-4928	0-1"	0.004mm
106-4908	106-4915	25-50mm	106-4922	106-4929	1-2"	0.004mm
106-4909	106-4916	50-75mm	106-4923	106-4930	2-3"	0.005mm
106-4910	106-4917	75-200mm	106-4924	106-4931	3-4"	0.005mm
106-4911	106-4918	100-125mm	106-4925	106-4932	4-5"	0.006mm
106-4912	106-4919	125-150mm	106-4926	106-4933	5-6"	0.006mm
106-4913	106-4920	150-170mm	106-4927	106-4934	6-7"	0.007mm

Mini-micrometers

Metric			Inch		
Order No.	Range	Accuracy	Order No.	Range	Accuracy
106-4939	0-15mm	0.01mm	106-4940	0-0.6"	0.001"



Features:

1. For measuring small dimensions.
2. Portable with little size.

Indicator snap micrometer



Painted frame
Type A

Features:

1. Retractable anvil with a indicator for precision measurement of mass-produced parts.
2. Carbide measuring faces.
3. Indicator accuracy: 0.001mm/0.00005"

Metric			Inch		
Order No.	Type A	Range	Order No.	Type A	Range
106-4941	106-4945	0-25mm	106-4947	106-4951	0-1"
106-4942	106-4946	25-50mm	106-4948	106-4952	1-2"
106-4943		50-75mm	106-4949		2-3"
106-4944		75-100mm	106-4950		3-4"
Order No.	Type B	Range	Order No.	Type B	Range
106-4953	106-4954	0-25mm	106-4955	106-4956	0-1"



Painted frame
Type B



Features:

1. Protection level: IP54.
2. Direct GO/NG judgment for mass-produced parts.
3. Carbide measuring faces. Painted frame.
4. Measuring forces: 5-10N.

Indicator snap micrometer

Metric			Inch		
Order No.	Range	Indicator Accuracy	Order No.	Range	Indicator Accuracy
106-4957	0-25mm	0.001mm	106-4961	0-1"	0.001mm
106-4958	25-50mm	0.001mm	106-4962	1-2"	0.001mm
106-4959	50-75mm	0.001mm	106-4963	2-3"	0.001mm
106-4960	75-100mm	0.001mm	106-4964	3-4"	0.001mm

Inside micrometers with interchangeable anvils

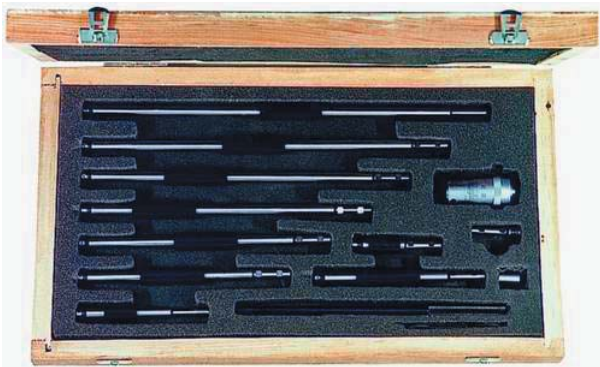


Features:

1. 65 degree or 55 degree V-shaped and cone-shaped anvils(interchangeable) are optional.
2. Dimensions of anvil-tail: 5x15mm
3. Supplied with a standard caliper gage for zero setting.
4. Resolution: 0.01mm;0.001"
5. Steel-ball-tipped anvils(interchangeable) also are optional for measuring over-pin diameter of internal gears.

Metric		Inch		
Order No.	Range	Order No.	Range	Accuracy
106-4965	75-100mm	106-4974	3-4"	0.003mm
106-4966	100-125mm	106-4975	4"-5"	0.003mm
106-4967	125-150mm	106-4976	5"-6"	0.003mm
106-4968	150-175mm	106-4977	6"-7"	0.003mm
106-4969	175-200mm	106-4978	7"-8"	0.004mm
106-4970	200-225mm	106-4979	8"-9"	0.004mm
106-4971	225-250mm	106-4980	9-10"	0.004mm
106-4972	250-275mm	106-4981	10-11"	0.004mm
106-4973	275-300mm	106-4982	11-12"	0.005mm

Inside micrometers



Features:

1. The interchangeable of extension rods provides a wide measuring range.
2. Each interchangeable rod is marked range, for easy operation.
3. Resolution: 0.01mm;0.001"

Order No.	Range	
106-4983	25-32mm	Micrometer head
106-4984	25-50mm	2
106-4985	1-1.25"	
106-4986	1-2"	2

Order No.	Range		Order No.	Range	
106-4993	200-225mm	Micrometer head	106-4987	50-63"	Micrometer head
106-4994	200-500mm	3	106-4988	50-200"	6
106-4995	200-1000mm	8	106-4989	50-300"	10
106-4996	8-9"	Micrometer head	106-4990	2-2.25"	Micrometer head
106-4997	8-20"	3	106-4991	2-8"	6
106-4998	8-40"	8	106-4992	2-12"	10

Inside micrometer

Features:

1. The combining of extension rods provides a wide measuring range.
2. Supplied with a standard caliper gage for zero setting.
3. Carbide measuring faces.
4. Diameter of extension rods: 15.5mm

Order No.	Range	Extension rods
106-5010	2-2.5"	Micrometer head
106-5011	2-4"	0.5",1"
106-5012	2-6"	0.5",1",2"
106-5013	2-12"	0.5",1",2"(2pcs),4"
106-5014	2-20"	0.5",1",2"(2pcs),4",8"
106-5015	2-40"	0.5",1",2",4"(2pcs),8",12"
106-5016	2-60"	0.5",1",2",4"(2pcs),8"(2pcs),12"(2pcs)
106-5017	2-3"	0.5"
106-5018	2-7"	0.5",1"(2pcs),2"
106-5019	2-10"	0.5",1",2",4"
106-5020	2-24"	0.5",1",2",4",6",8"

Order No.	Range	Extension rods
106-4999	50-63mm	Micrometer head
106-5000	50-100m	13mm,25mm
106-5001	50-150mm	13mm,25mm,50mm
106-5002	50-300mm	13mm,25mm,50mm(2pcs),100mm
106-5003	50-500mm	13mm,25mm,50mm(2pcs),100mm,200mm
106-5004	50-1000mm	13mm,25mm,50mm,100mm(2pcs),200mm,300mm
106-5005	50-1500mm	13mm,25mm,50mm,100mm(2pcs),200mm(2pcs),300mm(2pcs)
106-5006	50-75mm	13mm
106-5007	50-175mm	13mm,25mm(2pcs),50mm
106-5008	50-250mm	13mm,25mm,50mm,100mm
106-5009	50-600mm	13mm,25mm,50mm,100mm,150mm,200mm

Measuring Tools



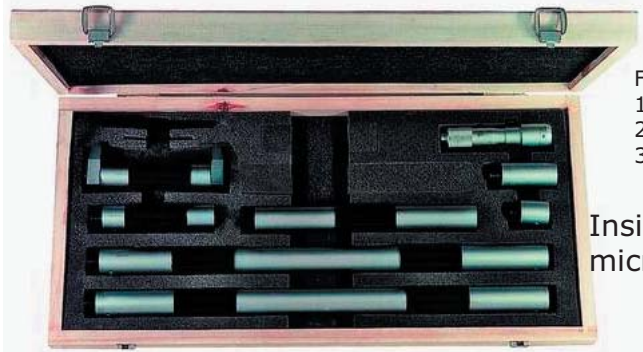
Features:

1. Resolution: 0.01mm;0.001"
2. Carbide measuring faces.
3. Diameter of extension rods: 16mm

Inside micrometer(single rod)

Order No.	Range	Accuracy	Order No.	Range	Accuracy
106-5021	50-75mm	0.005mm	106-5039	2-3"	0.00020"
106-5022	75-100mm	0.005mm	106-5040	3-4"	0.00020"
106-5023	100-125mm	0.006mm	106-5041	4"-5"	0.00024"
106-5024	125-150mm	0.006mm	106-5042	5"-6"	0.00024"
106-5025	150-175mm	0.007mm	106-5043	6"-7"	0.00028"
106-5026	175-200mm	0.007mm	106-5044	7"-8"	0.00028"
106-5027	200-225mm	0.008mm	106-5045	8"-9"	0.00032"
106-5028	225-250mm	0.008mm	106-5046	9-10"	0.00032"
106-5029	250-275mm	0.009mm	106-5047	10-11"	0.00036"
106-5030	275-300mm	0.009mm	106-5048	11-12"	0.00036"
106-5031	300-325mm	0.009mm	106-5049	12-13"	0.00036"
106-5032	325-350mm	0.009mm	106-5050	13-14"	0.00036"
106-5033	350-375mm	0.010mm	106-5051	14-15"	0.00040"
106-5034	375-400mm	0.010mm	106-5052	15-16"	0.00040"
106-5035	400-425mm	0.010mm	106-5053	16-17"	0.00040"
106-5036	425-450mm	0.010mm	106-5054	17-18"	0.00040"
106-5037	450-475mm	0.011mm	106-5055	18-19"	0.00043"
106-5038	475-500mm	0.011mm	106-5056	19-20"	0.00043"

Order No.	Range	Accuracy	Order No.	Range	Accuracy
106-5057	500-525mm	0.011mm	106-5077	20-21"	0.00043"
106-5058	525-550mm	0.011mm	106-5078	21-22"	0.00043"
106-5059	550-575mm	0.011mm	106-5079	22-23"	0.00043"
106-5060	575-600mm	0.012mm	106-5080	23-24"	0.00047"
106-5061	600-625mm	0.012mm	106-5081	24-25"	0.00047"
106-5062	625-650mm	0.012mm	106-5082	25-26"	0.00047"
106-5063	650-675mm	0.013mm	106-5083	26-27"	0.00051"
106-5064	675-700mm	0.013mm	106-5084	27-28"	0.00051"
106-5065	700-725mm	0.013mm	106-5085	28-29"	0.00051"
106-5066	725-750mm	0.014mm	106-5086	29-30"	0.00055"
106-5067	750-775mm	0.014mm	106-5087	30-31"	0.00055"
106-5068	775-800mm	0.014mm	106-5088	31-32"	0.00055"
106-5069	800-825mm	0.015mm	106-5089	32-33"	0.00059"
106-5070	825-850mm	0.015mm	106-5090	33-34"	0.00059"
106-5071	850-875mm	0.015mm	106-5091	34-35"	0.00059"
106-5072	875-900mm	0.016mm	106-5092	35-36"	0.00063"
106-5073	900-925mm	0.016mm	106-5093	36-37"	0.00063"
106-5074	925-950mm	0.016mm	106-5094	37-38"	0.00063"
106-5075	950-975mm	0.017mm	106-5095	38-39"	0.00067"
106-5076	975-1000mm	0.017mm	106-5096	39-40"	0.00067"



Inside micrometer

Features:

1. The combining of extension rods provides a wide measuring range
2. Carbide measuring faces.
3. Resolution: 0.01mm;0.001"



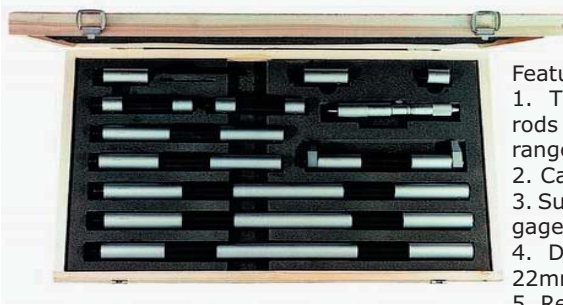
Diameter of extension rods: 22mm
Travel of micrometer head: 25mm/1"

Diameter of extension rods: 28mm
Travel of micrometer head: 50mm/2"

Order No.	Range	Extension rods	Order No.	Range	Extension rods
106-5097	100-125mm	Micrometer head	106-5103	4-5"	Micrometer head
106-5098	100-500mm	25mm,50mm,100mm,200mm	106-5104	4-20"	1",2",4",8"
106-5099	100-900mm	25mm,50mm,100mm,200mm,400mm	106-5105	4-36"	1",2",4",8",16"
106-5100	100-1300mm	25mm,50mm,100mm,200mm,400mm(2pcs)	106-5106	4-52"	1",2",4",8",16"(2pcs)
106-5101	100-1700mm	25mm,50mm,100mm,200mm,400mm(3pcs)	106-5107	4-68"	1",2",4",8",16"(3pcs)
106-5102	100-2100mm	25mm,50mm,100mm,200mm,400mm(4pcs)	106-5108	4-84"	1",2",4",8",16"(4pcs)

Order No.	Range	Extension rods	Order No.	Range	Extension rods
106-5109	1000-1050mm	Micrometer head	106-5114	40-42"	Micrometer head
106-5110	1000-2000mm	50mm,100mm(2pcs),200mm,500mm	106-5115	40-80"	2",4"(2pcs),8",20"
106-5111	1000-3000mm	50mm,100mm(2pcs),200mm,500mm,1000mm	106-5116	40-120"	2",4"(2pcs),8",20",40"
106-5112	1000-4000mm	50mm,100mm(2pcs),200mm,500mm,1000mm(2pcs)	106-5117	40-160"	2",4"(2pcs),8",20",40"(2pcs)
106-5113	1000-5000mm	50mm,100mm(2pcs),200mm,500mm,1000mm(3pcs)	106-5118	40-200"	2",4"(2pcs),8",20",40"(3pcs)

Measuring Tools



- Features:
1. The combining of extension rods provides a wide measuring range.
 2. Carbide measuring faces.
 3. Supplied with a standard caliper gage for zero setting.
 4. Diameter of extension rods: 22mm
 5. Resolution: 0.01mm;0.001"

- Features:
1. Resolution: 0.01mm;0.001"
 2. Counter readout: 0.01mm;0.001"



Inside micrometer

Order No.	Range	Extension rods	Order No.	Range	Extension rods
106-5127	150-175mm	Micrometer head	106-5131	6-7"	Micrometer head
106-5128	150-1400mm	25mm,50mm(2pcs),100mm,200mm,400mm(2pcs)	106-5132	6-56"	1",2"(2pcs),4",8",16"(2pcs)
106-5129	150-2000mm	25mm,50mm(2pcs),100mm,200mm(2pcs),400mm(3pcs)	106-5133	6-80"	1",2"(2pcs),4",8"(2pcs),16"(3pcs)
106-5130	150-2100mm	25mm,50mm(2pcs),100mm(2pcs),200mm(2pcs),400mm(3pcs)	106-5134	6-84"	1",2"(2pcs),4"(2pcs),8"(2pcs),16"(3pcs)

Digit inside micrometer

Order No.	Range	Extension rods	Order No.	Range	Extension rods
106-5119	150-175mm	Micrometer head	106-5123	6-7"	Micrometer head
106-5120	150-1000mm	25mm,50mm(2pcs),100mm,200mm,400mm	106-5124	6-40"	1",2"(2pcs),4",8",16"
106-5121	150-1500mm	25mm,50mm(2pcs),100mm(2pcs),200mm,400mm(2pcs)	106-5125	6-60"	1",2"(2pcs),4"(2pcs),8",16"
106-5122	150-2000mm	25mm,50mm(2pcs),100mm,200mm(2pcs),400mm(3pcs)	106-5126	6-80"	1",2"(2pcs),4",8"(2pcs),16"(3pcs)

- Features:
1. 5-30mm/0.2-1.2";25-50mm/1-2" micrometers finished with setting ring
 2. For measuring various inside dimensions.



Electronic Inside micrometer(Caliper type)

Order No.		Range	Accuracy	Order No.		Range	Accuracy
Carbide measuring faces	Stainless steel measuring faces			Carbide measuring faces	Stainless steel measuring faces		
106-5135	106-5143	5-30mm	0.005mm	106-5151	106-5159	0.2-1.2"	0.0002"
106-5136	106-5144	25-50mm	0.006mm	106-5152	106-5160	1-2"	0.00024"
106-5137	106-5145	50-75mm	0.007mm	106-5153	106-5161	2-3"	0.00028"
106-5138	106-5146	75-100mm	0.008mm	106-5154	106-5162	3-4"	0.00032"
106-5139	106-5147	100-125mm	0.009mm	106-5155	106-5163	4"-5"	0.00036"
106-5140	106-5148	125-150mm	0.009mm	106-5156	106-5164	5"-6"	0.00036"
106-5141	106-5149	150-175mm	0.010mm	106-5157	106-5165	6"-7"	0.00040"
106-5142	106-5150	175-200mm	0.010mm	106-5158	106-5166	7"-8"	0.00040"



Electronic Inside micrometer(Caliper type)

Double measuring forces, Ratchet stop

Order No.		Range	Accuracy	Order No.		Range	Accuracy
Carbide measuring faces	Stainless steel measuring faces			Carbide measuring faces	Stainless steel measuring faces		
106-5167	106-5175	5-30mm	0.005mm	106-5183	106-5191	0.2-1.2"	0.0002"
106-5168	106-5176	25-50mm	0.006mm	106-5184	106-5192	1-2"	0.00024"
106-5169	106-5177	50-75mm	0.007mm	106-5185	106-5193	2-3"	0.00028"
106-5170	106-5178	75-100mm	0.008mm	106-5186	106-5194	3-4"	0.00032"
106-5171	106-5179	100-125mm	0.009mm	106-5187	106-5195	4"-5"	0.00036"
106-5172	106-5180	125-150mm	0.009mm	106-5188	106-5196	5"-6"	0.00036"
106-5173	106-5181	150-175mm	0.010mm	106-5189	106-5197	6"-7"	0.00040"
106-5174	106-5182	175-200mm	0.010mm	106-5190	106-5198	7"-8"	0.00040"



u-digit Inside micrometer(Caliper type)

Features:

1. 5-30mm/0.2-1.2";25-50mm/1-2" micrometers finished with setting ring.
2. For measuring various inside dimensions.
3. Resolution: 0.01mm;0.001". Counter readout: 0.01mm;0.0001"

Order No.		Range	Accuracy	Order No.		Range	Accuracy
Carbide measuring faces	Stainless steel measuring faces			Carbide measuring faces	Stainless steel measuring faces		
106-5199	106-5207	5-30mm	0.005mm	106-5215	106-5223	0.2-1.2"	0.0002"
106-5200	106-5208	25-50mm	0.006mm	106-5216	106-5224	1-2"	0.00024"
106-5201	106-5209	50-75mm	0.007mm	106-5217	106-5225	2-3"	0.00028"
106-5202	106-5210	75-100mm	0.008mm	106-5218	106-5226	3-4"	0.00032"
106-5203	106-5211	100-125mm	0.009mm	106-5219	106-5227	4"-5"	0.00036"
106-5204	106-5212	125-150mm	0.009mm	106-5220	106-5228	5"-6"	0.00036"
106-5205	106-5213	150-175mm	0.010mm	106-5221	106-5229	6"-7"	0.00040"
106-5206	106-5214	175-200mm	0.010mm	106-5222	106-5230	7"-8"	0.00040"



Digit inside micrometer

Ratchet stop



Inside micrometer(Caliper type)

Order No.		Range	Accuracy	Order No.		Range	Accuracy
Carbide measuring faces	Stainless steel measuring faces			Carbide measuring faces	Stainless steel measuring faces		
106-5231	106-5239	5-30mm	0.005mm	106-5247	106-5255	0.2-1.2"	0.0002"
106-5232	106-5240	25-50mm	0.006mm	106-5248	106-5256	1-2"	0.00024"
106-5233	106-5241	50-75mm	0.007mm	106-5249	106-5257	2-3"	0.00028"
106-5234	106-5242	75-100mm	0.008mm	106-5250	106-5258	3-4"	0.00032"
106-5235	106-5243	100-125mm	0.009mm	106-5251	106-5259	4"-5"	0.00036"
106-5236	106-5244	125-150mm	0.009mm	106-5252	106-5260	5"-6"	0.00036"
106-5237	106-5245	150-175mm	0.010mm	106-5253	106-5261	6"-7"	0.00040"
106-5238	106-5246	175-200mm	0.010mm	106-5254	106-5262	7"-8"	0.00040"



Order No.		Range	Accuracy	Order No.		Range	Accuracy
Carbide measuring faces	Stainless steel measuring faces			Carbide measuring faces	Stainless steel measuring faces		
106-5263	106-5271	5-30mm	0.005mm	106-5279	106-5287	0.2-1.2"	0.0002"
106-5264	106-5272	25-50mm	0.006mm	106-5280	106-5288	1-2"	0.00024"
106-5265	106-5273	50-75mm	0.007mm	106-5281	106-5289	2-3"	0.00028"
106-5266	106-5274	75-100mm	0.008mm	106-5282	106-5290	3-4"	0.00032"
106-5267	106-5275	100-125mm	0.009mm	106-5283	106-5291	4"-5"	0.00036"
106-5268	106-5276	125-150mm	0.009mm	106-5284	106-5292	5"-6"	0.00036"
106-5269	106-5277	150-175mm	0.010mm	106-5285	106-5293	6"-7"	0.00040"
106-5270	106-5278	175-200mm	0.010mm	106-5286	106-5294	7"-8"	0.00040"

Features:

1. For all kinds of inside measurement.
2. Large measuring range with two sides of calipers.
3. Bidirectional graduation for easy reading in both direction.
4. Supplied with setting ring(30mm/1.2")

Order No.	Range	Accuracy	Setting rings
106-5295	5-30mm	0.006mm	30mm
	30-55mm		
106-5296	0.2-1.2"	0.00024"	1.2"
	1.2-2.2"		



Features:

1. Range 2-6mm without extension rods.
2. Self-centering 3-point for accurate measurement of internal diameters. Measurement can be taken closer to the bottom of the blind bore, and can be taken in to a deep hole with an extension rod.
3. Highly durable because of carbide-tipped contact points.
4. Within 100mm/4": supplied setting rings optional.
Over 100mm/4": setting rings optional
5. Over 100mm/4": measuring head is changed.
6. Resolution: within 12mm/0.5": 0.001mm;0.0001".
Over 12mm/0.5": 0.005mm;0.0002"

Three-point internal micrometers

Order No.	Range	Accuracy	Setting rings
106-5302	0.08-0.1"	0.00016"	0.1"
106-5303	0.1-0.12"	0.00016"	0.1"
106-5304	0.12-0.16"	0.00016"	0.16"
106-5305	0.16-0.2"	0.00016"	0.16"
106-5306	0.2-0.24"	0.00016"	0.24"
106-5307	0.24-0.28"	0.00016"	0.24"

Order No.	Range	Accuracy	Setting rings
106-5297	2-2.5mm	0.004mm	2.5mm
106-5298	2.5-3mm	0.004mm	2.5mm
106-5299	3-4mm	0.004mm	4mm
106-5300	4-5mm	0.004mm	5mm
106-5301	5-6mm	0.004mm	6mm



Three-point internal micrometers

Order No.	Range	Accuracy	Setting rings	Extension rods	Order No.	Range	Accuracy	Setting rings	Extension rods
106-5308	6-8mm	0.004mm	6mm	100mm	106-5311	0.275-0.35"	0.00016"	0.16"	4"
106-5309	8-10mm	0.004mm	8mm	100mm	106-5312	0.35-0.425"	0.00016"	0.16"	4"
106-5310	10-12mm	0.004mm	10mm	100mm	106-5313	0.425-0.5"	0.00016"	0.16"	4"

Three-point internal micrometers



Order No.	Range	Accuracy	Setting rings	Extension rods	Order No.	Range	Accuracy	Setting rings	Extension rods
106-5314	6-8mm	0.004mm	6mm	100mm	106-5327	0.275-0.35"	0.00016"	0.275"	4"
106-5315	8-10mm	0.004mm	8mm	100mm	106-5328	0.35-0.42"	0.00016"	0.35"	4"
106-5316	10-12mm	0.004mm	10mm	100mm	106-5329	0.425-0.5"	0.00016"	0.5"	4"
106-5317	12-16mm	0.004mm	16mm	150mm	106-5330	0.5-0.65"	0.00016"	0.65"	6"
106-5318	16-20mm	0.004mm	16mm	150mm	106-5331	0.65-0.8"	0.00016"	0.65"	6"
106-5319	20-25mm	0.004mm	25mm	150mm	106-5332	0.8-1"	0.00016"	1"	6"
106-5320	25-30mm	0.004mm	25mm	150mm	106-5333	1-1.2"	0.00016"	1"	6"
106-5321	30-40mm	0.004mm	40mm	150mm	106-5334	1.2-1.6"	0.00016"	1.6"	6"
106-5322	40-50mm	0.005mm	40mm	150mm	106-5335	1.6-2.0"	0.0002"	1.6"	6"
106-5323	50-63mm	0.005mm	62mm	150mm	106-5336	2-2.5"	0.0002"	2.5"	6"
106-5324	62-75mm	0.005mm	62mm	150mm	106-5337	2.5-3"	0.0002"	2.5"	6"
106-5325	75-88mm	0.005mm	87mm	150mm	106-5338	3-3.5"	0.0002"	3.5"	6"
106-5326	87-100mm	0.005mm	87mm	150mm	106-5339	3.5-4"	0.0002"	3.5"	6"

Three-point internal micrometers

Features:

1. Over 100mm/4": setting rings optional
2. Over 100mm/4": Measuring heads are interchangeable.
3. Ratchet stop. Aluminium body



Order No.		Range	Accuracy	Setting rings	Extension rods	Order No.		Range	Accuracy	Setting rings	Extension rods
Anticath-odeoxidation	Painted surface					Anticath-odeoxidation	Painted surface				
106-5340	106-5352	50-63mm	0.005mm	62mm	150mm	106-5364	106-5376	2-2.5"	0.0002"	4.56"	6"
106-5341	106-5353	62-75mm	0.005mm	62mm	150mm	106-5365	106-5377	2.5-3"	0.0002"	4.56"	6"
106-5342	106-5354	75-88mm	0.005mm	87mm	150mm	106-5366	106-5378	3-3.5"	0.0002"	4.56"	6"
106-5343	106-5355	87-100mm	0.005mm	87mm	150mm	106-5367	106-5379	3.5-4"	0.0002"	4.56"	6"
106-5344	106-5356	100-125mm	0.005mm	112.5mm	150mm	106-5368	106-5380	100-125mm	0.0002"	5.8"	6"
106-5345	106-5357	125-150mm	0.005mm	137.5mm	150mm	106-5369	106-5381	125-150mm	0.0002"	5.8"	6"
106-5346	106-5358	150-175mm	0.005mm	162.5mm	150mm	106-5370	106-5382	150-175mm	0.0002"	5.8"	6"
106-5347	106-5359	175-200mm	0.005mm	187.5mm	150mm	106-5371	106-5383	175-200mm	0.0002"	5.8"	6"
106-5348	106-5360	200-225mm	0.007mm	212.5mm	150mm	106-5372	106-5384	200-225mm	0.00028"	5.8"	6"
106-5349	106-5361	225-250mm	0.007mm	237.5mm	150mm	106-5373	106-5385	225-250mm	0.00028"	5.8"	6"
106-5350	106-5362	250-275mm	0.007mm	262.5mm	150mm	106-5374	106-5386	250-275mm	0.00028"	5.8"	6"
106-5351	106-5363	275-300mm	0.007mm	287.5mm	150mm	106-5375	106-5387	275-300mm	0.00028"	5.8"	6"

Three-point internal micrometers sets 315 series (Chrome-plated surface)



Order No.	Individual range	Setting rings	Extension rods
106-5388	2-2.5, 2.5-3mm	2.5mm	/
106-5389	3-4, 4-5, 5-6mm	4, 5, 6mm	/
106-5390	6-8, 8-10, 10-12mm	6, 8, 10mm	100mm
106-5391	6-8, 8-10, 10-12mm	6, 8, 10mm	100mm
106-5392	12-16, 16-20mm	16mm	150mm
106-5393	20-25, 25-30, 30-40mm	25.4mm	150mm
106-5394	20-25, 25-30, 30-40, 40-50mm	25.4mm	150mm
106-5395	40-50, 50-63, 62-75, 75-88, 87-100mm	40, 62, 87mm	150mm
106-5396	50-63, 62-75, 75-88, 87-100mm	62, 87mm	150mm

Three-point internal micrometers sets 375 series (Chrome-plated surface)



Order No.	Individual range	Setting rings	
106-5397	0.08-1", 0.1-0.12"	0.1"	/
106-5398	0.12-0.16", 0.16-0.2", 0.2-0.24", 0.24-0.28"	0.16", 0.24"	/
106-5399	0.275-0.35", 0.35-0.425", 0.425-0.5"	0.275", 0.35", 0.5"	4"
106-5400	0.275-0.35", 0.35-0.425", 0.425-0.5"	0.275", 0.35", 0.5"	4"
106-5401	0.5-0.65", 0.65-0.8"	0.65"	6"
106-5402			6"
106-5403	0.8-1", 1-1.2", 1.2-1.6", 1.6-2"	1", 1.6"	6"
106-5404			6"
106-5405	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5", 3.5"	6"

Order No.	Individual range	Setting rings	Extension rods
106-5406	50-63, 62-75, 75-88, 87-100mm	62, 87mm	150mm
106-5407	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5, 3.5"	6"

Order No.	Individual range	Setting rings	Extension rods
106-5408	50-63, 62-75, 75-88, 87-100mm	62, 87mm	150mm
106-5409	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5, 3.5"	6"

Painted surface

Anticathode-oxidation surface

Three-point internal micrometers

Features:

1. Range 2-6mm without extension rods.
2. Self-centering 3-point for accurate measurement of internal diameters. Measurement can be taken closer to the bottom of the blind bore, and can be taken in to a deep hole with an extension rod.
3. Highly durable because of carbide-tipped contact points.
4. Within 100mm/4": supplied setting rings optional.
Over 100mm/4": setting rings optional
5. Over 100mm/4": measuring head is changed.
6. Resolution: within 12mm/0.5": 0.001mm;0.0001".
Over 12mm/0.5": 0.005mm;0.0002"



Order No.	Range	Accuracy	Setting rings	Extension rods	Order No.	Range	Accuracy	Setting rings	Extension rods
106-5421	6-8mm	0.004mm	6-8mm	100mm	106-5424	0.275-0.35"	0.00016"	0.275"	4"
106-5422	8-10mm	0.004mm	8-10mm	100mm	106-5425	0.35-0.425"	0.00016"	0.35"	4"
106-5423	10-12mm	0.004mm	10-12mm	100mm	106-5426	0.425-0.5"	0.00016"	0.5"	4"

Three-point internal micrometers

Chrome-plated frame



Order No.	Range	Accuracy	Setting rings	Order No.	Range	Accuracy	Setting rings
106-5410	2-2.5mm	0.004mm	2.5mm	106-5415	0.08-0.1"	0.00016"	0.1"
106-5411	2.5-3mm	0.004mm	2.5mm	106-5416	0.1-0.12"	0.00016"	0.1"
106-5412	3-4mm	0.004mm	4mm	106-5417	0.12-0.16"	0.00016"	0.16"
106-5413	4-5mm	0.004mm	5mm	106-5418	0.16-0.2"	0.00016"	0.16"
106-5414	5-6mm	0.004mm	6mm	106-5419	0.2-0.24"	0.00016"	0.24"
				106-5420	0.24-0.28"	0.00016"	0.24"



