

HORIZONTAL BORING MACHINE CBA SERIES

High Accuracy

High Quality

High Rigidity

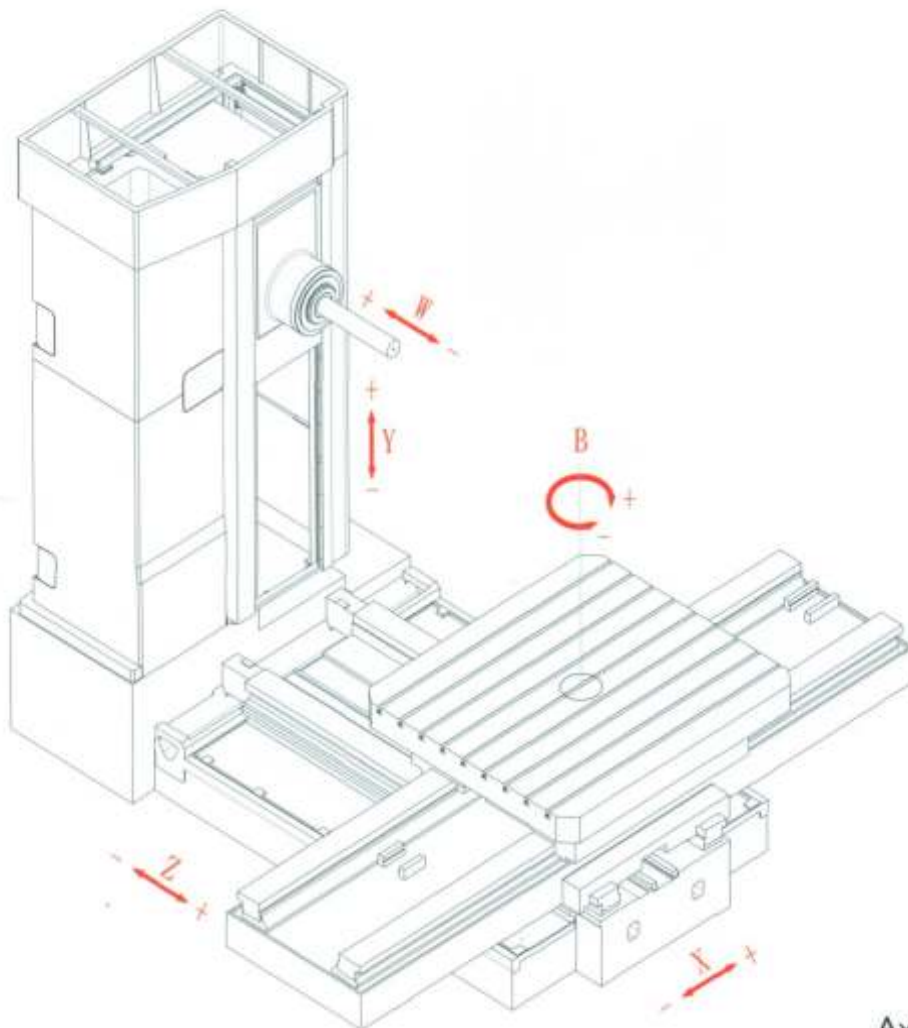


High Accuracy · High Quality · High Rigidity

- Fully Automatic Operation
- Spindle Made In House
- Ideal for Fabricating Molds
- High Efficiency

Table Type Fixed Column: CBA-R

T-Type Moving Column: CBA-TR, CBA-T



Axis Direction

CBA-110R3

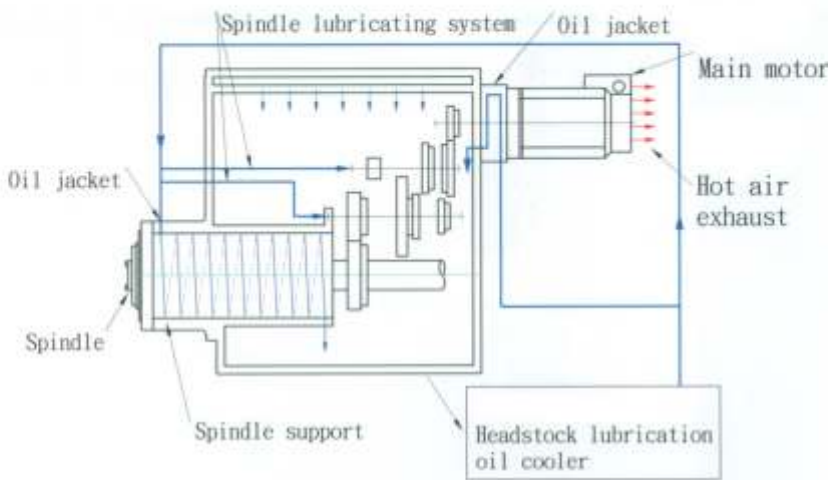


Features