Three-point internal micrometers

Order No.	Range	Accuracy	Setting rings	Extension rods	Order No.	Range	Accuracy	Setting rings	Extension rods
106-5427	6-8mm	0.004mm	6mm	100mm	106-5440	0.275-0.35"	0.00016"	0.275"	4"
106-5428	8-10mm	0.004mm	8mm	100mm	106-5441	0.35-0.42"	0.00016"	0.35"	4"
106-5429	10-12mm	0.004mm	10mm	100mm	106-5442	0.425-0.5"	0.00016"	0.5"	4"
106-5430	12-16mm	0.004mm	16mm	150mm	106-5443	0.5-0.65"	0.00016"	0.65"	6"
106-5431	16-20mm	0.004mm	16mm	150mm	106-5444	0.65-0.8"	0.00016"	0.65"	6"
106-5432	20-25mm	0.004mm	25mm	150mm	106-5445	0.8-1"	0.00016"	1"	6"
106-5433	25-30mm	0.004mm	25mm	150mm	106-5446	1-1.2"	0.00016"	1"	6"
106-5434	30-40mm	0.004mm	40mm	150mm	106-5447	1.2-1.6"	0.00016"	1.6"	6"
106-5435	40-50mm	0.005mm	40mm	150mm	106-5448	1.6-2.0"	0.0002"	1.6"	6"
106-5436	50-63mm	0.005mm	62mm	150mm	106-5449	2-2.5"	0.0002"	2.5"	6"
106-5437	62-75mm	0.005mm	62mm	150mm	106-5450	2.5-3"	0.0002"	2.5"	6"
106-5438	75-88mm	0.005mm	87mm	150mm	106-5451	3-3.5"	0.0002"	3.5"	6"
106-5439	87-100mm	0.005mm	87mm	150mm	106-5452	3.5-4"	0.0002"	3.5"	6"

Measuring Tools

Anticathodeoxidation	Painted surface	Range	Accuracy	Setting rings	Extension rods
106-5453	106-5465	50-63mm	0.005mm	62mm	150mm
106-5454	106-5466	62-75mm	0.005mm	62mm	150mm
106-5455	106-5467	75-88mm	0.005mm	87mm	150mm
106-5456	106-5468	87-100mm	0.005mm	87mm	150mm
106-5457	106-5469	100-125mm	0.005mm	112.5mm	150mm
106-5458	106-5470	125-150mm	0.005mm	137.5mm	150mm
106-5459	106-5471	150-175mm	0.005mm	162.5mm	150mm
106-5460	106-5472	175-200mm	0.005mm	187.5mm	150mm
106-5461	106-5473	200-225mm	0.007mm	212.5mm	150mm
106-5462	106-5474	225-250mm	0.007mm	237.5mm	150mm
106-5463	106-5475	250-275mm	0.007mm	262.5mm	150mm
106-5464	106-5476	275-300mm	0.007mm	287.5mm	150mm

Three-point internal micrometers

Features:

1. Over 100mm/4": setting rings optional
2. Over 100mm/4": Measuring heads are interchangeable.
3. Ratchet stop.
4. Aluminium body



Anticathodeoxidation	Painted surface	Range	Accuracy	Setting rings	Extension rods
106-5477	106-5489	2-2.5"	0.0002"	4.56"	6"
106-5478	106-5490	2.5-3"	0.0002"	4.56"	6"
106-5479	106-5491	3-3.5"	0.0002"	4.56"	6"
106-5480	106-5492	3.5-4"	0.0002"	4.56"	6"
106-5481	106-5493	4-5"	0.0002"	5.8"	6"
106-5482	106-5494	5-6"	0.0002"	5.8"	6"
106-5483	106-5495	6-7"	0.0002"	5.8"	6"
106-5484	106-5496	7-8"	0.0002"	5.8"	6"
106-5485	106-5497	8-9"	0.00028"	5.8"	6"
106-5486	106-5498	9-10"	0.00028"	5.8"	6"
106-5487	106-5499	10-11"	0.00028"	5.8"	6"
106-5488	106-5500	11-12"	0.00028"	5.8"	6"

Three-point internal micrometers sets



Order No.	Individual range	Setting rings	Extension rods
106-5501	2-2.5,2.5-3mm	2.5mm	/
106-5502	3-4,4-5,5-6mm	4,5,6mm	/
106-5503	6-8,8-10,10-12mm	6,8,10mm	100mm
106-5504	6-8,8-10,10-12mm	6,8,10mm	100mm
106-5505	12-6,16-20mm	16mm	150mm
106-5506	20-25,25-30,30-40mm	25.4mm	150mm
106-5507	20-25,25-30,30-40,40-50mm	25.4mm	150mm
106-5508	40-50,50-63,62-75,75-88,87-100mm	40,62,87mm	150mm
106-5509	50-63,62-75,75-88,87-100mm	62,87mm	150mm



Order No.	Individual range	Setting rings	Extension rods
106-5510	0.08-1",0.1-0.12"	0.1"	/
106-5511	0.12-0.16",0.16-0.2",0.2-0.24",0.24-0.28"	0.16",0.24"	/
106-5512	0.275-0.35",0.35-0.425",0.425-0.5"		4"
106-5513	0.275-0.35",0.35-0.425",0.425-0.5"		4"
106-5514	0.5-0.65",0.65-0.8"	0.65"	6"
106-5515			6"
106-5516	0.8-1",1-1.2",1.2-1.6",1.6-2"	1",1.6"	6"
106-5517			6"
106-5518	2-2.5",2.5-3", 3-3.5",3.5-4"	2.5",3.5"	6"

Order No.	Individual range	Setting rings	Extension rods
106-5519	50-63,62-75,75-88,87-100mm	62,87mm	150mm
106-5520	2-2.5",2.5-3",3-3.5",3.5-4"	2.5,3.5"	6"

Three-point internal micrometers sets

Features:

1. Over 100mm/4": setting rings optional
2. Over 100mm/4": Measuring heads are interchangeable.
3. Ratchet stop.

Order No.	Individual range	Setting rings	Extension rods
106-5521	50-63,62-75,75-88,87-100mm	62,87mm	150mm
106-5522	2-2.5",2.5-3",3-3.5",3.5-4"	2.5,3.5"	6"



Electronic Three-point internal micrometers sets



Features:

1. Range 2-6mm without extension rods.
2. Measurement can be taken closer to the bottom of the blind bore, and can be taken in to a deep hole with an extension rod.
3. Highly durable because of carbide-tipped contact points. Ratchet stop.
4. Within 100mm/4": supplied with setting rings.
5. Range 2-6mm: 0.08"-0.28". Two points models for very small holes.
6. Range 6-12mm/0.275"-0.5"
7. Protection level: IP54.
8. Criterion: DIN40050/IEC529
9. RS232 data output. Connecting cable: P1102.

Order No.	Range	Accuracy	Setting rings
106-5528	0.08-0.1"	0.00016"	0.1"
106-5529	0.1-0.12"	0.00016"	0.1"
106-5530	0.12-0.16"	0.00016"	0.16"
106-5531	0.16-0.2"	0.00016"	0.16"
106-5532	0.2-0.24"	0.00016"	0.24"
106-5533	0.24-0.28"	0.00016"	0.24"

Order No.	Range	Accuracy	Setting rings
106-5523	2-2.5mm	0.004mm	2.5mm
106-5524	2.5-3mm	0.004mm	2.5mm
106-5525	3-4mm	0.004mm	4mm
106-5526	4-5mm	0.004mm	5mm
106-5527	5-6mm	0.004mm	6mm

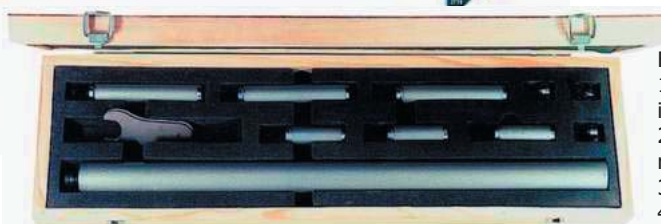


Electronic Three-point internal micrometers sets



Order No.	Range	Accuracy	Setting rings	Order No.	Range	Accuracy	Setting rings
106-5534	6-8mm	0.004mm	6mm	106-5537	0.275-0.35"	0.00016"	0.275"
106-5535	8-10mm	0.004mm	8mm	106-5538	0.35-0.425"	0.00016"	0.35"
106-5536	10-12mm	0.004mm	10mm	106-5539	0.425-0.5"	0.00016"	0.5"

Electronic Three-point internal micrometers sets



Order No.	Range	Setting rings	Extension rods
106-5642	200-500mm	200mm	150mm,500mm
106-5643	200-1000mm	200mm	150mm,500mm,1000mm
106-5644	8-20"	8"DIA	6",20"
106-5645	8-40"	8"DIA	6",20",40"

Features:

1. Large measuring range due to the patent structure and interchangeable measuring rods.
2. High accuracy interchangeable measuring rods enable that reading does not have to be reset after changing rods.
3. Protection level: IP54. Criterion: DIN40050/IEC529.
4. RS232 data output. Connecting cable: P1102(optiona)

Electronic Three-point internal micrometers sets



Order No.	Range	Accuracy	Setting rings	Extension rods	Order No.	Range	Accuracy	Setting rings	Extension rods
106-5540	6-8mm	0.004mm	6mm	100mm	106-5553	0.275-0.35"	0.00016"	0.275"	4"
106-5541	8-10mm	0.004mm	8mm	100mm	106-5554	0.35-0.42"	0.00016"	0.35"	4"
106-5542	10-12mm	0.004mm	10mm	100mm	106-5555	0.425-0.5"	0.00016"	0.5"	4"
106-5543	12-16mm	0.004mm	16mm	150mm	106-5556	0.5-0.65"	0.00016"	0.65"	6"
106-5544	16-20mm	0.004mm	16mm	150mm	106-5557	0.65-0.8"	0.00016"	0.65"	6"
106-5545	20-25mm	0.004mm	25mm	150mm	106-5558	0.8-1"	0.00016"	1"	6"
106-5546	25-30mm	0.004mm	25mm	150mm	106-5559	1-1.2"	0.00016"	1"	6"
106-5547	30-40mm	0.004mm	40mm	150mm	106-5560	1.2-1.6"	0.00016"	1.6"	6"
106-5548	40-50mm	0.005mm	40mm	150mm	106-5561	1.6-2.0"	0.0002"	1.6"	6"
106-5549	50-63mm	0.005mm	62mm	150mm	106-5562	2-2.5"	0.0002"	2.5"	6"
106-5550	62-75mm	0.005mm	62mm	150mm	106-5563	2.5-3"	0.0002"	2.5"	6"
106-5551	75-88mm	0.005mm	87mm	150mm	106-5564	3-3.5"	0.0002"	3.5"	6"
106-5552	87-100mm	0.005mm	87mm	150mm	106-5565	3.5-4"	0.0002"	3.5"	6"

Features:

1. Over 100mm/4": setting rings optional
2. Measuring heads are interchangeable.
3. Ratchet stop.
4. Aluminium body



Electronic Three-point internal micrometers sets

Order No.		Range	Accuracy	Setting rings	Extension rods	Order No.		Range	Accuracy	Setting rings	Extension rods
Anticathode-oxidation surface	Painted surface					Anticathode-oxidation surface	Painted surface				
106-5566	106-5578	50-63mm	0.005mm	62mm	150mm	106-5590	106-5602	2-2.5"	0.0002"	4.56"	6"
106-5567	106-5579	62-75mm	0.005mm	62mm	150mm	106-5591	106-5603	2.5-3"	0.0002"	4.56"	6"
106-5568	106-5580	75-88mm	0.005mm	87mm	150mm	106-5592	106-5604	3-3.5"	0.0002"	4.56"	6"
106-5569	106-5581	87-100mm	0.005mm	87mm	150mm	106-5593	106-5605	3.5-4"	0.0002"	4.56"	6"
106-5570	106-5582	100-125mm	0.005mm	112.5mm	150mm	106-5594	106-5606	4-5"	0.0002"	5.8"	6"
106-5571	106-5583	125-150mm	0.005mm	137.5mm	150mm	106-5595	106-5607	5-6"	0.0002"	5.8"	6"
106-5572	106-5584	150-175mm	0.005mm	162.5mm	150mm	106-5596	106-5608	6-7"	0.0002"	5.8"	6"
106-5573	106-5585	175-200mm	0.005mm	187.5mm	150mm	106-5597	106-5609	7-8"	0.0002"	5.8"	6"
106-5574	106-5586	200-225mm	0.007mm	212.5mm	150mm	106-5598	106-5610	8-9"	0.00028"	5.8"	6"
106-5575	106-5587	225-250mm	0.007mm	237.5mm	150mm	106-5599	106-5611	9-10"	0.00028"	5.8"	6"
106-5576	106-5588	250-275mm	0.007mm	262.5mm	150mm	106-5600	106-5612	10-11"	0.00028"	5.8"	6"
106-5577	106-5589	275-300mm	0.007mm	287.5mm	150mm	106-5601	106-5613	11-12"	0.00028"	5.8"	6"

Three-point internal micrometers sets



Resolution: 0.001mm/0.0001"



Order No.	Range	Accuracy	Setting rings	Order No.	Range	Accuracy	Setting rings
106-5614	50-70mm	0.004mm	50mm	106-5619	2-2.8"	0.00016"	2"
106-5615	70-100mm	0.004mm	70mm	106-5620	2.8-4"	0.00016"	2.8"
106-5616	100-150mm	0.005mm	100mm	106-5621	4-6"	0.00020"	4"
106-5617	150-250mm	0.007mm	150mm	106-5622	6-10"	0.00028"	6"
106-5618	200-300mm	0.007mm	Optional	106-5623	8-12"	0.00028"	Optional

Electronic Three-point internal micrometers sets



Features:

1. Measurement can be taken closer to the bottom of the blind bore, and can be taken in to a deep hole with an extension rod.
2. Highly durable because of carbide-tipped contact points. Ratchet stop.
3. Supplied with setting rings with zero adjust.
4. Protection level: IP54.
5. Criterion: DIN40050/IEC529(optiona)
6. RS232 data output. Connecting cable: P1102.

Order No.	Range	Accuracy	Setting rings	Order No.	Range	Accuracy	Setting rings
106-5624	50-70mm	0.004mm	50mm	106-5629	2-2.8"	0.00016"	2"
106-5625	70-100mm	0.004mm	70mm	106-5630	2.8-4"	0.00016"	2.8"
106-5626	100-150mm	0.005mm	100mm	106-5631	4-6"	0.00020"	4"
106-5627	150-250mm	0.007mm	150mm	106-5632	6-10"	0.00028"	6"
106-5628	200-300mm	0.007mm	Optional	106-5633	8-12"	0.00028"	Optional

Three-point internal micrometers sets

Order No.	Range	Individual range	Setting rings	Extension rods
106-5638	50-100mm	50-70,70-100mm	70mm	70mm
106-5639	100-250mm	100-150,150-250mm	150mm	150mm
106-5640	2-4"	2-2.8",2.8-4"	2.8"	4"
106-5641	4-10"	4-6",6-10"	6"	4"



Three-point internal micrometers sets

Order No.	Range	Individual range	Setting rings	Extension rods
106-5634	50-100mm	50-70,70-100mm	70mm	70mm
106-5635	100-250mm	100-150,150-250mm	150mm	150mm
106-5636	2-4"	2-2.8",2.8-4"	2.8"	4"
106-5637	4-10"	4-6",6-10"	6"	4"



Two-point internal micrometers



Features:

1. 2-point for accurate measurement of internal diameters. Measurements can be taken closer to the bottom of the blind bore, and can be taken into a deep hole with an extension rod.
2. Large measuring range due to the patent structure.
3. Highly durable because of carbide-tipped contact points.
4. Ratchet stop for exact repetitive readings.
5. Supplied with setting rings for zero adjust.
6. Protection level: IP54. Connecting cable: P1102. Criterion: DIN40050/IEC529(optiona)



Order No.	Range	Accuracy	Setting rings
106-5646	50-70mm	0.006mm	50mm
106-5647	70-100mm	0.006mm	70mm
106-5648	100-150mm	0.006mm	100mm
106-5649	150-250mm	0.010mm	150mm
106-5650	200-300mm	0.010mm	Optional
106-5651	2-2.8"	0.00024"	2"
106-5652	2.8-4"	0.00024"	2.8"
106-5653	4-6"	0.00028"	4"
106-5654	6-10"	0.0004"	6"
106-5655	8-12"	0.0004"	Optional

Two-point internal micrometers



Order No.	Range	Accuracy	Setting rings
106-5656	50-70mm	0.006mm	50mm
106-5657	70-100mm	0.006mm	70mm
106-5658	100-150mm	0.006mm	100mm
106-5659	150-250mm	0.010mm	150mm
106-5660	200-300mm	0.010mm	Optional
106-5661	2-2.8"	0.00024"	2"
106-5662	2.8-4"	0.00024"	2.8"
106-5663	4-6"	0.00028"	4"
106-5664	6-10"	0.0004"	6"
106-5665	8-12"	0.0004"	Optional



Electronic Three-point internal micrometers sets

Order No.	Range	Individual range	Setting rings	Extension rods
106-5666	50-100mm	50-70,70-100mm	70mm	150mm
106-5667	100-250mm	100-150,150-250mm	150mm	150mm
106-5668	2-4"	2-2.8",2.8-4"	2.8"	4"
106-5669	4-10"	4-6",6-10"	6"	4"

Electronic Three-point internal micrometers sets



Order No.	Range	Individual range	Setting rings	Extension rods
106-5670	50-100mm	50-70,70-100mm	70mm	150mm
106-5671	100-250mm	100-150,150-250mm	150mm	150mm
106-5672	2-4"	2-2.8",2.8-4"	2.8"	4"
106-5673	4-10"	4-6",6-10"	6"	4"



Two-point internal micrometers



Features:

1. Large measuring range due to the patent structure and interchangeable measuring rods.
2. High accuracy interchangeable measuring rods enable that reading does not have to be reset after changing rods. Ratchet stop.
3. Protection level: IP54. Criterion: DIN40050/IEC529.
4. RS232 data output. Connecting cable: P1102(optiona)
5. L-maximum dimension of measured diameter.

Order No.	Range	Setting rings	Extension rods
106-5674	200-500mm	200mm	150mm,500mm
106-5675	200-1000mm	200mm	150mm,500mm,1000mm
106-5676	8-20"	8"DIA	6",20"
106-5677	8-40"	8"DIA	6",20",40"



Pistol-grip Three-point Bore Gages



Features:

1. Single-hand operation, right and left hand viewing flexibility.
2. Self-centering 3-point for accurate measurement of internal diameters. Measurements can be taken closer to the bottom of the blind bore, and can be taken into a deep hole with an extension rod.
2. Highly durable because of carbide-tipped contact points.
3. Supplied with setting rings for zero adjust. (Over 100/4", setting rings optional)
4. Dial indicator is supplied by user. 5. Fixing dimension of dial indicator: 8mm or 3/8"

Order No.	Range	Accuracy	Setting rings	Order No.	Range	Accuracy	Setting rings
106-5678	6-8mm	0.004mm	6mm	106-5699	0.275-0.35"	0.00016"	0.275"
106-5679	8-10mm	0.004mm	8mm	106-5700	0.35-0.42"	0.00016"	0.35"
106-5680	10-12mm	0.004mm	10mm	106-5701	0.425-0.5"	0.00016"	0.5"
106-5681	12-16mm	0.004mm	16mm	106-5702	0.5-0.65"	0.00016"	0.65"
106-5682	16-20mm	0.004mm	16mm	106-5703	0.65-0.8"	0.00016"	0.65"
106-5683	20-25mm	0.004mm	25mm	106-5704	0.8-1"	0.00016"	1"
106-5684	25-30mm	0.004mm	25mm	106-5705	1-1.2"	0.00016"	1"
106-5685	30-40mm	0.004mm	40mm	106-5706	1.2-1.6"	0.00016"	1.6"
106-5686	40-50mm	0.005mm	40mm	106-5707	1.6-2.0"	0.0002"	1.6"
106-5687	50-63mm	0.005mm	62mm	106-5708	2-2.5"	0.0002"	2.5"
106-5688	62-75mm	0.005mm	62mm	106-5709	2.5-3"	0.0002"	2.5"
106-5689	75-88mm	0.005mm	87mm	106-5710	3-3.5"	0.0002"	3.5"
106-5690	87-100mm	0.005mm	87mm	106-5711	3.5-4"	0.0002"	3.5"
106-5691	100-125mm	0.005mm	112.5mm	106-5712	4-5"	0.0002"	4.5"
106-5692	125-150mm	0.005mm	137.5mm	106-5713	5-6"	0.0002"	5.5"
106-5693	150-175mm	0.005mm	162.5mm	106-5714	6-7"	0.0002"	6.5"
106-5694	175-200mm	0.005mm	187.5mm	106-5715	7-8"	0.0002"	7.5"
106-5695	200-225mm	0.007mm	212.5mm	106-5716	8-9"	0.00028"	8.5"
106-5696	225-250mm	0.007mm	237.5mm	106-5717	9-10"	0.00028"	9.5"
106-5697	250-275mm	0.007mm	262.5mm	305-20-001	10-11"	0.00028"	10.5"
106-5698	275-300mm	0.007mm	287.5mm	305-21-001	11-12"	0.00028"	11.5"

**3R Hardness Tester
with automatic dial selection**



This hardness tester is used for determining Rockwell hardness of hard alloys, quenched and unquenched steels. It can be applied in the laboratories of factories, scientific research institutes and colleges. It conforms to IS: 3804-1966 and BS: 891-1962 part I and Part II for Rockwell test.

Specifications:

Maximum Load	330lbs
Load Range	132lbs, 220lbs, 330lbs
Initial Range Load	22lbs
Maximum Test Load	4-1/4"
Depth of Throat	5-1/4"
Max. Depth of Spindle Below Base	2"
Base Size	7"x18"
Height	"1/2-24
Approx. Weight	150lbs

Standard Accessories

- 5-3/4" testing table.
- 2-3/16" testing table.
- 2-3/16" testing table with "V" groove.
- 120iãDiamond penetrator.
- 1/16" Steel ball penetrator.
- Rockwell A test block (1pcs)
- Rockwell B test block (1pcs)
- Rockwell C test block (1pcs)
- Screwdriver (2pcs)
- Complete instruction manual
- Dust proof plastic cover.

Order No. 950-1000

Rockwell Hardness Tester



This tester is designed for use in measuring the Rockwell hardness of hard alloys, quenched and unquenched steels. As its frame is higher than that of conventional type so that it is a desired instrument for determining the hardness of large sized workpieces in the factories and repair workshops.

Specifications

- Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
- Test force: 588.4, 980.7, 1471N (60,100,150kgf)
- Max. height of test piece: 400mm
- Depth of throat: 160mm
- Dimensions: 548 x 326 x 1025mm
- Weight: approx. 140kg

Main accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc.
- V-notch anvil: 1 pc.
- Diamond cone penetrator: 1 pc.
- 1/16"steel ball penetrator: 1 pc.
- Rockwell standardized block: 5 pcs.

Order No. 950-1002

Motor-Driven PlasticRockwell Hardness Tester



This tester can be used to determine the hardness of plastic, composite materials and all kinds of friction materials, soft materials, nonmetal soft materials. A specific automatic zeroing dial gauge, an automatic loading and unloading mechanism are adopted in it, so that the measuring accuracy is high and the performance is reliable.

Specifications

- Measuring range: 70-100HRE, 50-115HRL, 50-115HRM, 50-115HRR
- Test force: 588.4, 980.7, 1471N (60, 100, 150kgf)
- Max. height of test piece: 150mm
- Depth of throat: 135mm
- Min. scale value: 0.5HR
- Power supply: 220V or 110V AC, 50/60Hz
- Dimensions: 505 x 240 x 700mm
- Weight: approx. 70kg

Main accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc.
- V-notch anvil: 1 pc.
- Steel ball penetrator: 1/8", 1/4", 1/2" 1 pc. each
- Plastic Rockwell standardized block: 4 pcs.

Order No. 950-1005

Hammer Hitting Type Brinell Hardness Tester



This tester can measure the Brinell hardness of ferrous and non-ferrous metals and tensile strength of steel. It is widely applied in workshops and material store houses.

Specifications

- Measuring range: <450 HBS
- Diameter of steel ball: Dia. 10mm
- Dimensions: Dia. 25mm x 110mm
- Weight: approx. 0.5kg

Main accessories

- Brinell standardized block(special size): 2 pcs.
- 20X Readout microscope: 1 pc.

Order No. 950-1107

Motor-Driven Rockwell Hardness Tester

This tester is a necessary instrument widely used in the fields of machine building, metallurgy and measurement department, for determining the Rockwell hardness of ferrous, non-ferrous metals, non-metal materials and their finished parts.

Features

- * A frictionless loading shaft mechanism is adopted in the instrument instead of conventional type. As a result, the accuracy of preliminary test force has been greatly increased.
- * A unique automatic zeroing dial gauge is incorporated in this instrument for measuring the depth of indentation so as to eliminate the human error in the procedure of zero setting.
- * A series of operations involving applying, holding and releasing of total test force is performed automatically. That thoroughly eliminates human error in those operations.

Specifications

Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
 Test force: 588.4, 980.7, 1471N (60,100,150kgf)
 Max. height of test piece: 170mm
 Depth of throat: 130mm
 Min. scale value: 0.5HR
 Power supply: 220V AC or 110V AC, 50/60Hz
 Dimensions: 500 x 250 x 700mm
 Weight: approx. 75kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 Large V-notch anvil: 1 pc.
 Diamond cone penetrator: 1 pc.
 1/16" steel ball penetrator: 1 pc.
 Rockwell standardized block: 5 pcs.

Order NO. 950-1003

Digital Display Rockwell Hardness Tester

This tester is one type of practical semiautomatic hardness measuring instrument. It can be widely applied in the factories, scientific research institutes and laboratories of colleges, for determining the Rockwell hardness of ferrous, non-ferrous metals, non-metal materials and their finished parts.

Features

- * A frictionless loading shaft mechanism is adopted in this instrument instead of conventional type and the application of preliminary test force is controlled by a magnetic clutch, so that the accuracy of preliminary test force is greatly increased.
- * A series of operations including applying, holding and releasing of total test force is performed automatically. That completely eliminates human error in those operations.
- * Reading error by operators can be avoided thoroughly as the measured hardness values are digitally displayed.
- * The measured hardness value and data processing result concerned can be recorded automatically by the recorder.

Specifications

Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
 Test force: 588.4, 980.7, 1471N (60, 100, 150kgf)
 Max. height of test piece: 170mm
 Depth of throat: 130mm
 Unit for display: 0.1HR
 Power supply: 220V AC or 110V AC, 50/60Hz
 Dimensions: 500 x 250 x 700mm
 Weight: approx. 75kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 Large V-notch anvil: 1 pc.
 Diamond cone penetrator: 1 pc.
 1/16" steel ball penetrator: 1 pc.
 Rockwell standardized block: 5 pcs.
 Printer: 1 pc.

Order NO. 950-1004

Portable Brinell Hardness Tester

This tester can be used for determining the Brinell hardness value of ferrous metals whose elasticity moduli approximate to 2.

Specifications

Measuring range: 100-400HBS
 Impact capacity: 4.9J
 Dimensions: $\Phi 55 \times 370$ mm
 Weight: approx. 3.3kg

Main accessories

Brinell standardized block: 1 pc.
 20X Readout microscope: 1 pc.

Order NO. 950-1106

Digital Superficial Rockwell Hardness Tester

This tester can be used to determine the superficial Rockwell hardness value of steel, alloy steel, hard alloy, plated coating, carburized, nitrided and cyanided layers. The hardness value measured can be read off the show window. Features

Features:

- * A frictionless loading shaft mechanism is adopted in this instrument instead of conventional type and the application of preliminary test force is controlled by a magnetic clutch, so that the accuracy of preliminary test force is increased.
- * A series of operations including applying, holding and releasing of total test force is performed automatically. That completely eliminates human error in those operations.
- * Reading error by operators can be avoided thoroughly as the measured hardness values are digitally displayed.
- * The measured hardness value and data processing result concerned can be recorded automatically by the recorder.

Specifications

Measuring range: 70-94HR15N, 42-86HR30N, 20-77HR45N, 67-93HR15T, 29-82HR30T, 10-72HR45T
 Test force: 147.1, 294.2, 441.3N (15,30,45kgf)
 Max. height of test piece: 150mm
 Depth of throat: 120mm
 Power supply: 220V AC or 110V AC,50/60Hz
 Dimensions: 500 x 240 x 700mm
 Weight: approx. 68kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Diamond cone penetrator: 1 pc.
 1/16"steel ball penetrator: 1 pc.
 Superficial Rockwell standardized block: 4 pcs.
 Printer: 1 pc.

Order NO. 950-1007



Motor-Driven Superficial Rockwell Hardness Tester

This tester is a necessary instrument widely used in the fields of machine building, metallurgy and measurement and measurement department, for determining the superficial Rockwell hardness value of steel, alloy steel, hard alloy, plated coating, carburized and nitrided layers.

Features

- * A frictionless loading shaft mechanism is adopted in the instrument instead of conventional type. As a result, the accuracy of preliminary test force has been greatly increased.
- * A series of operations involving applying, holding and releasing of total test force is performed automatically. That thoroughly eliminates human error in those operations.

Specifications

Measuring range: 70-94HR15N, 42-86HR30N, 20-77HR45N, 67-93HR15T, 29-82HR30T, 10-72HR45T
 Test force: 147.1, 294.2, 441.3N (15, 30, 45kgf)
 Max. height of test piece: 150mm
 Depth of throat: 120mm
 Min. scale value: 0.5HRN(T)
 Power supply: 220V AC or 110V AC, 50/60Hz
 Depth of throat: 120mm
 Min. scale value: 0.5HRN(T)
 Power supply: 220V AC or 110V AC, 50/60Hz
 Dimensions: 500 x 250 x 700mm
 Weight: approx. 75kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 1/16"steel ball penetrator: 1 pc.
 Diamond cone penetrator: 1 pc.
 Superficial Rockwell standardized block: 4 pcs.

Order NO. 950-1008



Digital and Superficial Rockwell Hardness Tester



This tester features high measuring accuracy, reliable performance and applicable to wide fields. It is used for hardness testing of all kinds of Rockwell and Superficial Rockwell. It serves to measure the hardness of hard metals, carburized steels, quenched steels, mild steels, hard cast irons, Al, Cu and malleable irons.

This tester has big screen to display. It has a lot of functions such as scale selection, match hint of indenter, contrast for Brinell, Rockwell and Vickers hardness value, keeping the increase and decrease of time, data dispose, storage, pick up, print, adjustment of illuminating brightness, and RS-232 computer output as well.

Suitable range: HRA.B.C.D.E.F.G.H.K and HR15N.T; 30N.T; 45N.T (scale)

Main Specifications

Preliminary test force: 29.4, 98.07N(3, 10Kg)
 Total test force: 147.1, 294.2, 441.3, 588.4, 980.7, 1471N (15, 30, 45, 60, 100, 150kgf)
 Test force holding time: 0-60 seconds
 Test force holding and releasing method: Automatic
 Display method: Back light LCD screen
 Data dispose: CPU
 Others: HR, HB, HV, HK etc. hardness number for contrast
 Automatic print
 RS232 computer output
 Sample Max size: Working table to indenter 180.00mm
 The center of the indenter to the arm of the machine: 160.00mm
 Dimension (L x W x H): 550 x 260 x 800mm
 Net weight: Approx. 67Kg
 Power supply: AC 220V, 50/60Hz

Main Accessory

Diamond indenter: 1pc.
 Ball indenter: 1pc.
 Working tables: 3 pcs.
 Hardness blocks: 5 pcs.
 (HRC higher 1 pc.)
 (HRC lower 1 pc.)
 (HRB 1 pc.)
 (HRN 1 pc.)
 (HRT 1 pc.)

Order NO. 950-1006

Digital Display Low Load Brinell Hardness Tester



This tester is one new type of Brinell hardness testing instrument which integrates mechanical, optical, electronic and computer's techniques together. It is mainly used for determining the Brinell hardness of cast iron, steel, non-ferrous metals and soft metals, etc. It is especially an ideal testing instrument for hardness measurement of safety parts of plane, automobile and so on.

Features:

- * The Graphical User Interface is adopted and the operating system can be changed between Chinese and English. The system adopts quick and convenient menu operation.
- * The parameters of every measurement can be autosaved and the testing procedure can be performed automatically.
- * The testing data can be processed automatically and the hardness value's converting can also be performed automatically.
- * An advanced frictionless loading shaft mechanism is adopted. It can ensure the accurate and reliable test.

Specifications

Measuring range: 4-450HBS, 4-650HBW
 Test force: 9.807, 49.03, 98.07, 153.2, 294.2, 612.9N (1, 5, 10, 15.625, 30, 62.5kgf)
 Max. height of test piece: 180mm
 Depth of throat: 125mm
 Magnifications of the optical micrometer: 125X, 50X
 Min. value of the optical micrometer: 1µm, 2.5µm
 Power supply: 220/110V AC, 50/60Hz
 Dimensions: 580 x 260 x 730mm
 Weight: Approx. 90kg

Main accessories:

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Steel ball penetrator: Dia.1, Dia.2, Dia.2.5mm, 1 pc. each
 Brinell standardized block: 3 pcs.

Order NO. 950-1101

Electronic Brinell Hardness Tester



This tester is one new type of Brinell hardness tester which integrates mechanical and electronic techniques together, it would be the renewing product of Brinell hardness tester. It can be used for determining the Brinell hardness of unquenched steels, cast iron, non-ferrous metals and soft bearing alloys, etc.

Features:

- * The system will acquiesce all the parameters of last measurement after starting up.
- * Automatic protections are realized when over loading and position exceeding.
- * The operating functions are quick and convenient. The operating system can be changed between Chinese and English.
- * There are no weights in this tester and the test force is applied by electric power.

Specifications

Measuring range: 4-450HBS, 4-650HBW
 Test force: 612.9,980.7,1225.9,1838.8,2451.8,4903.5,7355.3,9807,14710.5,29421N
 (62.5, 100, 125, 187.5, 250, 500, 750, 1000, 1500, 3000kgf)
 Max. height of test piece: 240mm
 Depth of throat: 180mm
 Power supply: 220V AC, 50Hz
 Dimensions: 630 x 250 x 1000mm
 Weight: Approx. 250kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Steel ball penetrator: Dia. 2.5, Dia. 5, Dia. 10mm, 1 pc. each
 Brinell standardized block: 2 pcs.
 20X Readout microscope: 1 pc.

Order NO. 950-1100

Brinell Hardness Tester



This Brinell Hardness Tester is equipped with an electrical changeover switch. It can be used for determining the Brinell hardness of unquenched steels, cast iron, non-ferrous metals and soft bearing alloys, etc.

Specifications

Measuring range: 8-450HBS, 8-650HBW
 Test force: 1.839, 2.452, 7.355, 9.807, 29.42KN (187.5, 250, 750, 1000, 3000kgf)
 Max. height of test piece: 230mm
 Depth of throat: 120mm
 Power supply: 220V AC or 110V AC, 50/60Hz
 Dimensions: 700 x 268 x 842mm
 Weight: approx. 210kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Steel ball penetrator: Dia.2.5mm, Dia.5mm, Dia.10mm 1 pc. each
 Brinell standardized block: 2 pcs.
 20X Readout microscope: 1 pc.

Order NO. 950-1102

Vickers Hardness Tester 50kg



This tester is widely used in the factories, scientific research institutes, laboratories of colleges and institutes, for determining the Vickers hardness of ferrous and non-ferrous metals, hard alloys, carburized and nitrided layers.

Specifications

Measuring range: 5-2900HV
 Test force: 9.807, 49.03, 98.07, 196.1, 294.2, 490.3N
 (1, 5, 10, 20, 30, 50kgf)
 Max. height of test piece: 180mm
 Depth of throat: 125mm
 Magnifications of the optical micrometer: 125X, 50X
 Min. scale value of the optical micrometer: 1micron
 Power supply: 220V or 110V AC, 50/60Hz
 Dimensions: 580 x 260 x 730mm
 Weight: approx. 90kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Diamond pyramid penetrator: 1 pc.
 Vickers standardized block: 3 pcs.

Order NO. 950-1204



Brinell Hardness Tester

This Brinell Hardness Tester adopts the mechanical changeover switch. It can be used for determining the Brinell hardness of unquenched steels, cast iron, non-ferrous metals and soft bearing alloys, etc.

Specifications

Measuring range: 8-450HBS, 8-650HBW
 Test force: 1.839, 2.452, 7.355, 9.807, 29.42KN (187.5, 250, 750, 1000, 3000kgf)
 Max. height of test piece: 230mm
 Depth of throat: 120mm
 Power supply: 380V AC
 Dimensions: 700 x 268 x 842mm
 Weight: approx. 210kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Steel ball penetrator: Dia.2.5mm, Dia.5mm, Dia.10mm 1 pc. each
 Brinell standardized block: 2 pcs.
 20X Readout microscope: 1 pc.

Order NO. 950-1102



Digital Vickers Microhardness Tester 1000gf

The microhardness Tester allows a quick and precise measurements with the integrated lenses. The digital display in front of the system gives directly hardness values and assures an accurate measurement.

Main Features:

- *Direct reading of micro hardness
- *Touch panel backlit LCD display for ease of use
- *Rigid construction minimizes compliance errors
- *Magnifications Up to 500X
- *automatically calculates hardness using a fast image processing software

Specifications:

Loading Mechanism Automatic load and release method
 Measuring Range 5-3000HV
 Test Force: 9.807, 24.52, 49.04, 98.07, 196.1, 294.2, 490.4, 980.7 mN
 (10, 25, 50, 100, 200, 300, 500, 1000 gf)
 Magnifications 500X, 125X
 Measuring Accuracy 0.025%Im
 Max. Specimen Height 75mm
 Max. Specimen Depth 100mm
 Power 220V 50HZ or 110V 60HZ
 Size 340x160x378mm
 Weight 40kg

Order NO. 950-1201



Low Load Vickers Hardness Tester

The Digital Vickers Hardness Testers incorporate mechanical, optical and electronic techniques and are extremely accurate, easy to use instruments for measuring Vickers Hardness of surfaces and materials with an automatic load and release system. They incorporate a frictionless force loading shaft for a high level of accuracy. Sample holders are available for thin films and cylindrical surfaces. The optical micrometers identify the size of the indents and the instruments then automatically calculate the Vickers hardness that are displayed on the LCD screens.

Specifications:

Measuring range: 5-3000HV
 Test force: 1.961, 2.942, 4.903, 9.807, 19.61, 24.52, 29.42, 49.03N
 (0.2, 0.3, 0.5, 1, 2, 2.5, 3, 5kgf)
 Magnifications of the measuring microscope: 500X, 125X
 Min. scale value of the measuring microscope: 0.25micron
 Max. height of test piece: 130mm
 Depth of throat: 100mm
 Power supply: 220/110V AC, 50/60Hz
 Dimensions: 438 x 376 x 685mm
 Weight: Approx. 50kg

Main accessories:

Coordinate anvil: 1 pc.
 Thin shaft anvil: 1 pc.
 Thin plate anvil: 1 pc.
 Flat nose pliers: 1 pc.
 Large V-notch anvil: 1 pc.
 Small V-notch anvil: 1 pc.
 Diamond pyramid penetrator: 1 pc.
 Vickers standardized block: 2 pcs.
 Micro-Vickers standardized block: 1 pc.

Order NO. 950-1202

Digital Vickers Hardness Testers 5kg



The Digital Vickers Hardness Testers incorporate mechanical, optical and electronic techniques and are extremely accurate, easy to use instruments for measuring Vickers Hardness of surfaces and materials with an automatic load and release system. They incorporate a frictionless force loading shaft for a high level of accuracy. Sample holders are available for thin films and cylindrical surfaces. The optical micrometers identify the size of the indents and the instruments then automatically calculate the Vickers hardness that are displayed on the LCD screens.

Main Features:

Direct reading of Vickers Hardness
 Touch panel backlit LCD display for ease of use
 Rigid construction minimizes compliance errors
 Magnifications Up to 500X
 Video Camera Image Capture available
 Digital Display Capabilities Printing capabilities, test force, dwell time, magnification.

Specifications:

Loading mechanism Automatic load and release method
 Test Load: 1.961, 2.942, 4.903, 9.807, 19.61, 24.52, 29.42, 49.03 N
 or 0.2, 0.3, 0.5, 1, 2, 2.5, 3, 5kgf
 Magnification 500X and 125X
 Data Output RS232 standard
 Min measuring unit 1 μ m (500X), 2.5 μ m (125X)
 Min. scale value of the measuring microscope 0.025 micron
 Max specimen height 130 mm
 Max specimen depth 100 mm
 Dimensions W410 x D200 x H620mm
 Power 110 V / 220 V
 Weight 50 Kg

Order NO. 950-1203

Microhardness Tester



This tester is specially suitable for measuring the microhardness of carburized and nitrided layers of metal pieces, thin & small metal test pieces.

Specifications

Measuring range: 5-3000HV
 Test force: 0.09807, 0.2452, 0.4904, 0.9807, 1.961, 2.942, 4.904, 9.807N
 (10, 25, 50, 100, 200, 300, 500, 1000gf)
 Magnifications of the optical micrometer: 500X, 125X
 Min. scale value of the optical micrometer: 0.125micron
 Max. height of test piece: 75mm
 Depth of throat: 100mm
 Power supply: 220 or 110V AC, 50/60Hz
 Dimensions: 340 x 160 x 375mm
 Weight: approx. 40kg

Main accessories

Coordinate anvil: 1 pc.
 Thin shaft anvil: 1 pc.
 Thin plate anvil: 1 pc.
 Flat nose pliers: 1 pc.
 Large V-notch anvil: 1 pc.
 Small V-notch anvil: 1 pc.
 Diamond pyramid penetrator: 1 pc.
 Micro-Vickers standardized block: 2 pcs.
 Electronic calculator: 1 pc.

Order NO. 950-1207

Digital Vickers Hardness Testers 50kg

The Digital Vickers Hardness Testers incorporate mechanical, optical and electronic techniques and are extremely accurate, easy to use instruments for measuring Vickers Hardness of surfaces and materials with an automatic load and release system. They incorporate a frictionless force loading shaft for a high level of accuracy. Sample holders are available for thin films and cylindrical surfaces. The optical micrometers identify the size of the indents and the instruments then automatically calculate the Vickers hardness that are displayed on the LCD screens.

Main Features:

- * Direct reading of Vickers Hardness
- * Touch panel backlit LCD display for ease of use
- * Rigid construction minimizes compliance errors
- * Magnifications Up to 125X
- * Video Camera Image Capture available.
- * Digital Display Capabilities Printing capabilities, test force, dwell time, magnification. Standard deviation, date max., min. & average value display.

Specifications:

- * Loading mechanism Automatic load and release method
- * Test Load: 9.807, 49.03, 98.07, 196.1, 294.2, 490.3 N or 1 5 10, 20 30 50 kgf
- * Measuring range 5-2900HV
- * Magnification 125X and 50X
- * Data Output RS232 standard
- * Min measuring unit 125X, 50X
- * Max specimen height 180 mm
- * Max specimen depth 125 mm
- * Min. scale value of the optical micrometer 0.5micron
- * Dimensions W580 x D260 x H730mm
- * Power 110 V / 220 V
- * Weight 90 Kg

Order NO. 950-1205

Low Load Vickers Hardness Tester 10kgf

This tester is suitable for determining the Vickers hardness of thin sheet metals and various casehardened layers. It is widely applied in the factories, measurement departments, laboratories of colleges and institutes.

Specifications

- Measuring range: 30-3000HV
Test force: 4.903, 9.807, 19.61, 24.52, 29.42, 49.03, 98.07N
(0.5, 1, 2, 2.5, 3, 5, 10kgf)
Max. height of test piece: 130mm
Depth of throat: 100mm
Magnifications of the optical micrometer: 500X, 125X
Min. scale value of the optical micrometer: 0.25micron
Power supply: 220/110V AC, 50/60Hz
Dimensions: 438 x 382 x 708mm
Weight: approx. 70kg

Main accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc.
- V-notch anvil: 1 pc.
- Diamond pyramid penetrator: 1 pc.
- Vickers standardized block: 4 pcs.
- Coordinate anvil: 1 pc.
- Electronic calculator: 1 pc.

Order NO. 950-1208

Brinell and Vickers Hardness Teser



This tester can be used for measuring the Brinell and Vickers hardness of ferrous and non-ferrous metals in the factories of machinery and metallurgy, laboratories of colleges and scientific research institutes. It is especially suitable for determining the hardness of thin and small-sized workpieces.

Specifications

Measuring range: 4-450HBS, 10-3000HV
 Test force: 9.807, 24.52, 49.03, 98.07, 196.1, 294.2N
 (1, 2.5, 5, 10, 20, 30kgf)
 Max. height of test piece: 130mm
 Depth of throat: 100mm
 Magnifications of the optical micrometer: 500X, 125X
 Min. scale value of the optical micrometer: 0.25micron
 Power supply: 220/110V AC, 50/60Hz
 Dimensions: 438 x 382 x 708mm
 Weight: approx. 88kg

Main accessories

Coordinate anvil: 1 pc.
 Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Steel ball penetrator: Dia.1mm, Dia.2mm 1 pc. each
 Diamond pyramid penetrator: 1 pc.
 Brinell standardized block: 2 pcs.
 Vickers standardized block: 2 pcs.
 Electronic calculator: 1 pc.

Order NO. 950-1403

Brinell, Rockwell,Vickers Hardness Tester



This tester is used for determining the Brinell, Rockwell and Vickers hardness of ferrous, non-ferrous metals and hard alloys. It can be applied in the factories, scientific research institutes, laboratories of institutes and colleges.

Specifications

Measuring range: 4-450HBS, 20-88HRA, 20-100HRB, 20-70HRC, 200-1000HV
 Test force: 294.2, 306.5, 588.4, 612.9, 980.7, 1471, 1839N
 (30, 31.25, 60, 62.5, 100, 150, 187.5kgf)
 Max. height of test piece: 200mm
 Depth of throat: 160mm
 Power supply: 220V or 110V AC, 50/60Hz
 Dimensions: 480 x 250 x 760mm
 Weight: approx. 120kg

Main accessories

Large flat anvil: 1 pc.
 Small flat anvil: 1 pc.
 V-notch anvil: 1 pc.
 Diamond cone penetrator: 1 pc.
 Diamond pyramid penetrator: 1 pc.
 Steel ball penetrator: Dia.1.588mm, Dia.2.5mm, Dia.5mm 1 pc. each
 Brinell standardized block: 1 pc.
 Rockwell standardized block: 5 pcs.
 Vickers standardized block: 1 pc.
 40X Readout microscope: 1 pc.

Order NO. 950-1402

Leeb Hardness Tester

This tester is suitable for the quick hardness test of metal materials. They feature high accuracy, reliable performance, easy operation and convenient taking. The measured Leeb hardness can be converted into the hardness of Brinell, Rockwell, Vickers and Shore according to different directions and can be converted and recorded automatically.

Specifications of display unit

Power supply: 6.0V DC
 Working temperature: 1-40degree centigrade.
 Dimensions: 268 x 86 x 47mm
 Weight: approx. 0.67kg

Main accessories

Small positioner: 1 pc.
 Binder: 1 bottle
 Leeb standardized block: 1 pc.
 Charger: 1 pc



Specifications:

Order No.	950-1050	950-1051	950-1052	950-1053
Probe Type	D	DC	D+15	G
Measuring range	330-890HL	330-890HL	346-890HL	300-650HLG
Impact capacity	11Nmm	11Nmm	11Nmm	90Nmm
Dimensions	Dia.20x150mm	Dia. 20x85mm	Dia.20x165mm	Dia.20x250mm
Testing direction	Arbitrary			
Weight	75g	50g	80g	250g
Mass of impact body	5.5g	5.5g	5.5g	20g
Diameter of tungsten carbide ball	3mm	3mm	3mm	5mm
ApplicationRange	Basic type, suitable for most of hardness tests.	Suitable for hardness measuring of inner holes and small space.	Suitable for determining hardness of tooth face and slots, etc.	Suitable for hardness measuring of steel, cast steel, gray cast iron, nodular cast iron and non-ferrous metals.

Digital Rockwell & Superficial Rockwell Hardness Tester

This tester is a popular type Rockwell hardness testing machine with its novel appearance and unique inside structure, features high measuring accuracy, reliable performance and applicable to wide fields, it is used to for harness testing all kinds of Rockwell and Superficial Rockwell.

This tester has big screen to display, Brinell, Rockwell and Vickers for contrasting. It has a lot of function such as keeping the increase and decrease of time, data dispose, storage, pick up, print and RS-232 computer output as well.

Suitable range: HRA.B.C.D.E.F.G.H.K and HR15N.T; 30N.T; 45N.T(scale).

All the technique index are accord with the technique condition standard of GB/T230.3-2002

Rockwell hardness tester and consult ISO6508-2:1999 international standard.

It serves to measure the hardness of carbide, carburizing steels, quenching steels, hardcast iron; mild steels, Al, Cu and malleable irons.

Main Technical Parameters:

Preliminary test force: 29.4M(3kg), 98.07N(10kg)

Total test force: 147.1N(15kg), 294.2N(30kg), 441.3N(45kg),
588.4N(60kg), 980.7N(100kg), 1471N(150kg)

Test force folding time: 0-60S(can adjust)

Test force loading and releasing method: Automatic

Display method: Back light LCD screen

data dispose: CPU

Others: HR,HB,HV,HK hardness member for contrast

Automatic print

RS-232 computer output

Max height of piece: 180mm

Throat depth: 160mm

Dimension (L*W*H): (551*260*800)mm

Net weight: approx 67Kg

Power supply: AC220V±5% 50-60Hz

Main attachments: One diamond indenter and one ball indenter; three working tables;

Five pieces of harness brocks: HRC higher and Lower, HRB, HRN, HRT.



Order No. 950-1501

Digital Rockwell Hardness Tester



This Model digital Rockwell hardness tester is an organic whole of mechanical and electrical hardness testing instrument, with its novel appearance, directly observed digital display device and micro-computer control lifting and lowering screwed and automatic feedback lock among rotary wheels, connecting outside to the printer, full realizes the automatic. That completely eliminates error in those operations and reading.

It can used to measure the Rockwell hardness of ferrous, non-ferrous metals and plastic materials.

Order No. 950-1502

Main Technical Parameters:

Preliminary test force: 98N

Total test force(N): 588, 980, 1471N

Total test force dwell time(s): 1-30

Hardness Indication: Digital

Power Supply: AC220V/50HZ

Max height of piece: 170mm

Throat depth: 165mm

Dimension (DXWXH): 490×212×750mm

Weight: 85kg

Hardness Range: HRA:20-88; HRB:20-100; HRC:20-70.

Superficial Rockwell Hardness Tester

It serves to measure the hardness of ferrous, non-ferrous metals, carbide, Carburized or nitride layers, and other chemical treating layers. It is also used to for the hardness test of thin pieces.



Order No. 950-1503

Main Technical Parameters:

Preliminary test force: 29.1N

Total test force: 147, 294, 441N

Max height of piece: 170mm

Throat depth: 165mm

Dimension (DXWXH): 490×212×750mm

Power Supply: AC220V/50HZ

Weight: 70kg

Hardness Range: HR15N:70-91; HR30N:42-80; HR45N:20-70;
HR15T: 73-93; HR30T:43-82; HR45T:12-72.



Rockwell Hardness Tester Order No. 950-1504

To measure the hardness of carbide, carburizing steels, quenching steels, hardcast irons, mild steels, Al-alloys, Cu-alloys and malleable irons.

Hardness range: HRA: 20-88; HRB: 20-100; HRC: 20-70.

Superficial Rockwell Hardness Tester

To determine the superficial Rockwell hardness of carbide, carburized, nitride layers, and other chemical treating layers; also to measure the hardness of thin pieces.

Hardness range: HR15N:70-91; HR30N:42-80; HR45N:20-70; HR15T:73-93; HR30T:43-82; HR45T:12-72.

Order No. 950-1505

Plastic Rockwell Hardness Tester

For the hardness test of plastics, hard rubbers, fricative materials, synthetic resins, Al-alloys, Sn-alloys hard papers.

Hardness range: HRE:70-94; HRL100-120; HRM85-110; HRR114-125.

Order No. 950-1506

Rockwell Hardness Tester Order No. 950-1507

This tester is a popular type Rockwell hardness testing machine, with its novel appearance and eased operate, can be applied in the workshop of factories and measurement department, for determining the Rockwell hardness of ferrous and non-ferrous metals.

Hardness range: HRA:20-88; HRB:20-100; HRC:20-70.

Main Tech Parameter	950-1504	950-1505	950-1506	950-1507
Preliminary test force	98N	29N	98N	98N
Total test force	588, 980, 1471N	147, 294, 441N	588, 980, 1471N	588, 980, 1471N
Total test force dwell time	0-30S	0-30S	0-30S	0-30S
Max height of piece	170mm	170mm	170mm	170mm
Throat depth	165mm	165mm	165mm	165mm
Dimension (mm)	510×212×750	510×212×750	510×212×750	510×230×750
Power supply	AC220V/50HZ	AC220V/50HZ	AC220V/50HZ	AC220V/50HZ
Weight	85kg	80kg	85kg	85kg

Brinell Rockwell & Vickers Optical Hardness Tester

It serves the purpose of measuring the hardness of ferrous, non-ferrous metals, carbide, carburized layers and chemical treating layers.

Order No. 950-1508

Specifications:

- Preliminary test force:98
- Total test force: 588,980,1471N
- Brinell hardness test: 306,613,1839N
- Vickers hardness test: 294,588,980N
- Magnification: 37.5, 75 times
- Max. height of piece:180mm
- Throat depth: 200mm
- Dimension: 560×260×760mm
- Power Supply: AC220V/50HZ
- Weight: 90kg



Superficial Rockwell & Vickers Optical Hardness Tester

It serves to measure the hardness of ferrous, non-ferrous metals, carbide, carburized or nitrided layers, and other chemical treating layers. It is also used to for the hardness test of thin pieces.

Specifications:

- Preliminary test force: 29.4N
- Total test force: 147,294,441N
- Magnification: 75, 150 times
- Max. height of piece:180mm
- Measure Superficial Rockwell hardness test: 200mm
- Measure Vickers hardness test: 100mm
- Throat depth: 200mm
- Dimension: 560×260×750mm
- Power Supply: AC220V/50HZ
- Weight: 85kg

Order No. 950-1509

Digital Micro Hardness Tester



950-1510

The models is to adopt computer software programming, high-power optical measuring system, and photoelectric sensor technique, etc, through soft keys input, it is able to regulate and measure the strength of light source, to select Vickers and Knoop test method, to maintain time, file No., storage, etc.; and to provide the conversion table of various hardness numbers for reference. In LCD large screen display, it can display testing method, testing force and measuring indentation length, hardness value, dwell time of testing force, measuring times, and can key in year, month & date, testing result and data processing, etc. to be outputted through printer. It can be equipped with camera device; it can take photos of tested indentation and material metallographic composition. The hardness tester is applicable to measure micro hardness of micro & thin specimen, etc., and determine micro hardness of fragile materials, such as glass, ceramic, agate, etc., being the ideal hardness testing instrument for scientific research institution, enterprise and quality inspection department to perform research and detection.

950-1512



Order No.	950-1510	950-1512
Preliminary test force	0.098,0.246,0.49,0.98,1.96,2.94,4.90,9.80N	
Force applied method	Automatic	
Magnification	100× (in observation) & 400× (in measurement)	
Pressure Holding Time	0-60s	5-60s (5 second increment)
Min. Measurable Unit	0.0625μm	
Max. Height of piece	75mm	65mm
Throat depth	95mm	85mm
Dimension	441×270×480mm	405×290×480mm
Power Supply	AC220V/50HZ	AC220V/50HZ
Weight	31kg	25kg

Micro Hardness Tester

Model 950-1511 micro hardness tester is a novel type micro Vicker's and Knoop's hardness testing apparatus which adopts precise mechanical technique and photoelectrical technique. The configuration of this tester which adopts micro-computer to control is novel, by means of adjusting the soft key, the tester is able to adjust and measure either strong or weak light source, and is capable to pressure holding time of the test load and is displayed by LED. This tester adopts peculiar indentation measuring, inverting and read mechanism through measuring once by the micrometer eyepiece. It is easy to use and high precision in measurement.

It can be equipped with camera device; it can take photos of tested indentation and material metallographic composition. The hardness tester is applicable to measure micro hardness of micro & thin specimen, etc., and determine micro hardness of fragile materials, such as glass, ceramic, agate, etc., being the ideal hardness testing instrument for scientific research institution, enterprise and quality inspection department to perform research and detection.

Specifications

Testing Pressure:0.098,0.246,0.49,0.98,1.96,2.94,4.90,9.80N

Pressure Loading & Unloading : Automatic

Magnification: 100× (for observation) & 400× (for measuring)

Pressure Holding Time:5-60s (5 second as input increment)

Min. Measurable Unit: 0.5μm

Max. Height of piece: 65mm

Throat depth: 85mm

Weight: 25kg

Power Supply: AC220V/50HZ

Dimension: 405×290×480mm

Order No. 950-1511



Brinell Hardness Tester



950-1513

950-1513 serves to measure the Brinell hardness of ferrous metals, non-ferrous metals. It adopts electronic automatic load system and ten steps of test force. Test range is more extensive and precision is higher.

950-1514 can be applied to determine the Brinell hardness for ferrous metal and non-ferrous metal. The tester has an electronic auto loading, computer software programming, high power optical measurement photo sensor and other systems.

Order No.	950-1513	950-1514
Type	Electronic Type	Digital Type
Brinell hardness test force	612.5, 980, 1225, 1837.5, 2450, 4900, 7350, 9800, 14700, 29400N	
Measuring area	8-650 HBW(Carbide steel ball)	
Magnification	20X	
Max. Height of piece	200mm	220mm
Throat depth	135mm	135mm
Dimension	236×550×753mm	
Power Supply	AC220V 50/60Hz	
Weight	123kg	



950-1514

Vickers Hardness Tester



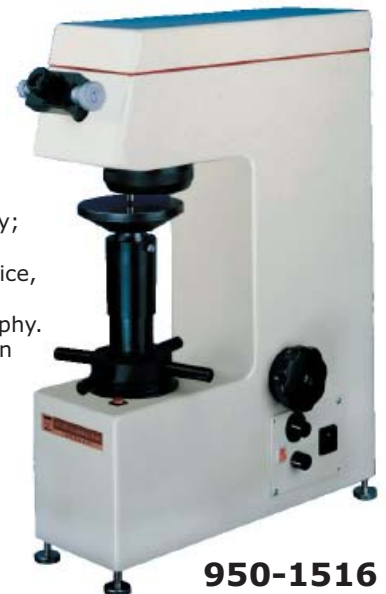
950-1515

950-1517

Micro computer control

Key features and functions:

- Adjustment of lighting source via soft keys;
 - Adjustment of pressure holding time and LED display;
 - Unique measurement conversion device and unique micro eyepiece one-time measurement readout device, ensuring easy use and high accuracy;
 - Camera for indentation photographing and metallography.
- The tester is specially designed for testing minute, thin samples or parts after surface coating.



950-1516

Order No.	950-1515	950-1517	950-1516
Testing Pressure	2.94N(0.35Kgf),4.9N(0.5Kgf), 9.80N(1Kgf),29.4N(3Kgf), 49.0N(5Kgf),98.0N(10Kgf)	9.8N(1Kgf),49N(5Kgf), 98N(10Kgf),196N(20Kgf), 294N(30Kgf),490N(50Kgf)	19.6N(2Kgf),29.4N(3Kgf), 49.0N(5Kgf),98.0N(10Kgf), 196N(20Kgf),294N(30Kgf)
Hardness Value Symbol	HV1,HV5,HV10,HV20,HV30,HV50		HV2,HV3,HV5,HV10,HV20 HV30
Error Range in Display	±3.0%		±3.0% ±2.0%
Measuring Range	8HV0.3-2500HV10	5HV1-2500HV10	10HV2-2500HV30
Magnification	100× & 200×	100×	100×
Pressure Holding Time	5-60s (5 second increment)		0-30s (5 second increment)
Min. Measurable Unit	0.5µm	1µm	1µm
Max. Height of piece	160mm		150mm
Throat depth	135mm		130mm
Dimension	540×220×650mm		452×200×620mm
Power Supply	AC220V/50HZ		AC220V/50HZ
Main Body Weight	40kg		38kg

Digital Low Load Vickers Hardness Tester

Low Load Vicker's Hardness Tester with Digital Display is a new hi-tech product integrating mechanical and photoelectrical technologies. As a substitute of traditional small-load Vicker's hardness tester, it features in easy operation and good reliability.

The following highlight some key features and functions:

- Integration of computer programming technology, high resolution optical measuring system and photoelectrical technique;
- Soft key input;
- Light source adjustment;
- Selectable testing model, conversion tables, pressure-holding time, file number input and data saving functions;
- Big LCD screen to display testing model, testing pressure, indentation length, hardness values, pressure holding time and numbers of tests;
- Date recording test results recording and data processing;
- Printing output function;
- RS232 interface for PC connection;
- Camera for indentation photographing and metallography

The tester is specially designed for testing minute, thin samples or parts after surface coating. For research institutes, factories labs and QC departments, this is an ideal hardness testing instrument for research or measuring purposes.



Order No.	950-1518	950-1519	
Testing Pressure	2.49N(0.3Kgf),4.9N(0.5Kgf),9.8N(1Kgf), 29.4(3Kgf),49.0N(5Kgf),98.0N(10Kgf)	9.8N(1Kgf),49N(5Kgf),98N(10Kgf), 196(20Kgf),294N(30Kgf),490N(50Kgf)	
Hardness Value Symbol	HV1,HV5,HV10	HV1,HV5,HV10,HV20	HV30,HV250
Error Range in Display	±3.0%	±3.0%	±2.0%
Measuring Range	8HV0.3-2500HV10	5HV-2500HV	
Magnification	100×	100×	
Pressure Holding Time	5-60s (5 second increment)	5-60s (5 second increment)	
Min. Measurable Unit	0.0625µm	0.25µm	
Max. Height of piece	160mm	160mm	
Throat depth	135mm	135mm	
Dimension	540×220×650mm	540×220×650mm	
Power Supply	AC220V/50HZ	AC220V/50HZ	
Main Body Weight	40kg	40kg	

Hammer Hitting Type Brinell Hardness Tester



Order No. 950-1520

Low Speed Precision Saw



Specifications:
Stroke of movable frame: 25mm
Positioning accuracy: 0.01mm
Rotate speed of main shaft: 0-700r/min
Diameter of saw disc: $\phi 100 \sim \phi 150$ mm
Power: 50w
Voltage: 110~220V
Overall dimension: 350x350x200mm
Weight: 18.5kg

Order No. 950-1420

Specimen Grinder



Technique Parameter

*Diameter of grinding plate: Dia.230mm
*Rotate speed of grinding plate: 450r/min
*Motor: 370w 220v 50Hz
*Overall dimension: 690*715*310mm
*Net weight: 45kg

Main Accessories

one of 1.5-meter outlet water pipe
one of 2-meter endure-pressure inlet water pipe
two pieces of polishing fabric

Order No.950-1423

Specimen Cutter Machine



Description

*No.950-1421 manual cutting machine is a large standing cutting machine, designed and manufactured according as an introduced and advanced technique of cutting actions and the health and safety standard of EC by our company.
*No.950-1421 includes cutting system, lighting system, cooling system and cleaning system.
*Scientific design of pull bar makes cutting action easy-to-use.
*Super cooling system can avoid specimen from burning while cutting.
*Imported gate style safety switch and explosion proof hood afford the safe guarantee for operators.
*It is the ideal option for colleges, car manufacturing, steel manufactories, material research institutes and so on.

Specifications

*Motor power: 4kw/5.5kw
*Cutting capacity of the new abrasive wheel : Dia.110mm
*Wide T-solt Bed, special clamping for large samples
*Coolant tank with 80L capacity
*Water-jet type cleaning system
*Isolated lighting system
*Imported gate style safety switch
*Power supply: 380V 50Hz

Order No.950-1421



Specimen Cutter Machine

Features

*The cutting machine is suitable for cutting metallographic and petrographic materials. It is safe, less noises and easy-to-use. It is the ideal option for laboratories of college, industry and mining. For rocks, potteries and porcelains sectioning, it must be with diamond cutting disc, large and close cutting compartment. Dual drive vises, T worktable, it is convenient to clamp variable irregular shape work pieces. Inside cooling system with 60L capacity. Isolated lighting system. Non-corroding cutting compartment and coolant tank.

Specifications

Cutting power: 3.0KW
 Grinding disc capacity: 350*2*32mm
 Rotate speed: 2800r/minMax.
 cutting diameter: 100mm
 Power: 380v 50Hz
 Overall dimension: 600*650*1400mm

Main Accessories

2 pieces of grinding disc
 2 pieces of spanner

Order No.950-1422

Manual Specimen Cutter Machine

*The cutting machine is suitable for cutting all kinds of specimens including metallic materials and nonmetallic materials so as to observe metallographic structure and lithofacies structure. The built-in cooling circuit could help to prevent burning the sample tissue due to overheating during the cut-off process. The cutting machine is quiet convenient, safety and reliable. It is one of the specimen-making equipments necessary for metallographic test for factory, researching unit and college and university laboratory.

Specifications

*Power :3phases ,4cords (380V,50HZ)
 *Rotation rate of spindle :2800rpm
 *Max cut-off diameter :80mm
 *Motor :Y2-1001-2 3.0KW

Order No.950-1456



Automatic Specimen Cutter Machine



Specifications

*Power :3phases , 4wires
 *Rotate speed of abrasive disc:2100rpm
 *Specification of abrasive disc:350mmx2.5mmx32mm
 *Max. cutting diameter: Dia.80mm
 *Max .cutting capacity : 80mmx200mm
 *Motor:Y S90L-2 2.2KW
 *Dimensions of cutting table:310mmx280mm

Order No.950-1455

Automatic Specimen Grinder and Polisher

Features

- *Rotate speed display in Digital
- *Force and sampling time changeable
- *Polishing disk with two steps stationary speed and stepless speed control
- *Polishing principal axis with stepless speed changed with nice and utilitarian glass fiber crust and stainless steel current pieces, rustless forever
- *Quick change polishing disk design, variable specimen holder central force
- *Large volume abrasives automatically dispensing system
- *Preparing for 6 samples simultaneously with one-key restore program function

Specifications

- *Speed of polishing disc:0-600rpm(stepless speed change) or 150rpm/300rpm(two steps stationary speed)
- *Force arranges: 1-200N
- *Sampling time: 0-999S
- *Max. diameter of sample: Dia.30mm
- *Diameter of polishing disk: Dia.250mm
- *Voltage: 220v 50Hz
- *Dimension: 660*380*640mm
- *Net Weight: 45kg

Main Accessories

- both of inflow and outflow water pipes
- 2 pieces of quick change polishing disk
- 1 flattener



Order No.950-1424

Specimen Grinder and Polisher

Features

- *This grinder polisher is the most economical and applied machine for metallographic specimens.
- *Full series of styles can fit multiple specimen preparation.
- *Designed and manufactured according to international advanced methodology and qualification of metallographic specimens.
- *Equipped with beautiful and applied glass fiber crust pure stainless steel, rustless forever.
- *Both of style of single-disk and double-disk equipped with stepless speed change and multiple-step constant speed system.
- *E-style machine equipped with stepless speed change and dual step constant speed system simultaneously, and can be switched each other.
- *The turnaround of plates can be chose with one-key restore program function.

Specifications

- *Speed of polishing disc: 50-600rpm(stepless speed change) or 150rpm/300rpm (two steps stationary speed)
- *Diameter of polishing disk: Dia.250mm
- *Voltage: 220v 50Hz
- *Dimension: 380*660*300mm
- *Net Weight: 45kg

Main Accessories

- *both of inflow and outflow water pipes
- *2 pieces of quick change polishing disk

Order No:950-1425
Order No:950-1426



Specimen Grinder and Polisher

Features

- *This grinder polisher is the most economical and applied machine for metallographic specimens.
- *Full series of styles can fit multiple specimen preparation.
- *Designed and manufactured according to international advanced methodology and qualification of metallographic specimens.
- *Equipped with beautiful and applied glass fiber crust ,pure stainless steel, rustless forever.
- *E-style machine equipped with stepless speed change and dual step constant speed system simultaneously, and can be switched each other.
- *The turnaround of plates can be chose.
- *With one-key restore program function.

Specifications

- *Speed of polishing disc: 50-600rpm(stepless speed change) or 150rpm/300rpm (two steps stationary speed)
- *Diameter of polishing disk: Dia.200mm
- *Voltage: 220v 50Hz
- *Dimension: 630*630*300mm
- *Net Weight: 45kg

Main Accessories

- *both of inflow and outflow water pipes
- *2 pieces of quick change polishing disk

Order No.950-1429
Order No.950-1430



Specimen Grinder and Polisher

Features

- *This grinder polisher is the most economical and applied machine for metallographic specimens.
- *Full series of styles can fit multiple specimen preparation.
- *Designed and manufactured according to international advanced methodology and qualification of metallographic specimens.
- *Equipped with beautiful and applied glass fiber crust, pure stainless steel, rustless forever.
- *E-style machine equipped with stepless speed change and dual step constant speed system simultaneously, and can be switched each other.
- *The turnaround of plates can be chose.
- *With one-key restore program function.

Specifications

- *Speed of polishing disc: 50-600rpm(stepless speed change) or 150rpm 300rpm (two steps stationary speed)
- *Diameter of polishing disk: Dia.300mm
- *Voltage: 220v 50Hz
- *Dimension: 430*710*300mm
- *Net Weight: 55kg

Main Accessories

- *both of inflow and outflow water pipes
- *1 piece of quick change polishing disk

Order No.950-1437



Specimen Grinder and Polisher

Features

- *This grinder polisher is of single disc.
- *It is suitable for pregrinding, grinding and polishing metallographic specimens.
- *Since the machine is speed-adjusted by a transducer, it can run from 50rpm to 1000rpm, which favors the machine with wide applications.

Specifications

- *Working voltage: 220V 50HZ
- *Diameter of grinding disc: Dia.230mm
- *Rotate speed: 50-1000rpm
- *Diameter of polishing disc: Dia.200mm
- *Rotate speed: 50-1000rpm
- *Motor: YSS7124, 550W
- *Overall dimensions: 650*370*310mm
- *Weight: 30kg

Order No.950-1441
Order No.950-1442



Specimen Grinder and Polisher

Features

- *This grinder polisher is of double discs.
- *It is suitable for pregrinding, grinding and polishing metallographic specimens.
- *Since the machine is speed-adjusted by a transducer, it can run between 50 and 1000rpm, which favors the machine with wide applications.
- *The machine is equipped with cooling system which can cool down the specimen during primary grinding so as to prevent overheating and damage the metallographic structure.
- *The left disc is for primary grinding and normal grinding, right disc is for polishing.
- *Featuring easy operation and reliable performance, it is an indispensable device for the factories, research institutions and college labs to prepare metallographic specimen.

Specifications

- *Working voltage: 220V 50HZ
- *Diameter of polishing disc: Dia.200mm
- *Rotate Speed: 50-1000rpm
- *Diameter of grinding disc: Dia.230mm
- *Rotate Speed: 50-1000rpm
- *Diameter of sand paper: Dia.200mm
- *Motor: YSS7124, 550W
- *Overall dimensions: 700*700*300mm
- *Weight: 45kg

Order No.950-1443
Order No.950-1444



Specimen Grinder and Polisher

Specifications

- *Diameter of grinding plate: Dia.230mm
- *Diameter of polishing plate: Dia.200mm
- *Rotate speed of polishing plate: 450r/min
- *Motor: 370w 220v 50Hz
- *Overall dimension: 690*715*310mm
- *Net weight: 45kg

Main Accessories

- *1.5-meter outlet water pipe
- *2-meter endure-pressure inlet water pipe
- *two pieces of polishing fabric

Order No.950-1445
Order No.950-1446



Specimen Polisher



Specifications

- *Motor power: 180w
- *Diameter of polishing plate: 200mm
- *Rotate speed: 1400r/min
- *Power: 380v 50Hz
- *Overall dimension: 360*300*320mm

Main Accessories

- *1 piece of polishing cloth

Order No.950-1447

Specimen Polisher



Specifications

- *Motor power: 180w
- *Diameter of polishing plate: 200mm
- *Rotate speed: 1400r/min
- *Weight: 35kg With cooling system
- *Power: 380v 50Hz
- *Overall dimension: 730*405*308mm

Main Accessories

- *2 pieces of polishing cloth

Order No.950-1451

Specimen Polisher

Features

- *No.950-1450 possesses more advanced and pleasant cabinet design, which has more space for storage.
- *With cooling unit, the heat generated from polishing is able to be removed to avoid damaging the specimen.
- *The motor with different speed can be applied to various metals.
- *This equipment will be an ideal choice for colleges, industrial enterprises and research institutes.

Specifications

- *Diameter of polishing plate: Dia.200mm
- *Rotate speed: 1400rpm or 900rpm
- *Motor: 380v/50hz or 220v/50hz
- *Dimension: 900*560*1010mm

Order No.950-1450



Specimen Polisher

Specifications

- *Motor power: 180w
- *Diameter of polishing plate: 200mm
- *Power: 380v 50Hz or 220v 50Hz (that can be ordered)
- *Rotate speed: 1400r/min or 900r/min (that can be ordered)
- *Overall dimension: 900*500*915mm

Main Accessories

- *1 piece of polishing cloth
- *It can be turned to table -style by removing four stands

Order No.950-1449

Automatic Cutter



Specifications

- *Power :3phases, 4wires 380v,50Hz
- *Rotate speed of principal axis:2100rpm
- *Specification of abrasive disc:350mm*2.5mm*32mm
- *Max. cutting diameter:Dia.100mm
- *Max .cutting capacity :100mm*200mm
- *Motor:YS90L2-2 3KW
- *Dimensions of cutting table :310mm*280mm
- *Overall dimension: 930*700*610mm

Order No.950-1452

Specimen Cutter Machine



Features

- *The machine cuts metallographic specimen with thin grinding wheel of rotating speedily, which is fit for cutting harder metal materials.
- *The machine has cooling equipment that will take off the quantity of heat produced when cutting, which will prevent sample too heat from changing organizations metallographic sample.

Specifications

- *Max .cutting section: 30*30mm
- *Specifications of grinding wheel piece: 250*2*32mm
- *Rotation speed: 2800r/min
- *Motor: 1.1KW
- *Voltage: 380V 50HZ
- *Overall dimension:470*390*360mm
- *Net weight: 60kg

Order No.950-1453

Specimen Cutter Machine

Features

- *This cutting machine is suitable for cutting the specimens of metallic materials and assorted rocks, which facilitates the observation of metallographic or rock structure.
- *The machine is equipped with cooling system that can cool down the specimen during cutting so as to prevent overheating and damaging the metallurgical structure.
- *Featuring easy operation and reliable performance, it is an indispensable device for the factories, research institutions and college labs to prepare metallurgical specimen.

Specifications

- *Max.Cutting Width: 60mm
- *Max.Cutting Height: 80mm
- *Max.Cutting Diameter:Dia.50mm
- *Specifications of Abrasive Wheel:250*2*32mm
- *Weight: 130kg

Order No.950-1454



Specimen Grinder and Polisher

Features

- *This grinder polisher is the most economical and applied machine for metallographic specimens.
- *Full series of styles can fit multiple specimen preparation.
- *Designed and manufactured according to international advanced methodology and qualification of metallographic specimens.
- *Equipped with beautiful and applied glass fiber crust, pure stainless steel, rustless forever.
- *Both of style of single-disk and double-disk equipped with stepless speed change and multiple-step constant speed system.
- *E-style machine equipped with stepless speed change and dual step constant speed system simultaneously, and can be switched each other.
- *The turnaround of plates can be chose.
- *Dual motors, with independence control system

Specifications

- *Speed of polishing disc: 50-600rpm(stepless speed change) or 150rpm/300rpm (two steps stationary speed)
- *Diameter of polishing disk: Dia.200mm/ Dia.250mm
- *Voltage: 220v 50Hz
- *Dimension:630*630*300mm
- *Net Weight: 75kg

Main Accessories

- *both of inflow and outflow water pipes
- *2 pieces of quick change polishing disk

Order No:950-1433

Order No:950-1434



MOUNTING PRESS

Features

- *This machine is designed for purpose of the last process before polishing.
- *It is setting up those small, difficult-to-hold or irregular specimen for metallographical test.
- *It can facilitate polishing and watch properly the ideal material structure and measure the hardness of the material by hardness tester.
- *The inserts for this machine are limited to thermosetting material only.
- *The punching temperature of different thermosetting material: be adjusted depending upon the features of materials .
- *Optional inserts are available.

Specifications

Specifications of heater:220V
Overall dimensions:400*290*400mm
Weight:33kg



Order No.	Thermosetting materials	Diameter of specimen	Volume of inserted powder	Heating temperature	Temperature holding time	Time for cooling
950-1457	Urea formal degdemoulding	22	10ml	130 °	10min	15min
	Insulatingmoulding powder (black)	22	10ml	135-150 °	8min	15min
950-1458	Urea formal degdemoulding powder	30	20ml	130°	10min	15min
	Insulatingmoulding powder (black)	30	20ml	135-150°	8min	15min
950-1459	Urea formal degdemoulding powder	45	35ml	130°	10min	15min
	Insulatingmoulding powder (black)	45	35ml	135-150°	8min	15min

Metal Cutting Bandsaw



Order No.: 850-0001

Features:

- * Heavy-duty cast base.
- * Full guarded blade.
- * Oil-bath gear box and life lubricated drive bearing.
- * Quick action vise.

Specifications:

- * Capacity 90: 4"x6" /100mmx150mm (rectangle), 4-1/2"/115mm (round)
- * Capacity 45: 2.36"x2.76" (rectangle), 2.76"(round)
- * Blade size: 1/2"x.025"x 64-1/2" (12.5mmx0.64mmx1638mm)
- * Blade speeds: 80, 120, 200 FPM
- * Bed width: 7-1/2"
- * Vise: 7-3/4"x6-1/4"
- * Overall length: 37"
- * Motor: 1/2HP
- * Height: 38" (horizontal); 54" (vertical)

Metal Cutting Bandsaw 115mm



Features:

- * Light-weight design, suitable for field and construction site application.
- * The bow can stand at 90 degree for vertical cutting.

Specifications:

- Max. Circular Capacity at 90 degree: 115mm 4.5")
- Max. Rectangular Capacity at 90 degree: 100x150mm (4"x6")
- Max. Circular capacity at at 45 degree: 100mm(4")
- Max. Rectangular capacity at 45 degree: 100*100mm(4"x4")
- Blade speed at 60HZ: 24,37,67MPM
- Blade speed at 50HZ: 80,120,220 FPM
- Blade size 12.7x0.64x1638mm (0.5"*0.025"x64.5")
- Motor: 375W (0.5HP),50/60HZ
- Drive: V-Belt
- Packing size 1020*320*390mm(40"*12.5"x15.25")
- N.W./G.W.: 61/64 kg (134/141 lb)

Order No.: 850-0002

Metal Cutting Bandsaw 100mm



Features:

- * Easy to carry to any work sites.
- * Angular cutting from 0 to 45 degrees.
- * Ideal for accurate metal cutting
- * High safety standard

Specifications:

- Max. Circular Capacity at 90 degree: 100mm(4")
- Max. Rectangular Capacity at 90 degree: 100x150mm (4"x6")
- Max. Circular capacity at at 45 degree: 60mm(2.4")
- Max. Rectangular capacity at 45 degree: 60x100mm(2.4"x4")
- Blade speed at 60HZ: 54MPM
- Blade speed at 50HZ: 45MPM
- Blade size 13x0.65x1470mm (0.5"x0.025"x58")
- Motor: 375W (0.5HP)
- Drive: Gear
- Packing size 55x37x40cm(22"x15"x16")
- N.W./G.W.: 23/26 kg (51/57 lb)

Order No.: 850-0005

Metal Cutting Bandsaw 128mm



Features:

- * Light-weight design, suitable for field and construction site application.
- * The bow can stand at 90 degree for vertical cutting.

Specifications:

Max. Circular Capacity at 90 degree: 128mm
Max. Rectangular Capacity at 90 degree: 128x150mm
Max. Circular capacity at at 45 degree: 95mm
Max. Rectangular capacity at 45 degree: 75x95mm
Max. Circular capacity at 60 degree: 44mm
Max. Rectangular capacity at 60 degree: 44x56mm
Blade speed at 60HZ: 24,47,61MPM
Blade speed at 50HZ: 20,29,50 MPM
Blade size 12.7x0.64x1638mm
Motor: 375W (0.5HP),50/60HZ
Drive: V-Belt
Packing size 980x750x640(38.6"x30"x25")
N.W./G.W.: 110/140 kg (242/308 lbs)

Order No.: 850-0003

Metal Cutting Bandsaw 5"



Features:

- * Light-weight design, suitable for field and construction site application.
- * The bow can stand at 90 degree for vertical cutting.
- * With hydraulic down feed

Specifications:

Max. Circular Capacity at 90 degree: 5"
Max. Rectangular Capacity at 90 degree: 5"x6"
Max. Circular capacity at at 45 degree: 3.75"
Max. Rectangular capacity at 45 degree: 2.94"x3.75"
Max. Circular capacity at 60 degree: 1.75"
Max. Rectangular capacity at 60 degree: 1.75"x2.19"
Blade speed at 60HZ: 80,120,200FPM
Blade speed at 50HZ: 65,95,165 FPM
Blade size 0.5"x0.025"x64.5"
Motor: 1/2HP,50/60HZ
Drive: V-Belt
Packing size 980x750x640(38.6"x30"x25")
N.W./G.W.: 110/140 kg (242/308 lbs)

Order No.: 850-0004



Metal Cutting Bandsaw 7"

Specifications:

Max. Circular Capacity at 90 degree: 178mm (7")
 Max. Rectangular Capacity at 90 degree: 178x305mm (7"x12")
 Max. Circular capacity at at 45 degree: 127mm (5")
 Max. Rectangular capacity at 45 degree: 120x125mm (4.75"x4.88")
 Blade speed at 60HZ: 27,41,59,78 MPM
 Blade speed at 50HZ: 22,34,49,64 MPM
 Blade size: 19.05X0.8X2362mm (0.75"x0.03"x93")
 Motor: 750W (1HP), 50/60HZ
 Drive: V-Belt
 Packing size 140x56x115cm
 N.W./G.W.: 180/227kg

Order No.: 850-0006



Metal Cutting Bandsaw 7"x12"

Features:

- * With higher and easy moving stand.
- * The bow can be moved between 90 degree and 45 degree.

Specifications:

Max. Circular Capacity at 90 degree: 178mm (7")
 Max. Rectangular Capacity at 90 degree: 178x305mm (7"x12")
 Max. Circular capacity at at 45 degree: 127mm (5")
 Max. Rectangular capacity at 45 degree: 120x115mm (4.75"x4.5")
 Blade speed at 60HZ: 34,70,104 MPM
 Blade speed at 50HZ: 29,59,87 MPM
 Blade size: 19.05X0.8X2362mm (0.75"x0.03"x93")
 Motor: 750W (1HP), 50/60HZ
 Drive: Gearbox
 Packing size 140x56x115cm
 N.W./G.W.: 210/250kg

Order No.: 850-0007



Metal Cutting Bandsaw 7"x10"

Features:

- * With higher and easy moving stand.
- * The bow can be moved between 90 degree and 45 degree.

Specifications:

Max. Circular Capacity at 90 degree: 180mm (7")
 Max. Rectangular Capacity at 90 degree: 178x305mm (7"x10")
 Max. Circular capacity at at 45 degree: 105mm (4")
 Max. Rectangular capacity at 45 degree: 120x115mm (4.75"x4.5")
 Blade speed at 60HZ: 39,66,82 MPM
 Blade speed at 50HZ: 34,55,66 MPM
 Blade size: 19.05X0.8X2362mm (0.75"x0.03"x93")
 Motor: 750W (1HP), 50/60HZ
 Drive: Gearbox
 Packing size 130x57x112cm
 N.W./G.W.: 180/210kg

Order No.: 850-0008



Gear Driven Metal Cutting Bandsaw 7"

Features:

- * The bow can be moved between 90 degree and 45 degree.
- * Gear Driven.

Specifications:

Max. Circular Capacity at 90 degree: 178mm (7")
Max. Rectangular Capacity at 90 degree: 178x210mm (7"x8.25")
Max. Circular capacity at at 45 degree: 127mm (5")
Max. Rectangular capacity at 45 degree: 85x140mm (3.33"x5.5")
Blade speed at 60HZ: 34,70,104 MPM
Blade speed at 50HZ: 29,59,87MPM
Blade size: 19.05X0.8X2362mm (0.75"x0.03"x93")
Motor: 750W (1HP), 50/60HZ
Drive: Gear Drive
Packing size 132x77x115cm
N.W./G.W.: 210/260kg

Order No.: 850-0009



Belt Driven Metal Cutting Bandsaw 7"

Features:

- * The bow can be moved between 90 degree and 45 degree.
- * Belt Driven.

Specifications:

Max. Circular Capacity at 90 degree: 178mm (7")
Max. Rectangular Capacity at 90 degree: 178x210mm (7"x8.25")
Max. Circular capacity at at 45 degree: 127mm (5")
Max. Rectangular capacity at 45 degree: 85x140mm (3.33"x5.5")
Blade speed at 60HZ: 27,41,59,78 MPM
Blade speed at 50HZ: 22,34,49,64 MPM
Blade size: 19.05X0.8X2362mm (0.75"x0.03"x93")
Motor: 750W (1HP), 50/60HZ
Drive: Belt Drive
Packing size 132x77x115cm
N.W./G.W.: 190/240kg

Order No.: 850-0011



Metal Cutting Bandsaw 7"

- * The bow can be moved between +/-45 degree.

Specifications:

Max. Circular Capacity at 90 degree: 178mm (7")
Max. Rectangular Capacity at 90 degree: 178x210mm (7"x8.25")
Max. Circular capacity at at 45 degree: 127mm (5")
Max. Rectangular capacity at 45 degree: 85x140mm (3.33"x5.5")
Blade speed at 60HZ: 34,70,104 MPM
Blade speed at 50HZ: 29,59,87 MPM
Blade size: 19.05X0.8X2362mm (0.75"x0.03"x93")
Motor: 750W (1HP), 50/60HZ
Drive: Gearbox
Packing size 132x77x115cm
N.W./G.W.: 210/260kg

Order No.: 850-0010

Belt Driven Metal Cutting Bandsaw 9"

Specifications:

Max. Circular Capacity at 90 degree: 229mm (9")
 Max. Rectangular Capacity at 90 degree: 178x305mm (7"x12")
 Max. Circular capacity at at 45 degree: 150mm (6")
 Max. Rectangular capacity at 45 degree: 127x150mm (5"x6")
 Blade speed at 60HZ: 32,60,88,115 MPM or 105,196,188,377 FPM
 Blade speed at 50HZ: 26,50,73,95 MPM or 85,164,240,312 FPM
 Blade size: 19.05X0.8X2362mm (0.75"x0.03"x93")
 Motor: 750W (1HP), 50/60HZ
 Drive: V Belt Drive
 Packing size 160x60x115cm
 N.W./G.W.: 220/248kg

Order No.850-0012



Gear Driven Metal Cutting Bandsaw 9"

Specifications:

* Max. Circular Capacity at 90 degree: 229mm (9")
 * Max. Rectangular Capacity at 90 degree: 178x305mm (7"x12")
 * Max. Circular capacity at at 45 degree: 150mm (6")
 * Max. Rectangular capacity at 45 degree: 127x150mm (5"x6")
 * Blade speed at 60HZ: 38,78,115 MPM or 125,255,380 FPM
 * Blade speed at 50HZ: 31,65,95 MPM or 104,212,316FPM
 * Blade size: 27X0.9X2655mm (1.06"x0.036"x104.5")
 * Motor: 750W (1HP), 50/60HZ
 * Drive: Gear Driven
 * Packing size 160x60x115cm
 * N.W./G.W.: 210/260kg

Order No. 850-0013



Metal Cutting Bandsaw 9"



Features:

- * Rigid cast iron design with steel base serving as utility shelf.
- * Two speeds for optimum cutting of metal.
- * Coolant pump ensures longer service life of saw blade.
- * scale on the vise allows easy adjustment for angle cuts.
- * Quick adjusting vise for angular cuts.
- * Swivel saw frame.

Specifications:

Max. Circular Capacity at 90 degree: 226mm (9")
 Max. Rectangular Capacity at 90 degree: 260x110mm (10"x4.3")
 Max. Circular capacity at at 45 degree: 150mm (6")
 Max. Rectangular capacity at 45 degree: 200x125mm (7.9"x5")
 Blade speed at 60HZ: 4P 72MPM or 236 FPM
 Blade speed at 50HZ: 8P 36MPM or 118FPM
 Blade size: 27X0.9X2455mm (1"x0.03"x96.7")
 Motor: 1100W (1.5HP), 50/60HZ
 Drive: Gearbox
 Packing size 146x72x110cm
 N.W./G.W.: 260/300kg

Order No.850-0020

Metal Cutting Bandsaw 9"



* The bow can be swiveled between 90 and 45 degrees.

Specifications:

Max. Circular Capacity at 90 degree: 229mm (9")
Max. Rectangular Capacity at 90 degree: 178x305mm (7"x12")
Max. Circular capacity at at 45 degree: 150mm (6")
Max. Rectangular capacity at 45 degree: 127x150mm (5"x6")
Blade speed at 60HZ: 38,78,115 MPM or 125,255,380 FPM
Blade speed at 50HZ: 31,65,95 MPM or 104,212,316FPM
Blade size: 27X0.9X2655mm (1.06"x0.036"x104.5")
Motor: 750W (1HP), 50/60HZ
Drive: Gear Driven
Packing size 160x60x115cm
N.W./G.W.: 210/260kg

Order No.850-0014

Metal Cutting Bandsaw 9"



* The bow can be swiveled between +/- 45 degrees.

Specifications:

Max. Circular Capacity at 90 degree: 229mm (9")
Max. Rectangular Capacity at 90 degree: 178x305mm (7"x12")
Max. Circular capacity at at 45 degree: 150mm (6")
Max. Rectangular capacity at 45 degree: 127x150mm (5"x6")
Blade speed at 60HZ: 38,78,115 MPM or 125,255,380 FPM
Blade speed at 50HZ: 31,65,95 MPM or 104,212,316FPM
Blade size: 27X0.9X2655mm (1.06"x0.036"x104.5")
Motor: 750W (1HP), 50/60HZ
Drive: Gear Driven
Packing size 160x60x115cm
N.W./G.W.: 210/260kg

Order No.850-0015

Hydraulic Metal Cutting Bandsaw 9"

Features:

- *Vertical force controlled through hydraulic cylinder.
- * Rebut structure for maximum capacity cutting.

Specifications:

Max. Circular Capacity at 90 degree: 229mm (9")
Max. Rectangular Capacity at 90 degree: 127x406mm (5"x16")
Max. Circular capacity at at 45 degree: 150mm (6")
Max. Rectangular capacity at 45 degree: 150x190mm (6"x7.5")
Blade speed at 60HZ: 35,60,88,115 MPM or 114,196,288,377 FPM
Blade speed at 50HZ: 26,50,73,95 MPM or 95,164,240,312FPM
Blade size: 27X0.9X3090mm (1.06"x0.036"x122")
Motor: 1.1kW (1.5HP), 50/60HZ
Drive: V belt
Packing size 176x83x115cm
N.W./G.W.: 260/340kg

Order No.850-0016



Hydraulic Metal Cutting Bandsaw 10"

Features:

- *Vertical force controlled through hydraulic cylinder.
- * Rebut structure for maximum capacity cutting.

Specifications:

Max. Circular Capacity at 90 degree: 254mm (10")
 Max. Rectangular Capacity at 90 degree: 127x457mm (5"x18")
 Max. Circular capacity at at 45 degree: 150mm (6")
 Max. Rectangular capacity at 45 degree: 150x190mm (6"x7.5")
 Blade speed at 60HZ: 35,60,88,115 MPM or 114,196,288,377 FPM
 Blade speed at 50HZ: 26,50,73,95 MPM or 95,164,240,312FPM
 Blade size: 27X0.9X3276mm (1.06"x0.036"x129")
 Motor: 1.47kW (2HP), 50/60HZ
 Drive: V belt
 Packing size 183x83x115cm
 N.W./G.W.: 310/397kg

Order No.850-0018



Variable Blade Speed Hydraulic Metal Cutting Bandsaw 9"

Features:

- *Vertical force controlled through hydraulic cylinder.
- * Rebut structure for maximum capacity cutting.
- * Variable blade speed.

Specifications:

Max. Circular Capacity at 90 degree: 229mm (9")
 Max. Rectangular Capacity at 90 degree: 127x406mm (5"x16")
 Max. Circular capacity at at 45 degree: 150mm (6")
 Max. Rectangular capacity at 45 degree: 150x190mm (6"x7.5")
 Blade speed at 60HZ: 22 to 122MPM or 95 to 402FPM
 Blade speed at 50HZ: 18 to 102MPM or 78 to 335FPM
 Blade size: 27X0.9X3090mm (1.06"x0.036"x122")
 Motor: 1.1kW (1.5HP), 50/60HZ
 Drive: V belt
 Packing size 176x83x115cm
 N.W./G.W.: 300/348kg

Order No.850-0017



Gear Driven Metal Cutting Bandsaw 9"

Features:

- *Vertical force controlled through hydraulic cylinder.
- * Rebut structure for maximum capacity cutting.
- * The bow can be swiveled between 90 and 45 degrees.

Specifications:

Max. Circular Capacity at 90 degree: 226mm (9")
 Max. Rectangular Capacity at 90 degree: 260x110mm (10"x4.3")
 Max. Circular capacity at at 45 degree: 150mm (6")
 Max. Rectangular capacity at 45 degree: 200x125mm (7.9"x5")
 Blade speed at 60HZ: 4P 72MPM or 236 FPM
 Blade speed at 50HZ: 8P 36MPM or 118FPM
 Blade size: 27X0.9X2455mm (1"x0.03"x96.7")
 Motor: 1100W (1.5HP), 50/60HZ
 Drive: Gearbox
 Packing size 146x72x110cm
 N.W./G.W.: 260/300kg

Order No.850-0019



Metal Cutting Bandsaw 170mm

Features:

- * Rigid cast iron design with steel base serving as utility shelf.
- * Two speeds for optimum cutting of metal.
- * Coolant pump ensures longer service life of saw blade.
- * scale on the vise allows easy adjustment for angle cuts.
- * Quick adjusting vise for angular cuts.

Specifications:

Max. Circular Capacity at 90 degree: 170mm (6.7")
 Max. Rectangular Capacity at 90 degree: 170x210mm (6.7"x8.3")
 Max. Circular capacity at at 45 degree: 120mm (4.7")
 Max. Rectangular capacity at 45 degree: 110x110mm (4.3"x4.3")
 Blade speed at 60HZ: 4P 80MPM or 262 FPM
 Blade speed at 50HZ: 8P 40MPM or 131FPM
 Blade size: 20X0.9X2085mm (0.79"x0.03"x82")
 Motor: 750W (1HP), 50/60HZ
 Drive: Gearbox
 Packing size 126x72x100cm
 N.W./G.W.: 200/240kg



Order No.850-0021

Pan and Box Brake



Order No.	840-0446	840-0447	840-0448	840-0449
Width: 2040mm	2040mm	2040mm	2540mm	2540mm
Thickness:	2mm	2.5mm	2mm	2.5mm
Angle:	0-135 degree			
Packing Size:	250x77x110cm	300x77x110cm	350x77x110cm	350x77x110cm
N.W/W.G:	750/860kg	870/1030kg	890/1060kg	1170/1370kg

Hand Brake



Order No.	840-0461	840-0462
Width:	305mm	610mm
Thickness: 1mm	1mm	1mm
Angle:	0-135 degree	
Shipping Size:	50x30x37cm	81x30x35cm
N.W/W.G:		28/31kg

Hand Brake



Technical Data:

Width: 1220mm
 Thickness: 1.2mm
 Angle: 0-135degree
 Packing Dim: 158x39x58cm
 N.W/W.G : 90/104kg

Order No.850-0463

Hand Brake

Technical Data:

Width: 1000mm
 Thickness: 2mm
 Angle: 0-135degree
 Packing Dim: 153x64x74cm
 N.W/W.G : 420/490kg



Order No.850-0464

Hand Brake



Order No.	840-0465	840-0466
Width: 1040mm	1040mm	1060mm
Thickness: 1.2mm	1.2mm	1.2mm
Angle:	0-140degree	
Packing Dim:	142x743x121cm	161x89x111cm
N.W/W.G:	80/121kg	110/155kg

Brake and Shear Machine



Features:

- * Work with aluminum, cooper and steel .
- *Bending capacity:19 gauge X 40",40" wide
- * Cutting capacity:20 gauge X40",40" wide
- * Stand height:35"
- * Includes all steel foldable frame for easy transport and storage

Technical Data:

Working Length: 1016mm
 Max bending thickness: 1mm
 Max shearing thickness: 1mm
 Max bending angle: 45-180degree
 N.W/W.G: 62/65kg

Order No.850-0471

Brake and Shear Machine

Features:

- * Work with aluminum, cooper and steel .
- * Bending capacity:19 gauge X 48",48" wide
- * Cutting capacity:20 gauge X48",48" wide
- * Stand height:35"
- * Includes all steel foldable frame for easy transport and storage

Technical Data:

Working Length: 1220mm
 Max bending thickness: 0.8mm
 Max shearing thickness: 0.8mm
 Max bending angle: 45-180degree
 N.W/W.G: 80/86kg

Order No.850-0472



Hand Brake

Technical Data:

Length: 460mm
 Thickness: 1.2mm
 Angle: 0-90degree
 Packing Dim:
 50×12×6.5cm
 N.W/W.G : 4.5/5kg



Order No.850-0473

Hand Brake

Technical Data:

Length: 610mm
 Thickness: 1.2mm
 Angle: 0-135degree
 Packing Dim: 81×21×37cm
 N.W/W.G : 24/26kg



Order No.850-0474

Hand Brake

Technical Data:

Length: 760mm
 Thickness: 1.2mm
 Angle: 0-90degree
 Packing Dim: 90×17×12cm
 N.W/W.G : 14/15kg



Order No.850-0475

Hand Brake

Technical Data:

Length: 1000mm
 Thickness: 1.2mm
 Angle: 0-135degree
 Packing Dim: 124×25.5×17.5cm
 N.W/W.G : 33/35kg



Order No.850-0476

Pan and Box Brake

Many different sizes of bending segment for various work pieces



Order No.	840-0428	840-0429
Width	1220mm	1260mm
Thickness	1.5mm	1.5mm
Angle	0-135degree	0-135degree
Packing Size	161x48x68cm	167x48x68cm
N.W/G.W.	165/197kg	143/161kg

HAND BRAKE



Width: 1500mm
 Thickness: 1.2mm
 Angle: 0-140degree
 Packing Dim: 200×75×120cm
 N.W/W.G : 285/355kg

Order No. 840-0468

FOLDING MACHINE



Working Length: 2020mm
 Sheet thickness: 1mm
 Max clamping bar left: 42mm
 Folding angle: 0-135degree
 Length: 2320mm
 Width: 630mm
 Height: 1100mm
 Weight: 335kgs

Order No. 840-0451

Shear, Brake and Slip Roll Machine



Features:

- *With segment bending blade for the bending of box section
- *Various widths segment, shiftable setup

Width: 2540mm
 Thickness: 2.5mm
 Angle: 0-135degree
 Pcking dimension: 310x77x110cm
 N.W/G.W.: 1230/1430kg

Order No. 840-0437

Hand Notcher



Technical Data:

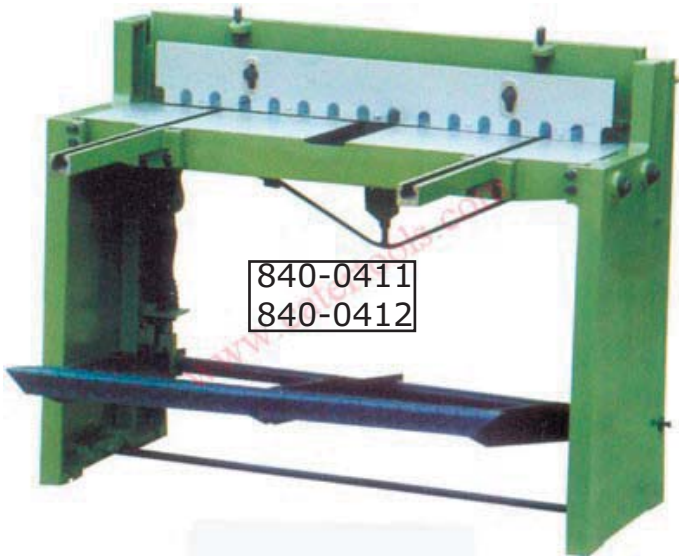
Capacity : 4ton
 Thickness: 1.6mm
 Punches: 152x152mm
 90°Angle: 152x152mm
 Ram Stroke: 20mm
 N.W./G.W.: 75/85kg
 Packing Dim : 61x57x56cm

Order No. 840-0078

FOOT SHEAR

Features:

- * Use for mild steel,aluminum,copper,brass, zinc,plastic and leads;
- * High carbon, high chrome steel blade
- * Foot control.



HAND SHEAR

Features:

- * Use for mild steel,aluminum, copper,brass,zinc, plastic and leads;
- * Finger guards.
- * High carbon, high chrome steel blade



Order No.	Capacity		Back Gauge Range	Shipping Size	N.W./G.W.	Qty of 20FT Conntiner Load
	Width	Thickness				
840-0411	1000mm	1mm	0-250mm	140x76x115cm	410/470kg	24pcs
840-0412	1320mm	1.5mm	0-940mm	168x76x115cm	480/560kg	18pcs
840-0414	1500mm	1.5mm	0-300 mm	208x76x115cm	410/480kg	14pcs
840-0415	2000mm	1.25mm	0-300mm	258x76x115 cm	480/560kg	12pcs

SHEAR, BRAKE and SLIP ROLL MACHINE

Features:

- * Combination of shear,brake and roll.For shearing,it can achieve single stroke and continuous stroke processing function.
- * For bending,there are three functions:Jogging,single stroke and contionuous stroke.
- * For rolling,there are two functions:jogging and continuous stroke.
- * This machine is the ideal equipment for sheet-metal working.



Order No.	840-0411	840-0412
Max.shearing thickness:	3mm(12ga)	3mm(12ga)
Max.shearing width:	1320mm(52")	2040mm(80")
Shearing angle:	2degree	2.5degree
Number of stroke:	30/min	30/min
Back-gauge range:	450mm	450mm
Height of worktable:	760mm	760mm
Max.bending thickness:	2mm(14ga)	2mm(14ga)
Max.bending width:	1320mm	2040mm
Max.rolling thickness:	3mm(12ga)	3mm(12ga)
Max.rolling width:	1500mm	2100mm
Min.rolling dia.:	90mm	120mm
Motor power:	3kW	4kW
N.W./G.W.:	2700/2970kg	3500/3800kg
Packing dimension:	254x145x197cm	326x145x197cm

3-IN-1 SHEAR,PRESS BRAKE AND SLIP ROLL

Features:

- * Removable male dies with female dies;
- * Back gage sandard equipment;
- * With 2-position handle;
- * Shears cuts mild steel or equivalent;
- * Press Brake-bends boxes,channels, angles and other complex jobs;
- * Sectional fingers allow box and pan works;
- * Slip Roll-roll provided with forming grooves.



840-0401
840-0402
840-0403



840-0404
840-0405
840-0406

Order NO.	840-0401	840-0402	840-0404	840-0404	840-0405	840-0406
Bed width(mm)	305 (12")	610 (24")	760 (30")	1016 (40")	1067 (42")	1320 (52")
Shearing Thickness(mm)	1	1	1	1	1	1
Bending Thickness(mm)	1	1	1	1	1	1
Bending Angle(degree)	90	90	90	90	90	90
Rolling Thickness(mm)	1	1	1	1	1	1
Min.Rolling Dia.(mm)	39	39	39	43	43	43
Packing Dimension(cm)	58x39x46	82x45x65	97x45x68	135x45x68	142x56x75	168x56x75
N.W./G.W.(kg)	45/52	100/120	120/140	200/230	260/280	320/350
Loading QTY of 20FT Contanier	180	105	90	60	48	39



Order NO.	840-0407	840-0408
Bed width(mm)	305 (12")	610 (24")
Shearing Thickness(mm)	1	1
Bending Thickness(mm)	1	1
Bending Angle(degree)	90	90
Rolling Thickness(mm)	1	1
Min.Rolling Dia.(mm)	39	39
Packing Dimension(cm)	58x39x46	82x45x65
N.W./G.W.(kg)	45/52	100/120
Loading QTY of 20FT Contanier	180	105

Hydraulic Press 10T



Features:

- * Pressing and clamping.
- * Rigid frame, shat and beam.
- * Reliable hydraulic system.

Specifications:

Capacity: 10 tons.
 Height: 713mm.
 Width: 596mm.
 Working Area: 146mm to 922mm.
 Shaft Trave: 153mm.

Order No.850-0110

Hydraulic Press 12T



Specifications:

Capacity: 12 tons.
 Height: 1283mm.
 Width: 514.4mm.
 Working Area: 66.7mm to 990mm.
 Weight: 54kg

Order No.850-0111

Hydraulic Press



Order No.	840-0112	840-0113
Capacity:	10 Tons	20 Tons
Height:	1276mm.	1555mm.
Width:	216.9mm.	658mm.
Working Area:	146mm to 922mm.	23 to 856mm
Shaft Travel:	203.2mm	203.2mm
Weight:	65kg	128kg



Hydraulic Press

20T and 30T

Features:

- * Pressing and clamping.
- * Rigid frame, shat and beam.
- * Reliable hydraulic system.

Order No.	840-0114	840-0115
Capacity	20 tons	30 tons
Height	1562mm	1710mm
Width	670mm	760mm
Working Area	146mm to 922mm.	6.4mm to 615mm.
Shaft Travel	203.2mm	203.2mm
Weight	126kg	232kg



Hydraulic Press



Features:

- * With the function of braking
- * With adjustable work table
- * Extremely torsion-proof steel weldment
- * Reliable ,highly accurate hydraulic system
- * Hydraulic press include replaceable top tools V-block and support table with stops
- * Table can be lifted through a chain driven by the main cylinder

Order No.	840-0119	840-0120	840-0121
Capacity	20ton	30ton	50ton
Power	1.5KW	3KW	2.2KW
Piston stroke	300mm	220mm	220mm
Weight	270kg	470kg	1060kg
Shipping Size	120x55x168cm	100x45x155cm	140x55x175mm

Hydraulic Press

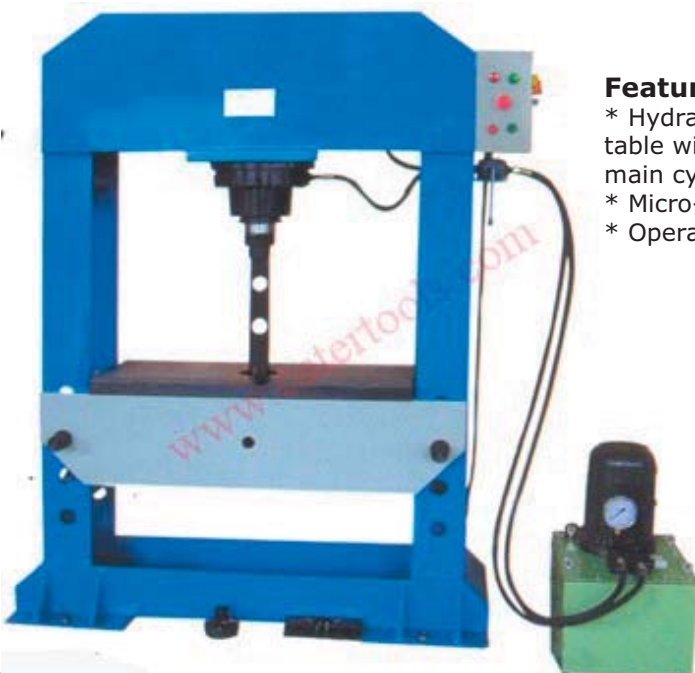


Features:

- * With the function of braking
- * With adjustable work table
- * Extremely torsion-proof steel weldment
- * Reliable ,highly accurate hydraulic system
- * Hydraulic press include replaceable top tools V-block and support table with stops
- * Table can be lifted through a chain driven by the main cylinder

Order No.	840-0122	840-0123	840-0124
Capacity	100ton	150ton	200ton
Power	2.2KW	3KW	4KW
Piston stroke	250mm	300mm	300mm
Weight	1300kg	1600kg	2100kg
Shipping Size	184x79x225cm	195x105x196cm	200x90x235mm

Hydraulic Press



Features:

- * Hydraulic press include replaceable top tools v-block,and support table with stops.Table can be lifted through a chain driven by the main cylinder.
- * Micro-switch for traverse adjustment.
- * Operating modus:semi-automatic,fully.

Technical Data:

Capacity: 100ton
 Power:2.2kW
 Piston stroke: 250mm
 Weight: 1200kg
 PackingDimension:140x70x175cm

Order No. 840-0118

Hydraulic Press



Features:

- * Hydraulic press include replaceable top tools v-block, and support table with stops. Table can be lifted through a chain driven by the main cylinder.
- * Micro-switch for traverse adjustment.
- * Operating modus: semi-automatic, fully.

Technical Data:

Capacity: 50ton
 Power: 2.2kW
 Piston stroke: 220mm
 Weight: 780kg
 Packing Dimension: 126x60x175cm

Order No. 840-0117

Hand Shear

840-0051
 840-0052
 840-0053
 840-0054
 840-0055



Features:

- * Lever arm with compensating spring.
- * Easy cutting across the entire length.
- * Rigid cutter body.

Specifications:

Blade Length: 200mm
 Steel sheet thickness: 6mm
 Flat Steel size: 70mmx6mm
 Round steel diameter: 13mm
 Weight: 19/17kg
 Shipping Size: 50x16x45mm



840-00526

Order No.		840-0051	840-0052	840-0053	840-0054	840-0055
Capacity (mm)	Width	5"	6"	8"	10"	12"
	Thickness	6	6	6	6	6
	Flat steel	70x6	70x6	70x6	70x6	70x6
	Round	11	11	13	13	13
N.W./G.W.(kg)		12/16	14/18	18/25	23/30	28/35
Shipping Size (mm)		33x15x33	33x15x33	50x15x44	74x15x44	74x15x44
Loading Q'ty of 20'CY		720	720	415	216	216

Features:

- * For shearing metal plates, bars, flat steel.
- * Hardened high grade carbon steel blade.
- * Rigid steel frame.
- * Easy mount to work bench or table top.
- * Easy to replace blade.

MANUAL SHEAR

Order No.	Capacity			N.W./ G.W. (kg)	Shipping Size (cm)	Loading Qty of 20FT Container Load
	Round steel(mm)	Flat steel(mm)	Square steel(mm)			
840-0061	20mm	30x8mm	18x18	14/19	40x23x36	840
840-0062	24mm	35x12mm	20x20	23/28	42x24x39	585
840-0063	28mm	40x12	24x24	34/39	46x28x43	480
840-0064	32mm	40x14	28x28	48/52	51x28x43	440

**840-0065
840-0066 PLATE AND ROUND STEEL SHEAR**

Features:

- * Rigid versatile cutter for sheet metals, flat steel, round bars, square bars, angle steel bars and T-beam steel.
- * Adjustable height hold-down.



840-0065



840-0061
840-0062
840-0063
840-0064

Order No.	840-0065	840-0066
Capacity	Round Steel	22mm
	Square Steel	20mm
	Flat Steel	90x14mm
	Angle Steel	60x7mm
	T-Steel	60x7mm
	Steel Plate	10mm
Weight	42kg	98kg
Packing Dimension(cm)	Machine:68x31x56 Handle: 125x17x5	Machine:97x39x65 Handle: 175x27x13



840-0066

DRILL PRESS



Order No.: 800-1201

- *Motor: 230V, 50Hz, 350W
- *Max. drilling capacity: Ø13mm
- *Spindle travel: 50mm
- *Spindle diameter: MT2
- *Column diameter: Ø50mm
- *Spindle speed: 5 speeds:
580-2650 T/min
- *Max. distance from spindle axis to column surface: 102mm
- *Max. distance from spindle end to table surface: 250mm
- *Table size: 152×170mm
- *Table size with extension: 192(max 271mm)×170mm
- *Base size: 320×190mm
- *Overall size: 410×240×650mm
- *Packing size: 577×377×260mm
- *Weight: 28/26kg



Order No.: 800-1202

- *Motor: 230V, 50Hz, 500W
- *Max. drilling capacity: Ø16mm
- *Spindle travel: 65mm
- *Spindle diameter: MT2
- *Column diameter: Ø60mm
- *Spindle speed: 12 speeds:
425-2545 T/min
- *Max. distance from spindle axis to column surface: 126mm
- *Max. distance from spindle end to table surface: 355mm
- *Max. distance from spindle end to base surface: 465mm
- *Table size: 200×200mm
- *Table size with extension: 240(max 330mm)×200mm
- *Base size: 380×250mm
- *Overall size: 520×300×850mm
- *Packing size: 712×430×315mm
- *Weight: 43/40kg



Order No.: 800-1203

- *Motor: 230V, 50Hz, 350W
- *Max. drilling capacity: Ø13mm
- *Spindle travel: 50mm
- *Spindle diameter: MT2
- *Column diameter: Ø46mm
- *Spindle speed: 5 speeds:
580-2650 T/min
- *Max. distance from spindle axis to column surface: 104mm
- *Max. distance from spindle end to table surface: 200mm
- *Max. distance from spindle end to base surface: 290mm
- *Table size: 160×160mm
- *Base size: 314×200mm
- *Overall size: 355×225×580mm
- *Packing size: 400×335×225mm
- *Weight: 20/17kg



Order No.: 800-1204

- *Motor: 120V, 60Hz, 2.5A
- *Max. drilling capacity: Ø13mm
- *Spindle travel: 50mm
- *Spindle diameter: MT2
- *Column diameter: Ø46mm
- *Spindle speed: 5 speeds:
760-3070 T/min
- *Max. distance from spindle axis to column surface: 104mm
- *Max. distance from spindle end to table surface: 200mm
- *Max. distance from spindle end to base surface: 290mm
- *Table size: 160×160mm
- *Base size: 314×200mm
- *Overall size: 445×225×595mm
- *Packing size: 465×350×265mm (polyfoam reinforcement)
- *Weight: 21/20kg



Order No.: 800-1205

- *Motor: 230V, 50Hz, 500W
- *Max. drilling capacity: Ø16mm
- *Spindle travel: 50mm
- *Spindle diameter: MT2
- *Column diameter: Ø46mm
- *Spindle speed: 9 speeds
280-2350 T/min
- *Max. distance from spindle axis to column surface: 115mm
- *Max. distance from spindle end to table surface: 270mm
- *Max. distance from spindle end to base surface: 330mm
- *Table diameter: 170×170mm
- *Base size: 320×198mm
- *Overall size: 490×220×610mm
- *Packing size: 455×340×225mm (cardboard reinforcement)
- *Weight: 56/53kg



Order No.: 800-1206

- *Motor: 230V, 50Hz, 450W
- *Max. drilling capacity: Ø16mm
- *Spindle travel: 60mm
- *Spindle diameter: MT2
- *Column diameter: Ø60mm
- *Spindle speed: 12 speeds:
230-2400 T/min
- *Max. distance from spindle axis to column surface: 126mm
- *Max. distance from spindle end to table surface: 350mm
- *Max. distance from spindle end to base surface: 524mm
- *Table size: 200×195mm
- *Base size: 355×235mm
- *Overall size: 530×300×820mm
- *Packing size: 765×435×195mm (polyfoam reinforcement)
- *Weight: 40/38kg



Order No.: 800-1207

- *Motor: 230V, 50Hz, 450W
- *Max. drilling capacity: Ø16mm
- *Spindle travel: 80mm
- *Spindle diameter: MT2
- *Column diameter: Ø70mm
- *Spindle speed: 12 speeds
220-2500 T/min
- *Max. distance from spindle axis to column surface: 169mm
- *Max. distance from spindle end to table surface: 390mm
- *Max. distance from spindle end to base surface: 640mm
- *Table diameter: Ø290mm
- *Base size: 250×434mm
- *Overall size: 600×350×990mm
- *Packing size: 800×490×275mm
- *Weight: 56/53kg



Order No.: 800-1208

- *Motor: 230V, 50Hz, 450W
- *Max. drilling capacity: Ø16mm
- *Spindle travel: 80mm
- *Spindle diameter: MT2
- *Column diameter: Ø70mm
- *Spindle speed: 12 speeds
220-2500 T/min
- *Max. distance from spindle axis to column surface: 169mm
- *Max. distance from spindle end to table surface: 780mm
- *Max. distance from spindle end to base surface: 1210mm
- *Table diameter: Ø290mm
- *Base size: 273×456mm
- *Overall size: 600×350×1570mm
- *Packing size: 1145×465×270mm
- *Weight: 63/60kg



Order No.: 800-1209

- *Motor: 230V, 50Hz, 450W
- *Max. drilling capacity: Ø20mm
- *Spindle travel: 80mm
- *Spindle diameter: MT2
- *Column diameter: Ø80mm
- *Spindle speed: 12 speeds
200-2600 T/min
- *Max. distance from spindle axis to column surface: 190mm
- *Max. distance from spindle end to table surface: 730mm
- *Max. distance from spindle end to base surface: 1220mm
- *Table diameter: 300×300mm
- *Base size: 500×300mm
- *Overall size: 700×350×1610mm
- *Packing size: 1215×475×275mm
- *Weight: 81/78kg



Order No.: 800-1210

- *Motor: 230V, 50Hz, 750W
- *Max. drilling capacity: Ø25mm
- *Spindle travel: 100mm
- *Spindle diameter: MT3
- *Column diameter: Ø80mm
- *Spindle speed: 12 speeds
200-2600 T/min
- *Max. distance from spindle axis to column surface: 215mm
- *Max. distance from spindle end to table surface: 725mm
- *Max. distance from spindle end to base surface: 1240mm
- *Table diameter: 330×330mm
- *Base size: 560×340mm
- *Overall size: 755×355×1665mm
- *Packing size: 1335×555×310mm
- *Weight: 102/98kg



Order No.: 800-1211

- *Motor: 230V, 50Hz, 1100W
- *Max. drilling capacity: Ø32mm
- *Spindle travel: 120mm
- *Spindle diameter: MT4
- *Column diameter: Ø92mm
- *Spindle speed: 9 speeds
150-2020 T/min
- *Max. distance from spindle axis to column surface: 226mm
- *Max. distance from spindle end to table surface: 590mm
- *Max. distance from spindle end to base surface: 1177mm
- *Table diameter: 364×364mm
- *Base size: 625×372mm
- *Overall size: 750×360×1710mm
- *Packing size: 1435×635×330mm
- *Weight: 140/135kg



Order No.: 800-1212

- *Motor: 230V, 50Hz, 1500W
- *Max. drilling capacity: Ø32mm
- *Spindle travel: 120mm
- *Spindle diameter: MT4
- *Column diameter: Ø92mm
- *Spindle speed: 12 speeds
200-2600 T/min
- *Max. distance from spindle axis to column surface: 250mm
- *Max. distance from spindle end to table surface: 655mm
- *Max. distance from spindle end to base surface: 1175mm
- *Table diameter: 425×475mm
- *Base size: 575×450mm
- *Overall size: 795×450×1715mm
- *Packing size: 1445×660×335mm
- *Weight: 145/140kg



Angle grinder Order No.: 800-0700

Features:

1. Input power: 5A/650W
2. Speed 4000-11000rpm
3. Disc size: 100mm
4. Spindle thread: M14
5. 3-Position Auxiliary Handle
6. Spindle lock
7. Variable speed
8. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0701

Features:

1. 4.5A/500W Powerful Motor
2. 3-Position Auxiliary Handle
3. Side switch
4. Spindle lock
5. Accessoires: 1pc wrench, 1pc side handle, 2pcs carbon brushes



Angle grinder Order No.: 800-0702

Features:

1. 7A/850W Powerful Motor
2. 3-Position Auxiliary Handle
3. Top side switch
4. Spindle lock
5. Soft grip handle
6. Accessoires: 1pc wrench, 1pc side handle, 2pcs carbon brushes



Angle grinder Order No.: 800-0703

Features:

1. 5A/6000W Powerful Motor
2. 3-Position Auxiliary Handle
3. Top side switch
4. Spindle lock
5. Soft grip handle
6. Accessoires: 1pc wrench, 1pc side handle, 2pcs carbon brushes



Angle grinder Order No.: 800-0704

Features:

1. Voltage: 230V/120V
2. Frequency: 50/60HZ
3. Input power: 600W
4. No load speed: 4000-11000rpm
5. Diameter: 115mm



Angle grinder Order No.: 800-0705

Features:

1. Voltage: 230V/120V
2. Frequency: 50/60HZ
3. Input power: 750W
4. No load speed: 4000-11000rpm
5. Diameter: 115mm



Angle grinder Order No.: 800-0706

Features:

1. Input power: 6.5A/850W
2. Speed 4000-11000rpm
3. Disc size: 115mm
4. Spindle thread: M14
5. 3-Position Auxiliary Handle
6. Spindle lock
7. Soft grip handle
8. Variable speed
9. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0707

Features:

1. Input power: 7A/960W
2. 3-Position Auxiliary Handle
3. Spindle lock
4. Soft grip handle
5. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0708

Features:

1. Input power: 9A/1150W
2. 3-Position Auxiliary Handle
3. Spindle lock
4. Soft grip handle
5. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0709

Features:

1. Input power: 9A/1150W
2. 3-Position Auxiliary Handle
3. Variable speed function
3. Spindle lock
4. Soft grip handle
5. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0710

Features:

1. Input power: 9A/1150W
2. 3-Position Auxiliary Handle
3. Spindle lock
4. Soft grip handle
5. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0711

Features:

1. Input power: 9A/1150W
2. 3-Position Auxiliary Handle
3. Spindle lock
4. Soft grip handle
5. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes



Angle grinder Order No.: 800-0712

Features:

1. Input power: 15A/1350W/1600W
2. Speed: 6000rpm
3. Disc size: 230mm
4. Spindle thread: M14
5. 3-Position Auxiliary Handle
6. Spindle lock
7. High efficiency and increased torque
7. Soft start function
8. Safety switch
9. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.
10. Display: Brusher extinc display



Angle grinder Order No.: 800-0713

Features:

1. Input power: 15A/2350W
2. 3-Position Auxiliary Handle
3. Rotary Handle
4. Spindle lock
5. Soft start function
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes



Angle grinder Order No.: 800-0714

Features:

1. Input power: 15A/2350W
2. 3-Position Auxiliary Handle
3. Rotary Handle
4. Spindle lock
5. Soft start function
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0715

Features:

1. Input power: 15A/2350W
2. 3-Position Auxiliary Handle
3. Soft grip Handle
4. Spindle lock
5. Soft start function
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0716

Features:

1. Input power: 15A/2350W
2. 3-Position Auxiliary Handle
3. Soft grip Handle
4. Spindle lock
5. Soft start function
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0717

Features:

1. Input power: 15A/2350W
2. 3-Position Auxiliary Handle
3. Soft grip Handle
4. Spindle lock
5. Soft start function
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0718

Features:

1. Input power: 15A/2350W
2. 3-Position Auxiliary Handle
3. Soft grip Handle
4. Spindle lock
5. Soft start function
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angel grinder Order No.: 800-0719

Features:

1. Input power: 15A/2100W
2. 3-Position Auxiliary Handle
3. Soft grip Handle
4. Spindle lock
5. Soft start function
6. The latest designer: Cord Guard
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0720

Features:

1. Input power: 15A/2100W
2. 3-Position Auxiliary Handle
3. Soft grip Handle
4. Spindle lock
5. Soft start function
6. The latest designer: Cord Guard
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0721

Features:

1. Input power: 15A/2000W
2. 3-Position Auxiliary Handle
3. Spindle lock
4. Heavy duty
5. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0722

Features:

1. Input power: 15A/2000W
2. 3-Position Auxiliary Handle
3. Soft grip handle
4. Soft start function
5. Spindle lock
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.



Angle grinder Order No.: 800-0723

Features:

1. Input power: 15A/2000W
2. 3-Position Auxiliary Handle
3. Soft grip handle
4. Soft start function
5. Spindle lock
6. Heavy duty
7. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.

Angle grinder Order No.: 800-0724



Features:

1. Input power: 15A/2550W/2100W
2. Speed: 6000rpm
3. Disc size: 230mm
4. Spindle thread: M14
5. 3-Position Auxiliary Handle
6. Spindle lock
7. High efficiency and increased torque
8. Soft start function
9. Safety switch
10. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.

Angle grinder Order No.: 800-0725



Features:

1. Input power: 15A/2550W/2100W
2. Speed: 6000rpm
3. Disc size: 230mm
4. Spindle thread: M14
5. 3-Position Auxiliary Handle
6. Spindle lock
7. High efficiency and increased torque
8. Soft start function
9. Safety switch
10. Accessoires: 1pcs wrench, 1pc hex wrench, 1pc side handle, 2pcs carbon brushes.
11. Display: Brusher extinc display

Impact drill Order No: 800-0726



Features:

1. Input power: 4.5A/500W
2. Max. drilling capacity: Concrete: 10mm
Steel: 6mm
Wood: 20mm
3. Variable speed with reversible 10mm key chuck
4. Accessories: 1pc chuck key, 2pcs carbon brushes.

Impact drill Order No: 800-0727



Features:

1. Input power: 4A/450W
2. Max. drilling capacity: Concrete: 10mm
Steel: 6mm
Wood: 20mm
3. Variable speed with reversible 10mm key chuck
4. Accessories: 1pc chuck key, 2pcs carbon brushes.



Impact drill Order No: 800-0728

Features:

1. Input power: 4A/500W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Variable speed with reversible 13mm key chuck
4. Side handle with Depth gauge.
5. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge.



Impact drill Order No: 800-0729

Features:

1. Input power: 4.5A/550W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Variable speed with reversible 13mm key chuck
4. Side handle with Depth gauge.
5. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge.



Impact drill Order No: 800-0730

Features:

1. Input power: 4.5A/550W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Soft grip handle.
4. Variable speed with reversible 13mm key chuck
5. Two colored side handle with Depth gauge.
6. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge.



Impact drill Order No: 800-0731

Features:

1. Input power: 4.5A/550W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Variable speed with reversible 16mm key chuck
4. Side handle with Depth gauge.
5. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge



Impact drill Order No: 800-0732

Features:

1. Input power: 6.5A/850W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Variable speed with reversible 16mm key chuck
4. Side handle with Depth gauge.
5. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge



Impact drill Order No: 800-0733

Features:

1. Input power: 5A/600W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Variable speed with reversible 13mm key chuck
4. Side handle with Depth gauge.
5. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge.



Impact drill Order No: 800-0734

Features:

1. Input power: 9A/1100W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Electronic speed controller & reversible 360 degree rotary auxiliary handle.
4. Soft grip handle & side handle.
5. Drill & hammer function.
6. Switch with lock-on button.
7. Heavy duty.
8. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge.



Impact drill Order No: 800-0735

Features:

1. Input power: 4.5A/500W
2. Max. drilling capacity: Concrete: 13mm
Steel: 10mm
Wood: 25mm
3. Variable speed with reversible 13mm key chuck
4. Soft grip handle
5. Side handle with Depth gauge.
6. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth gauge.



Impact drill Order No: 800-0736

Features:

1. Rated Voltd: 230/120V
2. Rated Frequency: 50/60HZ
3. Rated input power: 650/710W
4. No load speed: 0-2800/min
5. Max drilling dia: 13mm



Impact drill Order No: 800-0737

Features:

1. Rated Voltd: 230/120V
2. Rated Frequency: 50/60HZ
3. Rated input power: 850W
4. No load speed: 0-2800/min
5. Max drilling dia: 13mm



Impact drill Order No: 800-0738

Features:

1. Rated Volted: 230/120V
2. Rated Frequency: 50/60HZ
3. Rated input power: 1050W
4. No load spped: 0-800/min/0-2000/min
5. Max drilling dia: 13mm



Impact drill Order No: 800-0739

Features:

1. Input power: 9A/1100W
2. Max. drilling capacity: Concrete: 16mm
Steel: 13mm
Wood: 30mm
3. Electronic speed controller and reversible, Machine activator 16mm key chuck
4. Soft grip handle
5. Two colour side handle with depth guage.
6. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth guage.



Impact drill Order No: 800-0740

Features:

1. Input power: 9A/1100W
2. Max. drilling capacity: Concrete: 16mm
Steel: 13mm
Wood: 30mm
3. Electronic speed controller and reversible, Machine activator 16mm key chuck
4. Soft grip handle
5. Two colour side handle with depth guage.
6. Accessories: 1pc chuck key, 2pcs carbon brushes, 1pc side handle, 1pc depth guage.



Polisher Order No: 800-0741

Features:

1. 9.5A/1200W Powerful Motor
2. 3-Position Auxiliary Handle
3. Spindle Lock
4. Safety Switch
5. Bosch Popular Model Design
6. Heavy Duty
7. Accessories:1pc Rubber Disc, 1pc Polishing Disc,1pc Side Handle,1pc Wench,2pcs Carbon Brushes



Polisher Order No: 800-0742

Features:

1. 1600W Powerful Motor
2. 3-Position Auxiliary Handle
3. Spindle Lock
4. Safety Switch
5. Bosch Popular Model Design
6. Heavy Duty
7. Accessories:1pc Rubber Disc, 1pc Polishing Disc,1pc Side Handle,1pc Wench,2pcs Carbon Brushes



Circular saw Order No.: 800-0743

Features:

1. Powerful 9A/1050W high performance for cutting operation
2. Safety switch
3. Front and Rear Assist Handle are Ergonomically Designed for Maximum Control.
4. Bevel Adjustment Allows for Accurate 0-45 Degree Angled Cuts
5. Calibrated Depth Adjustment Allows for Accurate Cuts
6. 1pc 24 Tooth Alloy Blade Provides Smooth and Fast Cutting Ideal for Tough, Everyday Jobs
7. Accessories: 1pc wrench, 1pc saw blade, 2pcs carbon brushes and manual instruction
8. Double insulated
9. Capacity: at 90 degree 65mm, at 45 degree 43mm



Circular saw Order No.: 800-0744

Features:

1. 10A/1200W Powerful Motor 12A/1450W Powerful Motor
2. Soft grip handle
3. Front handle for extra cutting control
4. Parallel guide for straight cutting
5. Lock off switch for safety improved
6. Dust extraction
7. Coloured box packing with 1pc saw blade.
8. Iron base and aluminium head cover
9. Single speed
10. Capacity: at 90 degree 65mm, at 45 degree 43mm



Circular saw Order No.: 800-0745

Features:

1. Rated voltage: 230V/120V
2. Rated frequency: 50HZ/60HZ
3. Rated input power: 1300W
4. No load speed: 5000/min
5. Cutting capacity wood: at 90 degree 65mm, at 45 degree 43mm
6. Laser



Jig Saw Order No.: 800-0746

Features:

1. 500W powerful motor
2. Laser
3. Quicker saw blade change
4. Blade storage
5. Variable speed electronics for variety of materials
6. On-board blade storage compartment provides easy access to extra blades.



Jig Saw Order No.: 800-0747

Features:

1. 500W powerful motor
2. Laser
3. Quicker saw blade change
4. Blade storage
5. Variable speed electronics for variety of materials
6. On-board blade storage compartment provides easy access to extra blades.

Tool box, Cabinets, Work Bench

700-0001



- * Overall Size:1372mmx508mmx865mm.
- * 5 Drawers:446x420x100mm
- * 2 Shelves:..... 450x440mm
- * 20FT Container:128pcs

Work Station



700-0002

- * Metal top.
- * Overall Size:1372mmx508mmx865mm.
- * 5 Drawers:446x420x100mm
- * 2 Shelves:..... 450x440mm
- * 20FT Container:128pc



700-0003

- * Metal top.
- * Overall Size:1372mmx508mmx865mm.
- * 5 Drawers:446x420x100mm
- * 2 Shelves:..... 450x440mm
- * 40FT Container:192pc



700-0004

- * Metal top.
- * Overall Size:1372mmx508mmx865mm.
- * 5 Drawers:446x420x100mm
- * 2 Shelves:..... 450x440mm
- * 20FT Container:128pc



700-0005

- * Metal top.
- * Overall Size:1372mmx508mmx865mm.
- * 2 Drawers:446x420x100mm
- * 2 Shelves:..... 450x440mm
- * 20FT Container:168pc



700-0006

- * Metal top.
- * Overall Size:1372mmx508mmx865mm.
- * 4 Shelves:..... 450x440mm
- * 20FT Container:219pc

Tool Box, Cabinet, Work Bench



700-0007

- * Metal top.
- * Overall Size:838mmx508mmx852mm.
- * 5 Drawers:446x420x100mm
- * 20FT Container:144pcs



700-0008

- * Metal top.
- * Overall Size:838mmx508mmx852mm.
- * 2 Shelves:..... 450x440mm
- * 20FT Container:432pcs



700-0009

- * Metal top.
- * Overall Size:838mmx508mmx852mm.
- * 2 Shelves:..... 450x440mm
- * 20FT Container:432pcs



700-0010

- * Metal top.
- * Overall Size:2000mmx640mmx865mm.
- * 20FT Container:80pcs



700-0011

- * Metal top.
- * Overall Size:1500mmx640mmx865mm.
- * 20FT Container:110pcs



700-0012

- * Metal top.
- * Overall Size:1524mmx660mmx830mm.
- * 2 Drawers:585x573x198.5mm
- * 1 Drawer:..... 585x573 x 249mm
- * 20FT Container:20pcs

Tool box, Cabinets, Work Bench



700-0013

- * Metal top.
- * Overall Size:1200mmx600mmx740mm.
- * 20FT Container:279pcs



700-0014

- * Overall Size: 690x450x880mm
- * Weight: 33.8lbs or 15.2kg
- * 20 Feet container load: 458pcs



700-0015

- * Overall Size: 1050x610x945mm
- * Weight: 34.4lbs or 15.5kg
- * 20 Feet container load: 221pcs



700-0016

- * Overall Size: 737x383x663mm
- * Weight: 32.1lbs or 14.6kg
- * 20 Feet container load: 336pcs



700-0017

- * Overall Size: 737x383x668mm
- * 1 Drawer: 648x350x100mm
- * Weight: 44lbs or 20kg
- * 20 Feet container load: 252pcs



700-0018

- * Overall Size: 935x395x825mm
- * Weight: 52.6lbs or 23.9kg
- * 20 Feet container load: 210pcs

Tool Box, Cabinet, Work Bench



700-0019

- * Overall Size: 730x376x663mm
- * Weight: 28.6lbs or 13kg
- * 20 Feet container load: 500pcs



700-0020

- * Overall Size: 806x514x706-1065mm
- * 1 Drawer: 310x253x50mm
- * 1 Drawer: 310x253x76mm
- * Weight: 60.6lbs or 27.5kg
- * 20 Feet container load: 196pcs



700-0021

- * Overall Size: 762x406x812mm
- * Weight: 40lbs or 18.2kg
- * 20 Feet container load: 313pcs



700-0022

- * Overall Size: 762x406x900mm
- * Weight: 29.3lbs or 13.2kg
- * 20 Feet container load: 120pcs



700-0023

- * Overall Size: 602x385x140mm
- * Weight: 21bs or 9.6kg
- * 20 Feet container load: 795pcs



700-0024

- * Overall Size: 1330x610x370mm
- * Weight: 63.9bs or 29kg
- * 20 Feet container load: 182pcs

Tool box, Cabinets, Work Bench



700-0301

- * Overall Size: 660x307x435mm
- * Top Tray Area: 558x303x70mm
- * 6 Drawers: 171x273x48mm
- * 2 Drawers: 570x273x48mm
- * 1 Drawer: 570x273x74.5mm
- * Weight: 63lbs or 28.6kg.
- * 20 Feet container load: 188 pcs



700-0302

- * Overall Size: 559x307x705mm
- * 2 Drawers: 391x278x56.5mm
- * Weight: 36.3lbs or 18.5kg.
- * 20 Feet container load: 177pcs



700-0303

- * Overall Size: 660x322x366mm
- * Top Tray Area: 660x320x70mm
- * 3 Drawers: 178x305x52mm
- * 2 Drawers: 595x305x52mm
- * 1 Drawer: 595x305x76.5mm
- * Capacity: 3673 Cubic Inch or 60194 Cubic CM
- * Weight: 43.2lbs or 19.6kg.
- * 20 Feet container load: 264pcs



700-0304

- * Overall Size: 660x322x366mm
- * Top Tray Area: 656x319x70mm
- * 3 Drawers: 175x290x50.5mm
- * 2 Drawers: 585x290x50.5mm
- * 1 Drawer: 585x290x75.5mm
- * Capacity: 3473 Cubic Inch or 56908 Cubic CM
- * Weight: 41.6lbs or 18.9kg.
- * 20 Feet container load: 264pcs



700-0305

- * Overall Size: 660x322x366mm
- * Top Tray Area: 656x319x70mm
- * 6 Drawers: 175x290x50.5mm
- * 1 Drawer: 585x290x50.5mm
- * 1 Drawer: 585x290x75.5mm
- * Capacity: 3419 Cubic Inch or 56028 Cubic CM
- * Weight: 44.1lbs or 20kg
- * 20 Feet container load: 264pcs



700-0306

- * Overall Size: 668x338x212mm
- * 1 Drawer: 595x316x52mm
- * 1 Drawer: 595x316x103mm.
- * Capacity: 1699 Cubic Inch or 27846 Cubic CM
- * Weight: 23.6lbs or 10.7kg
- * 20 Feet container load: 400pcs



700-0307

- * Overall Size: 668x338x212mm
- * 1 Drawer: 594x312x60mm
- * 1 Drawer: 594x300x101mm
- * Capacity: 1710 Cubic Inch or 28024 Cubic CM
- * Weight: 22.7lbs or 10.3kg
- * 20 Feet container load: 400pcs



700-0308

- * Overall Size: 680x435x660mm
- * 3 Drawers: 551x403x75.5mm
- * 2 Drawers: 551x403x155mm
- * Capacity: 7062 Cubic Inch or 115729 Cubic CM
- * Weight: 70.7lbs or 32.1kg
- * 20 Feet container load: 108pcs

Tool Box, Cabinet, Work Bench



700-0309

- * Overall Size: 680x435x660mm
- * 3 Drawers: 550x428x76.5mm
- * Capacity: 9369 Cubic Inch or 153531Cubic CM
- * Weight: 55.9lbs or 25.4kg
- * 20 Feet container load: 108pcs



700-0310

- * Overall Size: 680x435x660mm
- * 3 Drawers: 551x403x75.5mm
- * Capacity: 9406 Cubic Inch or 154132Cubic CM
- * Weight: 56.4lbs or 25.6kg
- * 20 Feet container load: 108pcs



700-0311

- * Overall Size: 680x435x710mm
- * 3 Drawers: 550x428x76.5mm
- * Capacity: 9901 Cubic Inch or 162252 Cubic CM
- * Weight: 53.9lbs or 29kg
- * 20 Feet container load: 102pcs



700-0312

- * Overall Size: 790x445x570mm
- * Top Tray Area: 788x437x61mm
- * 6 Drawers: 248x423x41mm
- * 1 Drawer : 132x423x129mm
- * 2 Drawers: 688x423x85mm
- * 1 Drawer: 688x423x129mm
- * Capacity: 9110 Cubic Inch or 149379 Cubic CM
- * Weight: 53.9lbs or 29kg
- * 20 Feet container load: 110pcs



700-0313

- * Overall Size: 820x460x842mm
- * 2 Drawers: 690x429x60mm
- * 3 Drawers: 690x429x70mm
- * 2 Drawers: 690x429x95mm
- * 1 Drawer: 690x429x171mm
- * Capacity: 12073 Cubic Inch or 197834 Cubic CM
- * Weight: 194.9lbs or 88.6kg
- * 20 Feet container load: 66pcs



700-0314

- * Overall Size: 368x460x750mm
- * 2 Drawers: 276x413x49.5mm
- * 1 Drawer: 276x413x78mm
- * Capacity: 5131 Cubic Inch or 84077 Cubic CM
- * Weight: 52.9lbs or 24.0kg
- * 20 Feet container load: 165pcs

700-0315

- * Overall Size: 668x316x386mm
- * 2 Drawers: 125.5x279x48mm
- * 1 Drawer: 279.5x279x48mm
- * 2 Drawers: 588x279x48mm
- * 1 Drawer: 588x279x100.5mm
- * Capacity: 3567 Cubic Inch or 58458 Cubic CM
- * Weight: 55.7lbs or 25.3kg
- * 20 Feet container load: 215pcs



700-0316

- * Overall Size: 668x316x386mm
- * 2 Drawers: 588x279x48mm
- * 1 Drawer: 588x279x100.5mm
- * Capacity: 3814 Cubic Inch or 59228 Cubic CM
- * Weight: 63.1lbs or 28.7kg
- * 20 Feet container load: 215pcs



Tool box, Cabinets, Work Bench



700-0317

- * Overall Size: 668x316x386mm
- * 2 Drawers: 588x279x48mm
- * 1 Drawer: 588x279x100.5mm
- * Capacity: 3659 Cubic Inch or 59966 Cubic CM
- * Weight: 49.5lbs or 22.5kg
- * 20 Feet container load: 215pcs



700-0318

- * Overall Size: 668x445x491mm .
- * 8 Drawers: 125.5x409x48mm.
- * 1 Drawer: 279.5x409x100.5mm.
- * 2 Drawers: 589x409x48mm.
- * 1 Drawer: 588x409x100.5mm.
- * Capacity: 6438 Cubic Inch or 105496 Cubic CM
- * Weight: 97.9lbs or 44.5kg
- * 20 Feet container load: 130pcs



700-0319

- * Overall Size: 688x458x735mm
- * 2 Drawers: 591x409x100.5mm
- * 1 Drawer: 591x409x153mm
- * Capacity: 6438 Cubic Inch or 105496 Cubic CM
- * Weight: 83.5lbs or 37.9kg
- * 20 Feet container load: 84pcs



700-0320

- * Overall Size: 888x458x735mm
- * 4 Drawers: 591x409x100.5mm
- * 1 Drawer: 591x409x205.5mm
- * Capacity: 8961 Cubic Inch or 146844 Cubic CM
- * Weight: 103.6lbs or 47.1kg
- * 20 Feet container load: 84pcs



700-0322

- * Overall Size: 688x458x735mm
- * 2 Drawers: 591x409x48mm
- * 2 Drawers: 591x409x100.5mm
- * 2 Drawers: 591x409x153mm
- * Capacity: 8652 Cubic Inch or 141783 Cubic CM
- * Weight: 107.7lbs or 48.9kg
- * 20 Feet container load: 84pcs



700-0321

- * Overall Size: 688x458x735mm
- * 4 Drawers: 589x409x48mm
- * 2 Drawers: 589x409x100.5mm
- * 1 Drawer: 589x409x200.5mm
- * Capacity: 8828 Cubic Inch or 144669 Cubic CM
- * Weight: 112.2lbs or 51.0kg
- * 20 Feet container load: 84pcs



700-0323

- * Overall Size: 688x458x735mm
- * 3 Drawers: 591x409x100.5mm
- * Capacity: 11143 Cubic Inch or 182594 Cubic CM
- * Weight: 83.8lbs or 38.1kg
- * 20 Feet container load: 84pcs



700-0324

- * Overall Size: 660x323x380mm
- * 3 Drawers: 565x290x50mm
- * 1 Drawer: 565x290x75mm
- * Capacity: 3432 Cubic Inch or 56234 Cubic CM
- * Weight: 41.4lbs or 18.8kg
- * 20 Feet container load: 246pcs



700-0325

- * Overall Size: 660x323x380mm
- * 3 Drawers: 168x290x50mm
- * 2 Drawers: 565x290x50mm
- * 1 Drawer: 565x290x75mm
- * Capacity: 3377 Cubic Inch or 55336 Cubic CM
- * Weight: 41.9lbs or 19kg
- * 20 Feet container load: 246pcs

Tool Box, Cabinet, Work Bench



700-0326

- * Overall Size: 680x458x732mm
- * 2 Drawers: 570x418x79mm
- * 1 Drawer: 570x418x162mm
- * Capacity: 10598 Cubic Inch or 173667 Cubic CM
- * Weight: 76lbs or 34.5kg
- * 20 Feet container load: 97pcs



700-0327

- * Overall Size: 680x458x732mm
- * 4 Drawers: 570x418x79mm
- * 2 Drawers: 570x418x132mm
- * Capacity: 8190 Cubic Inch or 134212 Cubic CM
- * Weight: 88.1lbs or 40kg
- * 20 Feet container load: 97pcs



700-0328

- * Overall Size: 748x520x717mm
- * 2 Drawers: 578x426x101.5mm
- * 1 Drawer: 578x426x154mm
- * Capacity: 10679 Cubic Inch or 175140 Cubic CM
- * Weight: 105.6lbs or 48kg
- * 20 Feet container load: 84pcs



700-0329

- * Overall Size: 1029x455x519mm
- * 5 Drawers: 580.5x418x52.5mm
- * 1 Drawer: 580.5x418x109mm
- * 4 Drawers: 275.5x418x52.5mm
- * 1 Drawer: 275.5x418x165.5mm
- * Weight: 150lbs or 68kg
- * 20 Feet container load: 70pcs



700-0330

- * Overall Size: 1060x480x775mm
- * 4 Drawers: 580.5x418x52.5mm
- * 2 Drawers: 580.5x418x109mm
- * 1 Drawer: 580.5x418x165.5mm
- * Weight: 190lbs or 85kg
- * 20 Feet container load: 36pcs



700-0331

- * Overall Size: 660x307x377mm
- * 3 Drawers: 570x273x48mm
- * 1 Drawer: 570x273x74.5mm
- * Weight: 52.2lbs or 23.7kg
- * 20 Feet container load: 215pcs



700-0333

- * Overall Size: 670x315x265mm
- * 2 Drawers: 570x273x48mm
- * 1 Drawer: 570x273x74.5mm
- * Weight: 35.0lbs or 15.9kg
- * 20 Feet container load: 261pcs



700-0332

- * Overall Size: 660x307x377mm
- * 3 Drawers: 170.5x273x48mm
- * 2 Drawers: 570x273x48mm
- * 1 Drawer: 570x273x74.5mm
- * Capacity: 3229 Cubic Inch or 52914 Cubic CM
- * Weight: 49.6lbs or 22.5kg
- * 20 Feet container load: 256pcs



700-0334

- * Overall Size: 670x315x255mm
- * 1 Drawer: 570x273x74.5mm
- * 1 Drawer: 570x273x100.5mm
- * Weight: 29.1lbs or 13.2kg
- * 20 Feet container load: 261pcs

Tool box, Cabinets, Work Bench



700-0335

- * Overall Size: 680x458x860mm
- * 2 Drawers: 570x410x74.5mm
- * 1 Drawer: 570x410x74.5mm
- * Weight: 121.1lbs or 55kg
- * 20 Feet container load: 74pcs



700-0336

- * Overall Size: 680x458x860mm
- * 4 Drawers: 570x410x74.5mm
- * Weight: 125.6lbs or 57kg
- * 20 Feet container load: 74pcs



700-0337

- * Overall Size: 680x458x860mm
- * 5 Drawers: 570x415x74.5mm
- * 2 Drawers: 570x415x153.5mm
- * Capacity: 9503 Cubic Inch or 155724 Cubic CM
- * Weight: 122.7lbs or 55.7kg
- * 20 Feet container load: 87pcs



700-0338

- * Overall Size: 1035x458x897mm
- * 1 Drawer: 904x410x105mm
- * 1 Drawer: 566x410x50.5mm
- * 2 Drawers: 566x410x78mm
- * 1 Drawer: 566x410x160mm
- * 1 Drawer: 566x410x242mm
- * 2 Drawers: 302x410x78mm
- * Capacity: 14433 Cubic Inch or 236524 Cubic CM
- * Weight: 207.5lbs or 94.3kg
- * 40 Feet container load: 80pcs



700-0339

- * Overall Size: 1051x445x552mm
- * 3 Drawers: 570x410x74.5mm
- * 1 Drawer: 570x410x153.5mm
- * 3 Drawers: 313x410x74.5mm
- * 1 Drawer: 313x410x153.5mm
- * Weight: 152lbs or 69kg
- * 20 Feet container load: 60pcs



700-0340

- * Overall Size: 1051x445x552mm
- * 5 Drawers: 570x410x74.5mm
- * 5 Drawer: 313x410x74.5mm
- * Weight: 157.7lbs or 71.6kg
- * 20 Feet container load: 60pcs



700-0341

- * Overall Size: 1067x458x853mm
- * 1 Drawer: 937x410x122.5mm
- * 5 Drawers: 570x410x74.5mm
- * 1 Drawer: 570x410x153.5mm
- * Weight: 236lbs or 107kg
- * 20 Feet container load: 39pcs



700-0342

- * Overall Size: 1067x458x853mm
- * 1 Drawer: 937x410x122.5mm
- * 3 Drawers: 570x410x74.5mm
- * 2 Drawers: 570x410x153.5mm
- * 3 Drawers: 313x410x74.5mm
- * 2 Drawers: 313x410x153.5mm
- * Weight: 387.7lbs or 176kg
- * 20 Feet container load: 39pcs



700-0343

- * Overall Size: 910x550x947mm
- * 4 Drawers: 790x479x53mm
- * 3 Drawers: 790x479x109mm
- * 1 Drawer: 790x479x211mm
- * Capacity: 15695 Cubic Inch or 257192Cubic CM
- * Weight: 286.3lbs or 130kg
- * 20 Feet container load: 32pcs

Tool Box, Cabinet, Work Bench



700-0344

- * Overall Size: 754x404x750mm
- * 4 Drawers: 600x342x36mm
- * Weight: 101lbs or 46.1kg
- * 20 Feet container load: 105pcs



700-0345

- * Overall Size: 673x470x513mm
- * 4 Drawers: 597x428x90mm
- * Capacity: 4767 Cubic Inch or 77710 Cubic CM
- * Weight: 96.8lbs or 44kg
- * 20 Feet container load: 132pcs



700-0346

- * Overall Size: 683x480x887mm
- * 5 Drawers: 597x428x90mm
- * 1 Drawer: 597x428x135mm
- * 1 Drawer: 597x428x180mm
- * Capacity: 8922 Cubic Inch or 146205 Cubic CM
- * Weight: 96.8lbs or 44kg
- * 20 Feet container load: 50pcs



700-0347

- * Overall Size: 673x470x461mm
- * 2 Drawers: 597x428x90mm
- * 1 Drawer: 597x428x130mm
- * Capacity: 4350 Cubic Inch or 70907 Cubic CM
- * Weight: 73.7lbs or 33.5kg
- * 20 Feet container load: 132pcs



700-0348

- * Overall Size: 683x480x836mm
- * 1 Drawer: 597x428x194mm
- * Capacity: 10076 Cubic Inch or 164245 Cubic CM
- * Weight: 94.6lbs or 43kg
- * 20 Feet container load: 78pcs



700-0349

- * Overall Size: 683x480x836mm.
- * 4 Drawers: 597x428x130mm.
- * 1 Drawer: 597x428x194mm.
- * Capacity: 8673 Cubic Inch or 141384 Cubic CM
- * Weight: 128.7lbs or 58.5kg
- * 20 Feet container load: 78pcs



700-0101

- * Overall Size: 495x200x290mm
- * Capacity: 2187cubic feet or 21087 cubic cm.
- * Weight: 12.1 lbs or 5.5kg.
- * 20 Feet container load: 700pcs



700-0103

- * Overall Size: 459*255*333mm
- * Capacity: 1612 cubic feet or 26397 cubic cm.
- * Weight: 16.8lbs or 7.6kg.
- * 20 Feet container load: 625pcs



700-0104

- * Overall Size: 484x154x165mm
- * Capacity: 664cubic feet or 10877 cubic cm.
- * Weight: 4.8lbs or 2.2kg.
- * 20 Feet container load: 1864pcs



700-0102

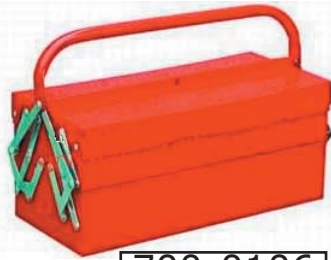
- * Overall Size: 466x210x232mm
- * Capacity: 1249cubic feet or 20474 cubic cm.
- * Weight: 10 lbs or 4.5kg.
- * 20 Feet container load: 900pcs

Tool box, Cabinets, Work Bench



700-0105

- * Overall Size: 466x210x170mm
- * Capacity: 904 cubic feet or 14807 cubic cm.
- * Weight: 6.6lbs or 3.0kg.
- * 20 Feet container load: 1160pcs



700-0106

- * Overall Size: 404x200x195mm
- * Capacity: 891 cubic feet or 14600 cubic cm.
- * Weight: 7.3lbs or 3.3kg.
- * 20 Feet container load: 1125pcs



700-0107

- * Overall Size: 370x160x160mm
- * Capacity: 507 cubic feet or 8301 cubic cm.
- * Weight: 5.6lbs or 2.5kg.
- * 20 Feet container load: 1947pcs



700-0108

- * Overall Size: 404x200x150mm
- * Capacity: 681 cubic feet or 11161 cubic cm.
- * Weight: 5.5lbs or 2.5kg.
- * 20 Feet container load: 1350pcs



700-0109

- * Overall Size: 370x160x123mm
- * Capacity: 387 cubic feet or 6345 cubic cm.
- * Weight: 4.2lbs or 1.9kg.
- * 20 Feet container load: 2591pcs



700-0110

- * Overall Size: 360x150x115mm
- * Capacity: 330 cubic feet or 5419 cubic cm.
- * Weight: 3.3 lbs or 1.5kg.
- * 20 Feet container load: 3360pcs



700-0111

- * Overall Size: 410x154x95mm
- * Capacity: 318 cubic feet or 5214 cubic cm.
- * Weight: 2.9 lbs or 1.3 kg.
- * 20 Feet container load: 3210pcs



700-0112

- * Overall Size: 284x160x78mm
- * Capacity: 195 cubic feet or 3197 cubic cm.
- * Weight: 2.9 lbs or 1.3 kg.
- * 20 Feet container load: 3848pcs



700-0113

- * Overall Size: 284x160x78mm
- * Capacity: 195 cubic feet or 3197 cubic cm.
- * Weight: 2.9 lbs or 1.3 kg.
- * 20 Feet container load: 5624pcs



700-0114

- * Overall Size: 510x218x240mm
- * Capacity: 1537 cubic feet or 25188 cubic cm.
- * Weight: 10.4 lbs or 4.7 kg.
- * 20 Feet container load: 792pcs



700-0115

- * Overall Size: 510x218x220mm
- * Capacity: 1433 cubic feet or 23482 cubic cm.
- * Weight: 11.5 lbs or 5.2 kg.
- * 20 Feet container load: 792pcs



700-0116

- * Overall Size: 510x218x220mm
- * Capacity: 1433 cubic feet or 23482 cubic cm.
- * Weight: 11.5 lbs or 5.2 kg.
- * 20 Feet container load: 792pcs

Tool Box, Cabinet, Work Bench



700-0117

- * Overall Size: 428x177x184mm
- * Capacity: 778cubic feet or 12761 cubic cm.
- * Weight: 11.5 lbs or 5.2 kg.
- * 20 Feet container load: 1562pcs



700-0118

- * Overall Size: 483x180x180mm
- * Capacity: 854cubic feet or 13997 cubic cm.
- * Weight: 7.5 lbs or 3.4 kg.
- * 20 Feet container load: 1276pcs



700-0119

- * Overall Size: 508x218x243mm
- * Capacity: 1417cubic feet or 23220 cubic cm.
- * Weight: 11.5 lbs or 5.2 kg.
- * 20 Feet container load: 792pcs



700-0201

- * Overall Size: 520*218*300mm
- * Capacity: 1565 cubic feet or 25645 cubic cm.
- * Top Tray Area: 518x216x63mm
- * 3 Drawers: 448x189x54mm
- * Weight: 19.8lbs or 9kg.
- * 20 Feet container load: 548 pcs



700-0202

- * Overall Size: 435*240*275mm
- * Capacity: 1436 cubic feet or 23526 cubic cm.
- * Top Tray Area: 433x238x54mm
- * 3 Drawers: 378x219x51.5mm
- * Weight: 13.2lbs or 6kg.
- * 20 Feet container load: 735 pcs



700-0203

- * Overall Size: 470x218x210mm
- * Capacity: 1013 cubic feet or 16604 cubic cm.
- * Top Tray Area: 468x214x63mm
- * 1 Drawers: 397x189x80mm
- * Weight: 10.1lbs or 4.6kg.
- * 20 Feet container load: 720 pcs



700-0204

- * Overall Size: 510x218x250mm
- * Capacity: 1282 cubic feet or 21004 cubic cm.
- * Top Tray Area: 508x215x63.4mm
- * 2 Drawers: 437x189x60mm
- * Weight: 13.4lbs or 6.1kg.
- * 20 Feet container load: 576pcs



700-0205

- * Overall Size: 534x218x288mm
- * Capacity: 1271 cubic feet or 20817 cubic cm.
- * Top Tray Area: 532x215x58mm
- * 1 Drawers: 501x189x48mm
- * Weight: 16.4lbs or 7.4kg.
- * 20 Feet container load: 616pcs



700-0206

- * Overall Size: 534x218x288mm
- * Capacity: 1268 cubic feet or 20774 cubic cm.
- * Top Tray Area: 532x215x58mm
- * 2 Drawers: 501x189x36mm
- * 1 Drawers: 501x189x75mm
- * Weight: 17.9lbs or 8.1kg.
- * 20 Feet container load: 616pcs



700-0207

- * Overall Size: 497x217x240mm
- * 2 Drawers: 597x189x55mm
- * Weight: 15.4lbs or 7.0kg.
- * 20 Feet container load: 752pcs



700-0208

- * Overall Size: 497x217x298mm
- * Capacity: 1466 cubic feet or 23895 cubic cm.
- * 3 Drawers: 597x189x55mm
- * Weight: 18.7lbs or 8.5kg.
- * 20 Feet container load: 592pcs

Tool box, Cabinets, Work Bench

700-0401



- Tool Chest:**
- * Overall Size: 600x260x340mm
 - * Top Tray Area: 598x258x52.5mm
 - * 3 Drawers: 151.5x225x40mm
 - * 2 Drawers: 511x225x40mm
 - * 1 Drawer: 511x225x65mm
 - * Capacity: 1900 Cubic Inch or 31161 Cubic CM.
 - * Weight: 25.3 lbs or 11.5kg
- Roller Cabinet:**
- * Overall Size: 616x330x742mm
 - * Panel Area: 536x300x378mm
 - * Drawers: 511x308x85mm
 - * Capacity: 4140 Cubic Inch or 67836 Cubic CM.
 - * Weight: 30 lbs or 15.9kg
 - * 20 FT Container Load: 151PCS

700-0402



- Tool Chest:**
- * Overall Size: 435x240x270mm
 - * Top Tray Area: 433x238x49mm
 - * 3 Drawers: 378x219x53mm
 - * Capacity: 1384 Cubic Inch or 22686 Cubic CM.
 - * Weight: 12.1 lbs or 5.5kg
- Roller Cabinet:**
- * Overall Size: 455x280x580mm
 - * Capacity: 4140 Cubic Inch or 67836 Cubic CM.
 - * Weight: 14.1 lbs or 6.4kg
 - * 20 FT Container Load: 245PCS

700-0403



- Tool Chest:**
- * Overall Size: 380x240x255mm
 - * Top Tray Area: 379x238x61mm
 - * 2 Drawers: 323x219x63mm
 - * Capacity: 1123 Cubic Inch or 18409 Cubic CM.
 - * Weight: 8.8 lbs or 4.0kg
- Roller Cabinet:**
- * Overall Size: 400x280x487mm
 - * Capacity: 2998 Cubic Inch or 49126 Cubic CM.
 - * Weight: 14.1 lbs or 6.4kg
 - * 20 FT Container Load: 340PCS

700-0404



- Tool Chest:**
- * Overall Size: 450x240x325mm
 - * Top Tray Area: 448x239x48mm
 - * 4 Drawers: 378x209x49.5mm
 - * Capacity: 1523 Cubic Inch or 24957 Cubic CM.
 - * Weight: 15.0 lbs or 6.8kg
- Roller Cabinet:**
- * Overall Size: 515x280x632mm
 - * Panel Area: 513x278x411mm
 - * 1 Drawer: 446x256x76.5mm
 - * Capacity: 4110 Cubic Inch or 67349 Cubic CM.
 - * Weight: 24.2 lbs or 11.00kg
 - * 20 FT Container Load: 236PCS



700-0405

- Tool Chest:**
- * Overall Size: 500x260x340mm
 - * Top Tray Area: 598x258x52.5mm
 - * 3 Drawers: 151.5x225x40mm
 - * 2 Drawers: 511x225x40mm
 - * 1 Drawers: 511x225x85mm
 - * Capacity: 1900 Cubic Inch or 31161 Cubic CM.
 - * Weight: 25.3 lbs or 11.5kg
- Roller Cabinet:**
- * Overall Size: 616x330x658mm
 - * Panel Area: 536x300x378mm
 - * Drawer: 511x308x85mm
 - * Capacity: 4140 Cubic Inch or 67836 Cubic CM.
 - * Weight: 30 lbs or 16.4kg
 - * 20 FT Container Load: 151PCS



- Tool Chest:** 9 drawers with ball bearing slide.
- * Overall Size (LXWXH): 1051mmx405mmx531mm
 - * Shipping Size (LXWXH): 1130mmx530mmx715mm
 - * Net Weight: 68kg
 - * 20FT container load: 60pcs
 - * 40FT container load: 126pcs

- Roller Cabinet:** 13 drawers with ball bearing slide
- * Overall Size (LXWXH): 1065mmx458mmx1050mm
 - * Shipping Size (LXWXH): 1144mmx581mmx1240mm
 - * Net Weight: 119.5kg
 - * 40FT high container load: 40pcs

700-0350



- Tool Chest:**
- * Overall Size: 1051x445x552mm
 - * 5 Drawers: 570x410x74.5mm
 - * 5 Drawer: 313x410x74.5mm
 - * Weight: 157.7lbs or 71.6kg
 - * 20 Feet container load: 60pcs
- Roller Cabinet:**
- * Overall Size: 1067x458x853mm
 - * 1 Drawer: 937x410x122.5mm
 - * 5 Drawers: 570x410x74.5mm
 - * 1 Drawer: 570x410x153.5mm
 - * Weight: 236lbs or 107kg
 - * 20 Feet container load: 39pcs

700-0352

Truck Tyre Balancer

Order No.700-1029



SPECIFICATIONS:

- .Automatical START/STOP
- .Automatic distance and wheel diameter measuring
- .Self diagnosis
- .Changeable between gram and ounce
- .Changeable between millimeter and inch
- .Protection cover
- .4ALU Functions for light alloy wheels
- .Full screen display for the a.b.d.reading

Cyclc time	8sec.
Maximum Wheel Weight	120Kg
Motor power	250W/400W
Power supply	220V/380V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g for car and ±25g for truck
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	230Kg
Noise	<70dB
Ambient	0-40centigrade
Work air pressure	8-10bar

Truck Tyre Balancer

Order NO.700-1030



SPECIFICATIONS:

- .Automatic START/STOP
- .Automatic distance and wheel diameter measuring
- .Self diagnosis
- .Self calibration
- .Changeable between gram and ounce
- .Changeable between millimeter and inch
- .Protection cover
- .4ALU functions for light alloy wheels
- .Full screen display for the a.b.d.reading

Cyclc time	8sec.
Maximum Wheel Weight	120Kg
Motor power	250W/400W
Power supply	220V/380V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g for car and ±25g for truck
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	230Kg
Noise	<70dB
Ambient	0-40 centigrade
Work air pressure	8-10bar

Car Wheel Balancer

Order No.700-1031



SPECIFICATIONS:

- .Automatic START/STOP
- .Automatic distance and wheel diameter measuring
- .Self diagnosis
- .Self calibration
- .Changeable between gram and ounce
- .Changeable between millimeter and inch
- .Protection cover
- .4ALU functions for light alloy wheels
- .Full screen display for the a.b.d.reading

Cyclc time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	125Kg
Noise	<70dB
Ambient	0-40centigrade

Car Wheel Balancer

Order NO.700-1032



- SPECIFICATIONS:**
- .Automatic START/STOP
 - .Automatic distance and wheel diameter measuring
 - .Self diagnosis
 - .Changeable between gram and ounce
 - .Changeable between millimeter and inch
 - .Protection cover
 - .4ALU functions for light alloy wheels
 - .Full screen display for the a.b.d.reading

Cycle time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	125Kg
Noise	<70dB
Ambient	0-40centigrade

Car Wheel Balancer

Order No.700-1033



Technical features:
Small size, fine appearance with economical design.

Cycle time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	135Kg
Noise	<70dB
Ambient	0-40centigrade

Car Wheel Balancer

Order No.700-1034

Cycle time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	125Kg
Noise	<70dB
Ambient	0-40centigrade

- SPECIFICATIONS:**
- .Automatic START/STOP
 - .Automatic distance and wheel diameter measuring
 - .Self diagnosis
 - .Self calibration
 - .Changeable between gram and ounce
 - .Changeable between millimeter and inch
 - .Protection cover
 - .4ALU functions for light alloy wheels
 - .Full screen display for the a.b.d.reading





Car Wheel Balancer

Order NO.700-1035

SPECIFICATIONS:

- .Automatic START/STOP
- .Automatic distance and wheel diameter measuring
- .Self diagnosis
- .Self calibration
- .Changeable between gram and ounce
- .Changeable between millimeter and inch
- .Protection cover
- .4ALU Functions for light alloy wheels
- .Full screen display for the a.b.d.reading

Cyclc time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	125Kg
Noise	<70dB
Ambient	0-40centigrade



Car Wheel Balancer

Order No.700-1036

SPECIFICATIONS:

- .Automatic START/STOP
- .Automatic distance and wheel diameter measuring
- .Self diagnosis
- .Self calibration
- .Changeable between gram and ounce
- .Changeable between millimeter and inch
- .Protection cover
- .4ALU functions for light alloy wheels
- .Color video display

Cyclc time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	125Kg
Noise	<70dB
Ambient	0-40centigrade



Car Wheel Balancer

Order No.700-1037

SPECIFICATIONS:

- .Automatic START/STOP
- .Automatic distance and wheel diameter measuring
- .Self diagnosis
- .Self calibration
- .Changeable between gram and ounce
- .Changeable between millimeter and inch
- .Protection cover
- .4ALU functions for light alloy wheels
- .Full screen display for the a.b.d.reading

Cyclc time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	135Kg
Noise	<70dB
Ambient	0-40centigrade

Car Wheel Balancer



Order No.700-1038

- SPECIFICATIONS:**
- .Automatic START/STOP
 - .Self diagnosis
 - .Self calibration
 - .Changeable between gram and ounce
 - .Changeable between millimeter and inch
 - .Protection cover
 - .4ALU functions for light alloy wheels
 - .Full screen display for the a.b.d.reading

Cyclc time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Net weight with cover	125Kg
Noise	<70dB
Ambient	0-40centigrade

Car Wheel Balancer



Order No.700-1039

- Technical features:**
- .Self-calibration
 - .Ounces/Gram selectable
 - .MM/INCH selectable
 - .Normal, Static, AL1, AL2, AL3 balancing modes

Cyclc time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Noise	<70dB
Ambient	0-40centigrade
Net weight without cover	90Kg

Car Wheel Balancer



Order No.700-1040

- Technical features:**
- .elf-calibration
 - .unces/Gram selectable ?
 - .M/INCH selectable
 - .Normal, Static, AL1,AL2,AL3 balancing modes

Cyclc time	8sec.
Maximum Wheel Weight	70Kg
Motor power	180W/250W
Power supply	110V/220V 50Hz/60Hz
Balancing speed	≤200rpm
Balancing precision	±1g
Rim diameter	10"-24" (265-615mm)
Rim width	1.5"-20" (40-510mm)
Noise	<70dB
Ambient	0-40centigrade
Net weight without cover	95Kg

Tyre Changer

Order NO.700-1041



Rim clamping from outside	6"-21"
Max.wheel diameter	960mm
Max.wheel width/turntable	260mm
Max.wheel width/bead-breaker	320mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	164Kg
Noise	<70dB
Packing outside dimension	990×760×910(mm)

Tyre Changer

Order No.700-1042

- Technical features:
- .Pneumatic bead breaker blade
 - .Manometer for inflation pressure control equipped with deflating push button
 - .Water box in the case



Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	950mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	300mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	198Kg
Noise	<70dB
Packing outside dimension	1000×860×910

Tyre Changer

- Technical features:
- Semi-automatic tyre changer,suitable for 12"-23"stiff,wide and low-profile tyres,and also capable of handling 20"aluminum alloy rims.
 - .Unit integrated case
 - .Complete with air reserve tank
 - .Quick inflating
 - .Pneumatic bead breaker blade
 - .Vertical and horizontal arms with pneumatic dual locking device
 - .Water box in the case



Order No.700-1043

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	950mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	260mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	213Kg
Noise	<70dB
Packing outside dimension	1305×960×940

Tyre Changer



Technical features:

Semi-automatic tyre changer, suitable for 12"-23" stiff, wide and low-profile tyres, and also capable of handling 20" aluminium alloy rims.

- .Air reserve tank in the pole
- .Quick inflating
- .Pneumatic bead breaker blade
- .Manometer for inflating pressure control equipped with deflating push button
- .Water box

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max. wheel diameter	1000mm
Max. wheel width/turntable	410mm
Max. wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power supply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	217Kg
Noise	<70dB
Packing outside dimension	1120×910×910

Order No.700-1044

Tyre Changer



Technical features:

It is full automatic tyre changer with left mechanical hand. It is especially capable of stiff, wide and low-profile tyres.

- .Air reserve tank in the pole
- .Quick inflating
- .Pneumatic bead breaker adjustable in 2 position
- .Manometer for inflating pressure control equipped with deflating push button
- .Convenient tool box

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max. wheel diameter	1150mm
Max. wheel width/turntable	460mm
Max. wheel width/bead-breaker	480mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power supply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	315Kg
Noise	<70dB
Packing outside dimension	1305×960×940(mechanical hand packing)1200×820×430

Order No.700-1045



Order NO.700-1046

Tyre Changer

Technical features:

- .Pneumatic bead breaker blade
- .Manometer for inflation pressure control equipped with deflatin push button
- .Water box in the case

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	950mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Max.wheel width	340mm
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	216Kg
Noise	<70dB
Packing outside dimension	1050mm×960mm×910mm



Tyre Changer

Order NO.700-1047

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	960mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	336Kg
Noise	<70dB
Packing outside dimension	1270×1050×1760

Truck Tyre Changer

Technical features:

All movement of the working parts are guided by the movable control platform, particularly suitable for handling truck wheel, farm wheels, passenger car wheels and industrial vehicle wheels between 14" and 26" with deep grooved rims, with ring. It is a ideal mechanized equipment for maintenance wheel, for it saves time and labor with high efficiency, which does not damage to the inside of the rubber wheel and rim.

- .Full automatic control working arm lift
- .Movable control platform
- .Working arm with quick rotation system
- .Four oil cylinder



Order No.700-1048

Max.wheel diameter	1600mm
Handles wheels from	14"-26"
Max.wheel width	800mm
Max.wheel weigt	1270Kg
Hydraulic pump motor	1.1Kw 1.5Kw 2.2Kw
Operating pressure	0-130bar
Power suply	380V3ph 220V3ph 220V1ph
Motor power	1.5Kw 1.5Kw 2.2Kw
Net weight	720Kg
Noise	<70dB
Packing outside dimension	2245×1775×960(mm)

Tyre Changer

Order No.700-1049



Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	1000mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weignt	250Kg
Noise	<70dB
Packing outside dimension	1120×960×940

Tyre Changer

Technical features:

Semi-automatic tyre changer,suitable for12"-23"stiff,wide and low-profile tyres,and also capable of handling20" aulminum alloy rims.

.Complete with air reserve tank

.Quick inflating

.Pneumatic bead breaker blade

.Manometer for inflating pressure control equipped with deflating push button

.Water box in case

.Pole is tiltable



Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	1000mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	260Kg
Noise	<70dB
Packing outside dimension	1305×960×940(mm)

Order NO.700-1051

Tyre Changer

Technical features:

- It is full automatic tyre changer with left mechanical hand. It is especially capable of stiff, wide and low-profile tyres.
- .Pole is tiltable
- .Vertical and horizontal arms with pneumatic dual locking device
- .Complete with air reserve tank
- .Quick inflating
- .Pneumatic bead breaker blade
- .Manometer for inflating pressure control equipped with deflating push button
- .Convenient tool box

Order No. 700-1052



Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	1000mm
Max.wheel width/turtable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weigt	336Kg
Noise	<70dB
Packing outside dimension	1270×1050×1760

Truck Tyre Changer

Technical features:

- All movement of the working parts are guided by the movable control platform, particularly suitable for handling truck wheel, farm wheels, passenger car wheels and industrial vehicle wheels between 14" and 26" with deep grooved rims, with ring. It is a ideal mechanized equipment for maintenance wheel, for it saves time and labor with high efficiency, which does not damage to the inside of the rubber wheel and rim.
- .Three oil cylinders
- .Moveable control platform
- .Working arm with quick rotation system

Order NO.700-1053



Max.wheel diameter	1600mm
Handles wheels from	14"-26"
Max.wheel width	800mm
Max.wheel weight	1270Kg
Hydraulic pump motor	1.1Kw 1.5Kw 2.2 Kw
Operating pressure	0-130bar
Power suply	380V3ph 220V3ph 220V1ph
Motor power	1.5Kw 1.5Kw 2.2Kw
Net weigt	590Kg
Noise	<70dB
Packing outside dimension	2045×1685×960

Tyre Changer



- Technical features:
 .Pneumatic bead breaker blade
 .Manometer for inflating pressure control equipped with deflating push button
 .Water box in case

Order No.700-1054

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	950mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	320mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	207Kg
Noise	<70dB
Packing outside dimension	1000×860×910

Tyre Changer



- Technical features:
 .Pneumatic bead breaker blade
 .Manometer for inflating pressure control equipped with deflating push button
 .Water box in case

Order No.700-1055

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	950mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	300mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	193Kg
Noise	<70dB
Packing outside dimension	1000×860×910

Tyre Changer



- Technical features:
 .Combined case
 .Complete with pneumatic bead breaker blade
 .Manometer for inflatin pressure control equipped with deflating push button
 .Water box in case

Order NO. 700-1056

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	950mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	240mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	203Kg
Noise	<70dB
Packing outside dimension	1000×860×910

Tyre Changer

Technical features:

- .Slide with two workin position
- .Pneumatic bead breaker blade
- .Manometer for inflating pressure control equipped with deflating push button
- .Water box in case

Order NO.700-1057



Rim clamping from outside	8"-19"
Rim clamping from inside	10"-22"
Max.wheel diameter	1000mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weignt	203Kg
Noise	<70dB
Packing outside dimension	1050×960×910

Tyre Changer

Order No.700-1058



Rim clamping from outside	12"-20"
Rim clamping from inside	14"-23"
Max.wheel diameter	1000mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	217Kg
Noise	<70dB
Packing outside dimension	1120×910×910

Tyre Changer

Technical features:

- .Pneumatic bead breaker blade
- .Manometer for inflating pressure control equipped with deflating push button
- .Water box in case

Order No.700-1059



Rim clamping from outside	10"-17"
Rim clamping from inside	13"-21"
Max.wheel diameter	950mm
Max.wheel width/turntable	240mm
Max.wheel width/bead-breaker	340mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Net weight	179Kg
Noise	<70dB
Packing outside dimension	1000×860×910

Tyre Changer

Technical features:

- It is a unit integrated and full automatic equipment, which is especially capable of handling stiff, wide and low-profile tyres.
- .Pole is tiltable
- .Vertical and horizontal arms with pneumatic dual locking device
- .Complete with air reserve tank
- .Quick infalting
- .Pneumatic bead breaker blade
- .Manometer for inflating pressure control equipped with deflating control pedal

Order No.700-1060

Rim clamping from outside	12"-20"
Rim clamping from inside	14"-24"
Max.wheel diameter	1000mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(145psi)
Power suply	110/220V 1ph 380V 3ph
Motor power	0.75-1.1Kw
Noise	<70dB



Tyre Changer

It is full automatic changer specially for wide tread and low-profile tyres..

- .Post inclinable
- .Pneumatic locking for vertical shaft and moving arm
- .Quick Inflating
- .Pneumatic Bead-remove
- .Air-release button for pressure device
- .Tool Box for Maintenance
- .2-Speed Turntable

Order No.700-1061

Rim clamping from outside	14"-24"
Rim clamping from inside	16"-28"
Max.wheel diameter	1200mm
Max.wheel width/turntable	410mm
Max.wheel width/bead-breaker	360mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V(1ph) 380V(3ph)
Motor power	0.85-1.1Kw
Net weignt	358Kg
Noise	<70dB
Packing outside dimension	main body(1405mm×1050mm×1060mm) Helper arm(1180mm×800mm×400mm)



Tyre Changer

It is full automatic changer specially for wide tread and low-profile tyres. It works at ease in collaboration with the double helpers.

- .Pneumatic locking for vertical shaft and moving arm.
- .Post inclinable
- .Pneumatic Bead-remover arm with 2 stoppers
- .Air Tank
- .Inflating device for tubeless tyre
- .Pneumatic Bead-remover
- .Air-release button for pressure device
- .Manuallocking for moving arm

Order No.700-1062

Rim clamping from outside	14"-24"
Rim clamping from inside	16"-28"
Max.wheel diameter	1200mm
Max.wheel width/turtable	410mm
Max.wheel width/bead-breaker	460mm
Bead-remover cylinder(force at 10 bar)	2500Kg
Operating pressure	8-10bar(116-145Psi)
Power suply	110/220V(1ph) 380V(3ph)
Motor power	0.75-1.1Kw
Net weight	430Kg
Noise	<70dB
Packing outside dimension	main body 1405×1050×1060(mm) Helper arm 1295×1115×620(mm)



Wheel Alignment



Order No.700-1063

The equipments install:

power supply	110V/220V 1ph
Toe	+6°~-6°(±0.02°)
Camber	+10°~-10°(±0.02°)
Caster	+15°~-15°(±0.04)
Kingpin inclinable	+20°~-20°(±0.02°)
Set back	+6°~-6°(±0.02°)
Steering angle	+45°~-45°(±0.04°)
Thrust angle	+6°~-6°(±0.04°)
Net weight	90Kg
Packing outside dimension	1200×900×1550mm

Power	0.5KW/td>
Electric voltage	220V/110V/td>
Rim diameter	12"-21"/td>
CPU	1.8G/td>
Memory	128MB/td>
Hard disk	40G/td>
Key board and mouse	wireless/td>
Display	17"/td>
Printer	Ink-jet printer/td>
Testing	8Bundle/td>
Transmission	Infrared ray/td>
Sensor battery voltage	6V/13A/td>

Wheel Alignment

Order No.700-1064

Standard features

power supply	110V/220V 1ph
Toe	+6°~-6°(±0.02°)
Camber	+10°~-10°(±0.02°)
Caster	+15°~-15°(±0.04)
Kingpin inclinable	+20°~-20°(±0.02°)
Set back	+6°~-6°(±0.02°)
Steering angle	+45°~-45°(±0.04°)
Thrust angle	+6°~-6°(±0.04°)
Net weight	90Kg
Packing outside dimension	1200×900×1550



The equipments install:

Power	0.5KW/td>
Electric voltage	220V/110V/td>
Rim diameter	12"-21"/td>
CPU	1.8G/td>
Memory	128MB/td>
Hard disk	40G/td>
Key board and mouse	wireless/td>
Display	17"/td>
Printer	Ink-jet printer/td>
Testing	8Bundle/td>
Transmission	Infrared ray/td>
Sensor battery voltage	6V/13A/td>

Wheel Alignment

Order NO.700-1065

Standard features:

power supply	110V/220V 1ph
Toe	+6°~-6°(±0.02°)
Camber	+10°~-10°(±0.02°)
Caster	+15°~-15°(±0.04)
Kingpin inclinable	+20°~-20°(±0.02°)
Set back	+6°~-6°(±0.02°)
Steering angle	+45°~-45°(±0.04°)
Thrust angle	+6°~-6°(±0.04°)
Net weight	90Kg
Packing outside dimension	1200×900×1600



The equipments install:

Power	0.5KW/td>
Electric voltage	220V/110V/td>
Rim diameter	12"-21"/td>
CPU	1.8G/td>
Memory	128MB/td>
Hard disk	40G/td>
Key board and mouse	wireless/td>
Display	17"/td>
Printer	Ink-jet printer/td>
Testing	8Bundle/td>
Transmission	Bluetooth/td>
Sensor battery voltage	6V/13A/td>

Wheel Alignment

Order No.700-1066

Standard features:

power supply	110V/220V 1ph
Toe	+6°~-6°(±0.02°)
Camber	+10°~-10°(±0.02°)
Caster	+15°~-15°(±0.04)
Kingpin inclinable	+20°~-20°(±0.02°)
Set back	+6°~-6°(±0.02°)
Steering angle	+45°~-45°(±0.04°)
Thrust angle	+6°~-6°(±0.04°)
Net weight	90Kg
Packing outside dimension	1500×700×1450



The equipments install:

Power	0.5KW/td>
Electric voltage	220V/110V/td>
Rim diameter	12"-21"/td>
CPU	1.8G/td>
Memory	128MB/td>
Hard disk	40G/td>
Key board and mouse	wireless/td>
Display	17"/td>
Printer	Ink-jet printer/td>
Testing	8Bundle/td>
Transmission	Infrared ray+cable/td>
Sensor battery voltage	6V/13A/td>

Wheel Alignment

Order No.700-1067



Standard features:

power supply	110V/220V 1ph
Toe	+6°~-6°(±0.02°)
Camber	+10°~-10°(±0.02°)
Caster	+15°~-15°(±0.04)
Kingpin inclinable	+20°~-20°(±0.02°)
Set back	+6°~-6°(±0.02°)
Steering angle	+45°~-45°(±0.04°)
Thrust angle	+6°~-6°(±0.04°)
Net weight	90Kg
Packing outside dimension	1200×900×1550

The equipments install:

Power	0.5KW/td>
Electric voltage	220V/110V/td>
Rim diameter	12"-21"/td>
CPU	1.8G/td>
Memory	128MB/td>
Hard disk	40G/td>
Key board and mouse	wireless/td>
Display	17"/td>
Printer	Ink-jet printer/td>
Testing	8Bundle/td>
Transmission	Infrared ray/td>
Sensor battery voltage	6V/13A/td>

Wheel Alignment

Order No.700-1068



Standard features:

power supply	110V/220V 1ph
Toe	+6°~-6°(±0.02°)
Camber	+10°~-10°(±0.02°)
Caster	+15°~-15°(±0.04)
Kingpin inclinable	+20°~-20°(±0.02°)
Set back	+6°~-6°(±0.02°)
Steering angle	+45°~-45°(±0.04°)
Thrust angle	+6°~-6°(±0.04°)
Net weight	90Kg
Packing outside dimension	1200×900×1550mm

The equipments install:

Power	0.5KW/td>
Electric voltage	220V/110V/td>
Rim diameter	12"-21"/td>
CPU	1.8G/td>
Memory	128MB/td>
Hard disk	40G/td>
Key board and mouse	wireless/td>
Display	17"/td>
Printer	Ink-jet printer/td>
Testing	8Bundle/td>
Transmission	Infrared ray/td>
Sensor battery voltage	6V/13A/td>

Lifter For Wheel Alignment

Order NO.700-1070



Lifting capacity	3500Kg
Max lift hight	1700mm
Lifting Time	75s
Lowering Time	75s
Net Weight	1100Kg
Motor power	2.2Kw 220V/380V 50Hz
Oil pressure	20Mpa
Minimum height	500mm
Overall Length	4360mm
Overall Height	2118mm
Overall Width	2920mm

Lifter

Order No.700-1071



Lifting capacity	3000Kg
Max lift height	1750mm
Lifting Time	50s
Lowering Time	30s
Net Weight	880Kg
Motor power	2.2Kw
Oil pressure	16Mpa
Air pressure	0.8Mpa
Noise	<70dB
Power Supply	220V/380V 50Hz

Lifter

Order No.700-1072



Lifting capacity	3000Kg
Max lift height	1750mm
Lifting Time	45s
Lowering Time	30s
Net Weight	900Kg
Motor power	2.2Kw
Oil pressure	16Mpa
Air pressure	0.8Mpa
Noise	<70dB
Power Supply	220V/380V 50Hz

Lifter

Order NO.700-1073



Lifting capacity	3600Kg
Max lift height	1900mm
Lifting Time	45s
Lowering Time	30s
Net Weight	830Kg
Motor power	2.2Kw
Oil pressure	16Mpa
Noise	<70dB
Power Supply	220V/380V

Lifter

Order No.700-1074



Lifting capacity	4000Kg
Max lift hight	1700mm
Lifting Time	55s
Lowering Time	30s
Net Weight	1880Kg
Motor power	2.2Kw
Oil pressure	16Mpa
Air pressure	0.8Mpa
Noise	<70dB
Power Supply	220V/380V 50Hz

Lifter

Order No.700-1076



Lifting capacity	2800Kg
Max lift hight	1200mm
Lifting Time	20s
Lowering Time	30s
Net Weight	350Kg
Oil pressure	16Mpa
Air pressure	5-10Bar
Noise	<70dB
Power Supply	220V 1ph 380V 3ph
Motor Power	1.5Kw

Multi Lift For Wheel Alignment

Order NO.700-1077



Lifting capacity	3500Kg
Lifting Height	2200mm
Lifting Time	60s
Lowering Time	45s
Net Weight	2000Kg
Gross Weight	2200Kg
Motor power	2.2KW(400-230V
Noise	<70dB
Overall Length	4400mm
Overall Width	2150mm
Distance between Platforms	930mm
Pri.Platform Lifting Height	1750mm
Sec.Platform Lifting Height	450mm
PRI.Platform Length	4000mm
PRI.Platform Width	610mm
Pump Max.Pressure	31.5MPa
Working Pressure	20MPa
Packing Dimension	620×460×4200(2Pcs) 520×380×100 (1Pc) 520×500×260 (1Pc)

Portable Threader



Features:

A hand-held, powerful, portable electric threader
Features a reversible 220V/110V series motor
capacity: 1/2"-1-1/4" pipe
Ideal for on-site applications

Technical Data:

Motor: 1350W series motor
Switch: heavy-duty with safety lock forward/reverse switch
Spindle speed: 32RPM
Voltage :110V/220V
Current: 12A/5.2A
N.W.: 6KGS

Order NO. 800-7000

Standard Equipment:

Die head: 1/2", 3/4", 1", 1-1/4".
dies(BSPT/NPT): 1/2", 3/4", 1", 1-1/4".
Tools: 1 Carbon brush, 1 support arm, 1 plastic carrying case.
Support Arm



Assembling



Features:

An improved hand-held, powerful, portable electric threader
Features a reversible 220/110V series motor
Capacity: 1/2"-2" pipe
Ideal for on-site applications

Technical Data:

motor: 1350W series motor
switch: heavy-duty with safety lock forward/reverse switch
spindle speed: 32RPM
Voltage: 110V/220V
Current: 12A/5.2A
N.W.: 8KGS

OrderNO. 800-7001

Standard Equipment:

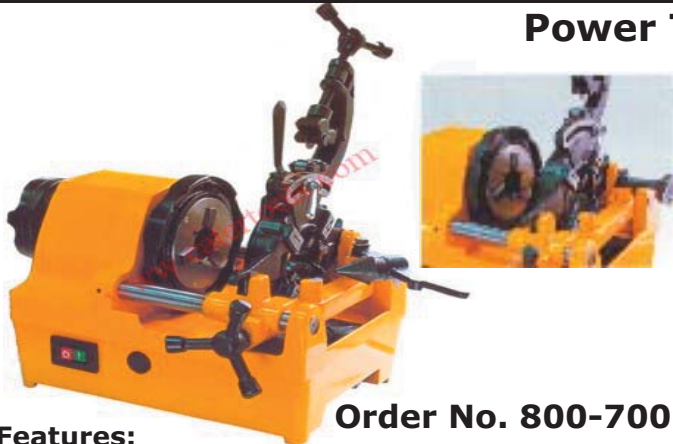
Die head: 1/2", 3/4", 1", 1-1/4", 1/2", 2".
Dies(BSPT/NPT): 1/2", 3/4", 1", 1-1/4", 1 1/2", 2".
Tools: 1 Carbon brush, 1 Support arm, 1 Plastic carrying case



Assembling



Power Threading



Order No. 800-7002

Features:

The model SQ40 threading machine features a compact and lightweight design-only 37.8kg.
A powerful 1050W Series Motor enable the SQ40 to thread pipe much more faster. Compact Molding and superior material used on the SQ40 makes the life expectancy much more longer

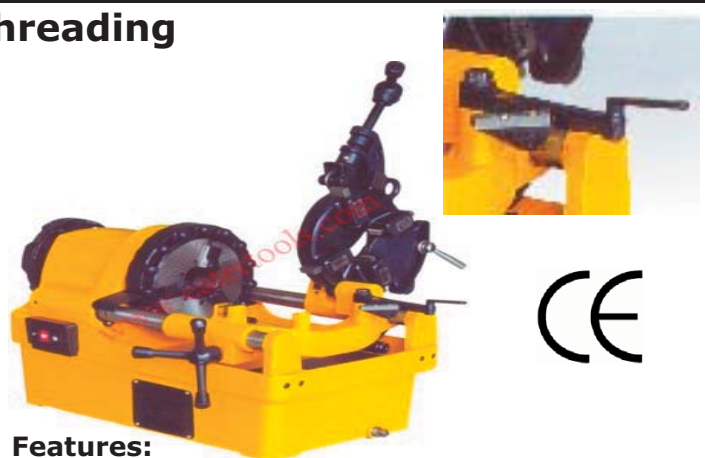
Technical Data:

motor: 1050W series motor
switch: On/Off, heavy-duty, push-button type
spindle speed: 40 RPM
Voltage: 110V/220V
Current: 8A/4A
N.W.: 37.8KGS

Capacity:

- a) 1/4"-1-1/2" (BSPT and NPT); (1/4"-3/8"; 1/2"-3/4"; 1"-1-1/2")
- b) M10-M33 (ISO)
- c) 3/8"-1" (BSW)
- d) 1/4"-1-1/2" (BSPP)

Processing BSW and ISO needs additional die head, order separately



Features:

The threading machine was equipped with a powerful 1800W Series Motor which enable the machine process standard threads more quickly. Compact Molding and superior material used on it makes the life expectancy more longer.

Technical Data:

- 1) Motor: 1,800W universal 115V or 220V, 50-60Hz
- 2) Spindle speed: 40rpm
- 3) Net weight: 50kg

Capacity:

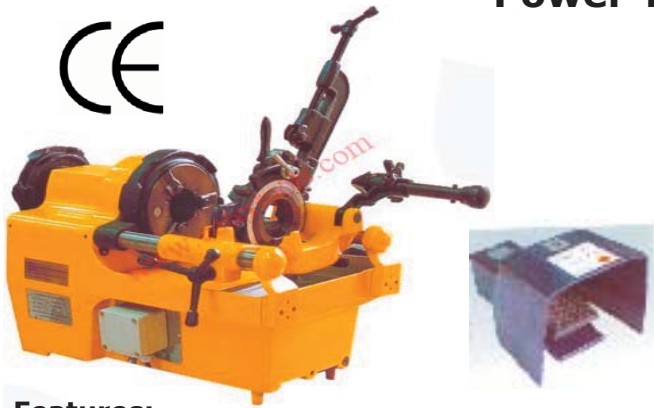
- a) 1/2"-2" (BSPT and NPT) (1/2"-3/4", 1"-2")
- b) M10-M33 (ISO)
- c) 3/8"-1- 1/4" (BSW)
- d) 1/2"-2" (BSPP)

Order No. 800-7003



PIPE THREADING TOOLS

Power Threading



Features:

The model SQ50C threading machine was supplied with a 1/2"-2" die head allowing cutting standard pipe threads (BSPT/NPT) and BSW, ISO, BSPP threads (changing a head).

Technical Data:

- 1) Motor: 750W induction 115V or 220V, 50-60Hz
- 2) Spindle speed: 27rpm
- 3) Net weight: 65kg

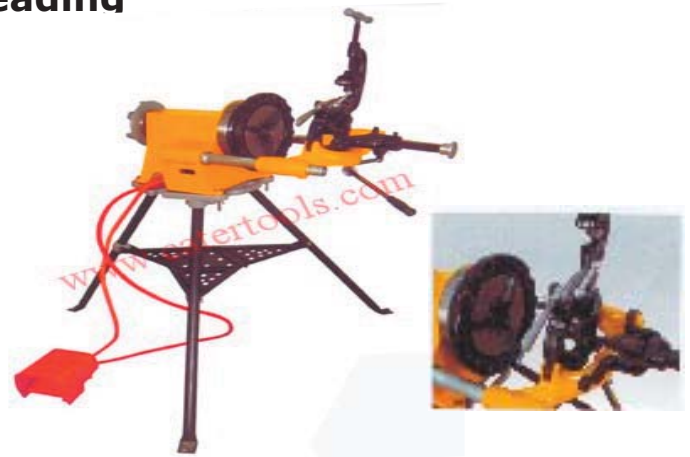
Capacity:

- a) 1/2"-2" (BSPT and NPT) (1/2"-3/4", 1"-2")
- b) M10-M33 (ISO)
- c) 3/8"-1-1/4" (BSW)
- d) 1/2"-2" (BSPP)



Order No. 800-7004

foot-switch for choice



Features:

The threading machine is equipped with a powerful 1500W reversible series motor. With 38RPM springle speed, this model can get your job done precisely and quickly. The equipped die head can process standard BSPT&NPT threads from 1/2" to 2". 1/8"-3/8" dies can also be equipped for choice.

It is designed versatilely for pipe threading as well as roll grooving (grooving part need buying separately)

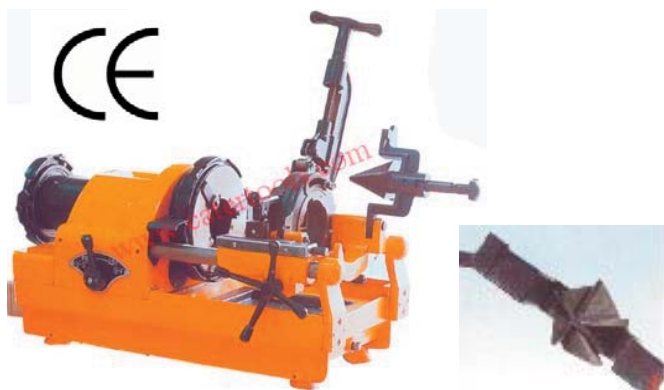
Technical Data:

- 1) Motor: 1,500W universal 115V or 220V, 50-60Hz
- 2) Spindle speed: 40rpm
- 3) Net weight: 45kg

Capacity:

- a) 1/2"-2" (BSPT and NPT) (1/2"-3/4", 1"-2")
- b) M10-M33 (ISO)
- c) 3/8"-1-1/4" (BSW)
- d) 1/2"-2" (BSPP)

Order No. 800-7005



Features:

The model SQ80C threading machine is powered by a quiet, 2-speed induction motor. Supplied with a 1/2"-2" Die Head and a 2-1/2"-3" die head allowing cutting standard pipe threads (BSPT/NPT) and BSW, ISO, BSPP threads (changing a die head).

Technical Data:

- 1) Motor: 750W induction 115V or 220V, 50-60Hz
- 2) Spindle speed: 26/11rpm
- 3) Net weight: 135kg

Capacity:

- a) 1/2"-3" (BSPT and NPT) (1/2"-3/4", 1"-2", 2-1/2"-3")
- b) M10-M33 (ISO)
- c) 3/8"-1 1/4" (BSW)
- d) 1/2"-2" (BSPP)



Order No. 800-7006



Features:

The 4" threading machine is powered by a quiet, 2-speed induction motor. Supplied with a 1/2"-2" Die Head and a 2-1/2"-4" die head allowing cutting standard pipe threads (BSPT/NPT) and BSW, ISO, BSPP threads (changing a die head).

Technical Data:

- 1) Motor: 750W induction 115V or 220V, 50-60Hz
- 2) Spindle speed: 24/10rpm
- 3) Net weight: 150kg

Capacity:

- a) 1/2"-4" (BSPT and NPT) (1/2"-3/4", 1"-2", 2-1/2"-4")
- b) M10-M33 (ISO)
- c) 3/8"-1-1/4" (BSW)
- d) 1/2"-2" (BSPP)



Order No. 800-7007

Power Threading



Capacity:

2 -1/2"-6" (BSPT and NPT) (2- 1/2"-4" ;5"-6")

Features:

The ultimate in 6" threading technology. Powered by a quiet 2-speed induction motor. It provides high quality threading and performance.

Technical Data:

- 1) Motor: 1100W induction motor
- 2) Switch: On/Off, heavy-duty, push-button type
- 3) Spindle speed: 16/6rpm
- 4) Voltage: 110/220V
- 5) Current: 8A/4A
- 6) Net weight: 195KGS



foot-switch for choice

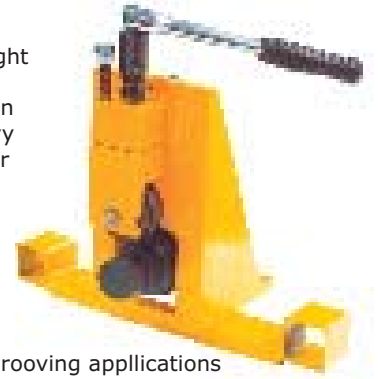


Order No. 800-7008

Portable Roll Groover

Features:

The Roll Groover is the durable and efficient light weight portable unit available. Built with a solid, durable cast-iron housing, it withstands heavy usage, yet is light enough for easy transportation.



Technical Data:

- * Capacity: 1-1/4"-10" pipe
- * For field and service roll grooving applications
- * Quick and easy mount to **800-7011** power driver
- * Durable cast-iron housing is capable of withstanding extensive field use
- * Lightweight, only 20kgs, allow for easy transport and storage
- * Easy-operate handle is part of over-all unit. Operator not required to supply extra tool.



Order No. 800-7009

Hydraulic Roll Groover



Features:

The Hydraulic roll groover features a powerful 10 ton hydraulic ram in a compact, easy to transport unit. With one man set-up and operation. It is the ideal groover for job-site requirements. Designed to provide maximum versatility, it is capable of grooving 10" thin wall and 6" standard wall pipes.

Technical Data:

- * Motor: 750W induction 115V or 220V, 50-60Hz
- * Spindle speed: 26/11rpm
- * Net weight: 80kg
- * Grooving capacity: 1 1/4"-12"
- * Threading parts also available

Order No. 800-7010



Capacity:

- * 1/2"-3" (BSPT/NPT)
- * M10-M33 (ISO)
- * 3/8"-1 1/4" (BSW)
- * 1/2"-2" (BSPP)

Features:

The power driver is for **800-7006** threading machine. A pipe threading parts can be mounted for threads cutting purpose. Oil gun & bucket can be used during threading.

Technical Data:

- * Motor: 750W induction motor
- * Switch: On/Off, heavy-duty, push-button type
- * Spindle speed: 26/11rpm
- * Voltage: 110V/220V
- * Current: 6.5A/3A
- * Net weight: 135kgs

Order No. 800-7011



PIPE THREADING TOOLS

Die Heads for Threading Machine



Features:
Available on
2-1/2" -4" for 800-7007
2 -1/2"-4" for 800-7008

Order No. 800-7012



Features:
DH02A Available on
1/2"-2" for 800-7003
1/2"-2" for 800-7004
1/2"-2" for 800-7006
DH02B Available on
2 1/2"-3" for 800-7006
1/2" -2" for 800-7007

Order No. 800-7013



Features:
Available on
1/4"-1 1/2"

Order No. 800-7016



Features:
Available on 5"-6"

Order No. 800-7017



Dies Available

Features:
Precessing BSPP/BSW/ISO threads need a additional die head
The additional die head can be used on threading machines:
SQ40/50/50C/80C/100E

Order No. 800-7014

Technical Data:

BSPT: 1/4"-3/8", 1/2"-3/4", 1"-1-1/2", 1"-2", 1-1/2"-2",
2-1/2"-2", 2-1/2"-3", 2-1/2"-4", 5"-6".
NPT: 1/4"-3/8", 1/2"-3/4", 1"-1-1/2", 1"-1-1/2", 1"-2",
1-1/2"-2", 2-1/2"-3", 2-1/2"-4", 5"-6".
BSPP: 1/2"-3/4", 1"-2"
BSW: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8"-1-1/4".
ISO: M10, M12, M14-M16, M18-M22, M24-M27, M30



Features:
Precessing BSPP/BSW/ISO threads need a additional die head
The additional die head can be used on threading machines:
SQ40/50/50C/80C/100E

Order No. 800-7015

Technical Data:

BSPT: 1/4"-3/8", 1/2"-3/4", 1"-1-1/2", 1"-2", 1-1/2"-2",
2-1/2"-2", 2-1/2"-3", 2-1/2"-4", 5"-6".
NPT: 1/4"-3/8", 1/2"-3/4", 1"-1-1/2", 1"-1-1/2", 1"-2",
1-1/2"-2", 2-1/2"-3", 2-1/2"-4", 5"-6";
BSPP: 1/2"-3/4", 1"-2".
BSW: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8"-1-1/4".
ISO: M10, M12, M14-M16, M18-M22, M24-M27, M30



Bucket

385mm upper diameter
340mm bottom diameter,
,220mm deep,
hose length 1.4m
For fortable threading machines



Oil Gun

*Hand-operated,easy pumping trigger
*Oil is filtered and recirculated through reservoir
*For portable threading machines

Tri-stand Chain Vise



Features:

Capacity: 1/2"-6" The worktable available for increased convenience handling pipe, fittings, sealants, soldering paste and any other job-related materials. Ideal when working with larger pipe and handling other bulkier material.

Order No. 800-7018

Bench Chain Vise



Features:

Capacity: 1/2"-6" Rugged cast-iron base has handy pipe rest and bender.

Order No. 800-7019

Threading Machine Stands



Order No. 800-7021



Order No. 800-7020

Clamp



Features:

Lightweight, easy-to-use, for pipe holding.

Capacity: 1/2"; 3/4"; 1"; 1 1/4"; H403 1 1/4"; 1 1/2"; 2"; H404

Order No. 800-7022

Portable Pipe Cutter



Features:

Designed for rapid cutting of 2" through 4" steel pipe, heavy-wall steel pipe, and cast-iron pipe. Range: 2" - 4"

Order No. 800-7023

Portable Pipe Cutter



Features:

Designed for rapid cutting of 4" through 6" steel pipe, heavy-wall steel pipe, and cast-iron pipe. Range: 4" - 6"

Order No. 800-7024



Features:

Designed for rapid cutting of 6" through 8" steel pipe, heavy-wall steel pipe, and cast-iron pipe. Range: 6" - 8"

Order No. 800-7025



PIPE THREADING TOOLS

Power Pipe Cutter

Features:

This unit is designed to cut 2 1/2"-8" pipe quickly, cleanly and with minimal effort. The unique design incorporates the SQ30-2 to rotate a displacement-type cutter. This unit utilise a powerful 10 ton hydraulic cylinder, quick-coupled with the convenience of a two-speed foot pump. The large cutter wheel, powered by the SQ302, produce a clean, square cut with no sparks, dust or abrasive material to hinder the operator.



Order No. 800-7026

Capacity: 2 1/2"-8" pipe

Order No. 800-7027

Capacity: 2 1/2"-12" pipe

Drain Cleaning Machines



Features:

Voltage: 220/110V
input power: 400W
Speed: 400rpm
Capacity: RD 20-150mm
Length: 30M

Order No. 800-7031



Order No. 800-7032

Features:

Voltage: 220/110V
input power: 1100W
Speed: 700rpm
Capacity: RD 50-300mm
Length: 50M

Hydraulic Pipe Benders

For bending metal pipe and tubing, Available with wing heads in either manual or electric powered versions featuring a single circuit hydraulic system with spring return which enables the ram to be advanced in controlled stages permitting easy and precise bending of the pipes. Supplied with a set of bending formers to accommodate different pipe sizes.



- 1) Pump: 44MPa
- 2) Bending angle: $180/2 \leq a \leq 180$
- 3) Bends radius: 4D
- 4) Capacity: 1/2"-2".
- 5) Weight: 82kg

Order No. 800-7028



- 1) Pump: 44MPa
- 2) Bending angle: $180/2 \leq a < 180$
- 3) Bends radius: 4D
- 4) Capacity: 1/2"-2".
- 5) Weight: 60kg

Order No. 800-7029



- 1) Pump: 59MPa
- 2) Bending angle: $180/2 \leq a < 180$
- 3) Bends radius: 4D
- 4) Capacity: 1/2"-2".
- 5) Weight: 150kg

Order No. 800-7030

Hole cutting Tool



- Features:**
- 1) Motor: 1,300W, universal type, 220V 50Hz
 - 2) Speed: 112rpm
 - 3) Capacity: F20-120mm
 - 4) Weight: 21.5kg

Order No. 800-7033

Pressure Testing Pump



- Features:**
Hand Pressure Testing-pump
Tests all types of installations such as heating, compressed air and refrigeration systems, oil installation, fire lines and small bore pipelines.
- 1) Very low effort required to operate
 - 2) Tank capacity: 12L
 - 3) Volume / stroke: 40cm³
 - 4) Pressure: 5MPa

Order No. 800-7034

Lightweight Core Drill



- Technical Data:**
- 1) Motor: 3,500W induction 115V or 220V, 50-60Hz
 - 2) Max. boring dia.: 300mm
 - 3) One run boring depth: 510mm
 - 4) Adapter threads: M33
 - 5) Bit speed: 380-760rpm
 - 6) Net weight: 40kg
 - 7) Core bits ordered separately

Order No. 800-7043



Pressure Testing Pump



- Features:**
Tests all types of installations such as heating, compressed air and refrigeration systems, oil installation, fire lines and small bore pipelines.
- 1) Motor: 250W induction, 220V, 50Hz
 - 2) Water flow: 2.9lpm
 - 3) Pressure: 6MPa

Order No. 800-7035

Lightweight Core Drill

- Features:**
- 1) Suitable for sampling in concrete, cement, brick or bituminous pavement, or for drilling in pipeline works.
 - 2) Powerful and high-speed series motor
 - 3) Fine-machine transmission mechanism and superior laser-welded diamond bit ensure fast and correct penetration of granite, reinforced concrete and bituminous pavement.
 - 4) Dual insulation, dual protection and water-tight switch safe, normal and fast operation.



- Technical Data:**
- 1) Motor: 1,050W induction 115V or 220V, 50-60Hz
 - 2) Max. boring dia.: 100mm
 - 3) One run boring depth: 400mm
 - 4) Adapter threads: M22
 - 5) Bit speed: 1,050rpm
 - 6) Net weight: 9kg
 - 7) Core bits ordered separately

Order No. 800-7040



- Technical Data:**
- 1) Motor: 1,050W induction 115V or 220V, 50-60Hz
 - 2) Max. boring dia.: 100mm
 - 3) One run boring depth: 400mm
 - 4) Adapter threads: M22
 - 5) Bit speed: 1,050rpm
 - 6) Net weight: 9kg
 - 7) Core bits ordered separately

Order No. 800-7041



- Technical Data:**
- 1) Motor: 2,200W induction 115V or 220V, 50-60Hz
 - 2) Max. boring dia.: 250mm
 - 3) One run boring depth: 510mm
 - 4) Adapter threads: M33
 - 5) Bit speed: 860rpm (high), 350rpm (low)
 - 6) Net weight: 29kg
 - 7) Core bits ordered separately

Order No. 800-7042

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc .due to high open voltage ,
 Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0100
AC Input Voltage	110V/60HZ or 230V/50HZ
Fuse	16A
Max.Power Consumption	2.4KW / 2.8KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -85A
Current At 60%	60A
Usable Electrodes	Dia 1.6 ~ 2.5MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	280 X 115 X 175 MM
The machine's Weight	3.2 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc .due to high open voltage ,
 Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation .

Order No.	895-0101
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	2.8KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5-85A
Current At 60%	60A
Usable Electrodes	Dia1.6 ~ 2.5MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	240 X 100 X 140 MM
The machine's Weight	2.7 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc .due to high open voltage ,
 Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0102
AC Input Voltage	110V / 60HZ or 230V / 50HZ
Fuse	16A
Max.Power Consumption	2.4KW / 2.8KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 - 85A
Current At 60%	60A
Usable Electrodes	Dia 1.6 ~ 2.5MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	320 X 120 X 195 MM
The machine's Weight	4.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc .due to high open voltage ,
 Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0103
AC Input Voltage	110V / 60HZ or 230V / 50HZ
Fuse	16A
Max.Power Consumption	2.4KW / 2.8KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 – 85A
Current At 60%	60A
Usable Electrodes	Dia 1.6 ~ 2.5MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	320 X 120 X 195 MM
The machine's Weight	4.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc .due to high open voltage ,
 Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0104
AC Input Voltage	230V / 50HZ
Fuse	16A
Max.Power Consumption	3.7 KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 – 125A
Current At 60%	75A
Usable Electrodes	Dia1.6 ~ 2.5MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	320 X 120 X 195 MM
The machine's Weight	4.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc .due to high open voltage ,
 Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0105
AC Input Voltage	230V / 50HZ
Fuse	16A
Max.Power Consumption	3.7 KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 – 125A
Current At 60%	75A
Usable Electrodes	Dia1.6 ~ 2.5MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	320 X 120 X 195 MM
The machine's Weight	4.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc
 .due to high open voltage , Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable
 .electrodes :High-carbon steel Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation .

Order No.	895-0106
AC Input Voltage	230V / 50HZ
Fuse	16A
Max.Power Consumption	4.7 KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 – 150A
Current At 60%	75A
Usable Electrodes	dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	320 X 120 X 195 MM
The machine's Weight	4.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc
 .due to high open voltage , Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable
 .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0107
AC Input Voltage	230V / 50HZ
Fuse	16A
Max.Power Consumption	4.7 KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 – 150A
Current At 60%	90A
Usable Electrodes	Dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	320 X 120 X 195 MM
The machine's Weight	4.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 * Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 * Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 * Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc
 due to high open voltage , Thermostatic, Overvoltage, Overcurrent protection.
 * Direct current (DC) for MMA and scratch TIG, Usable
 electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 * It suitable to upholster industry, high altitude, field operation

Order No.	895-0108
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	3.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 –125A
Current At 60%	75A
Usable Electrodes	Dia 1.6 ~ 3.2MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	8.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control,
 Inverter IGBT, Single-phase,
 Portable, Fan-cooled,
 .Double fan Light weight,
 Small volume, Stable welding,
 High efficiency 65khz,
 .Low power consumption, Arc
 force, Hot start, Anti-sticking,
 Easy starting arc
 .due to high open voltage ,
 Thermostatic, Overvoltage,
 Overcurrent protection.
 .Direct current (DC) for MMA
 and scratch TIG, Usabl
 .electrodes :High-carbon
 steel, Stainless steel, Cast
 iron etc.
 .It suitable to upholster
 industry, high altitude, field
 operation .

Order No.	895-0109
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	3.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -125A
Current At 60%	75A
Usable Electrodes	Dia 1.6 ~ 3.2MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	8.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control,
 Inverter IGBT, Single-phase,
 Portable, Fan-cooled,
 .Double fan Light weight,
 Small volume, Stable weld-
 ing, High efficiency 65khz,
 .Low power consumption,
 Arc force, Hot start, Anti-
 sticking, Easy starting arc
 .due to high open voltage ,
 Thermostatic, Overvoltage,
 Overcurrent protection.
 .Direct current (DC) for MMA
 and scratch TIG, Usable
 .electrodes :High-carbon
 steel, Stainless steel, Cast
 iron etc.
 .It suitable to upholster
 industry, high altitude, field
 operation .

Order No.	895-0110
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	4.7KW
Efficiency	85%
Max.Output No-load Volt- age	65V
Work Current Adjustable Range	5 -150A
Current At 60%	90A
Usable Electrodes	Dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	8.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control,
 Inverter IGBT, Single-
 phase, Portable, Fan-
 cooled,
 .Double fan Light weight,
 Small volume, Stable
 welding, High efficiency
 65khz,
 .Low power consumption,
 Arc force, Hot start, Anti-
 sticking, Easy starting arc
 .due to high open voltage
 , Thermostatic, Overvolt-
 age, Overcurrent protec-
 tion.
 .Direct current (DC) for
 MMA and scratch TIG,
 Usable
 .electrodes :High-carbon
 steel, Stainless steel, Cast
 iron etc.
 .It suitable to upholster
 industry, high altitude,
 field operation

Order No.	895-0111
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	4.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -150A
Current At 60%	90A
Usable Electrodes	Dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	8.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc
 .due to high open voltage , Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable
 .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0112
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	5.4KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -180A
Current At 60%	110A
Usable Electrodes	Dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc
 .due to high open voltage , Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable
 .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation.

Order No.	895-0113
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	5.4KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -180A
Current At 60%	110A
Usable Electrodes	Dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc
 .due to high open voltage , Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable
 .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0114
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	5.4KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -200A
Current At 60%	120A
Usable Electrodes	Dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC ARC WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase, Portable, Fan-cooled,
 .Double fan Light weight, Small volume, Stable welding, High efficiency 65khz,
 .Low power consumption, Arc force, Hot start, Anti-sticking, Easy starting arc .due to high open voltage ,
 Thermostatic, Overvoltage, Overcurrent protection.
 .Direct current (DC) for MMA and scratch TIG, Usable
 .electrodes :High-carbon steel, Stainless steel, Cast iron etc.
 .It suitable to upholster industry, high altitude, field operation

Order No.	895-0115
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	5.4KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -200A
Current At 60%	120A
Usable Electrodes	Dia 1.6 ~ 4.0MM
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase
 .Portable,Stable welding,High efficiency,Low power
 .Consumption,Arc force,Hot start,Anti-sticking,Easy .starting arc,due to high open voltage,Thermostatic
 .Overvoltage,Overcurrent protection
 .Direct current (DC) for high frequency TIG weiding,Usable
 .electrodes:Stainless steel,Aluminium,Titanium. Copper
 .Nickel,Magnesium and their Alloys.

Order No.	895-0116
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -180A
Current At 60%	110A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase
 .Portable,Stable welding,High efficiency,Low power
 .Consumption,Arc force,Hot start,Anti-sticking,Easy .starting arc,due to high open voltage,Thermostatic
 .Overvoltage,Overcurrent protection
 .Direct current (DC) for high frequency TIG weiding,Usable
 .electrodes:Stainless steel,Aluminium,Titanium. Copper
 .Nickel,Magnesium and their Alloys.

Order No.	895-0117
AC Input Voltage	230V/50HZ
Fuse	12A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -130A
Current At 60%	75A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase
 .Portable,Stable welding,High efficiency,Low power
 .Consumption,Arc force,Hot start,Anti-sticking,Easy starting arc,due to high open voltage,Thermostatic
 .Overvoltage,Overcurrent protection
 .Direct current (DC) for high frequency TIG weiding,Usabie
 .electrodes:Stainless steel,Al uminium,Titanium. Copper
 .Nickel,Magnesium and their Alloys.

Order No.	895-0118
AC Input Voltage	230V/50HZ
Fuse	12A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -130A
Current At 60%	75A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase
 .Portable,Stable welding,High efficiency,Low power
 .Consumption,Arc force,Hot start,Anti-sticking,Easy starting arc,due to high open voltage,Thermostatic
 .Overvoltage,Overcurrent protection
 .Direct current (DC) for high frequency TIG weiding,Usabie
 .electrodes:Stainless steel,Al uminium,Titanium. Copper
 .Nickel,Magnesium and their Alloys.

Order No.	895-0119
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -160A
Current At 60%	100A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:
 .Microprocessor control, Inverter IGBT, Single-phase
 .Portable,Stable welding,High efficiency,Low power
 .Consumption,Arc force,Hot start,Anti-sticking,Easy starting arc,due to high open voltage,Thermostatic
 .Overvoltage,Overcurrent protection
 .Direct current (DC) for high frequency TIG weiding,Usabie
 .electrodes:Stainless steel,Aluminium,Titanium. Copper
 .Nickel,Magnesium and their Alloys.

Order No.	895-0120
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -160A
Current At 60%	100A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:

- .Microprocessor control, Inverter IGBT, Single-phase
- .Portable,Stable welding,High efficiency,Low power
- .Consumption,Arc force,Hot start,Anti-sticking,Easy starting arc,due to high open voltage,Thermostatic
- .Overvoltage,Overcurrent protection
- .Direct current (DC) for high frequency TIG welding,Usable
- .electrodes:Stainless steel,Aluminium,Titanium. Copper
- .Nickel,Magnesium and their Alloys.

Order No.	895-0121
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -180A
Current At 60%	110A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:

- .Microprocessor control, Inverter IGBT, Single-phase
- .Portable,Stable welding,High efficiency,Low power
- .Consumption,Arc force,Hot start,Anti-sticking,Easy starting arc,due to high open voltage,Thermostatic
- .Overvoltage,Overcurrent protection
- .Direct current (DC) for high frequency TIG welding,Usable
- .electrodes:Stainless steel,Aluminium,Titanium. Copper
- .Nickel,Magnesium and their Alloys.

Order No.	895-0122
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -200A
Current At 60%	120A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS

INVERTER DC TIG WELDING MACHINE



Description:

- .Microprocessor control, Inverter IGBT, Single-phase
- .Portable,Stable welding,High efficiency,Low power
- .Consumption,Arc force,Hot start,Anti-sticking,Easy starting arc,due to high open voltage,Thermostatic
- .Overvoltage,Overcurrent protection
- .Direct current (DC) for high frequency TIG welding,Usable
- .electrodes:Stainless steel,Aluminium,Titanium. Copper
- .Nickel,Magnesium and their Alloys

Order No.	895-0123
AC Input Voltage	230V/50HZ
Fuse	16A
Max.Power Consumption	2.7KW
Efficiency	85%
Max.Output No-load Voltage	65V
Work Current Adjustable Range	5 -200A
Current At 60%	120A
Insulation Class	H
Protection Degree	IP 21
The machine's Formal Size	440 X 180 X 330 MM
The machine's Weight	9.5 KGS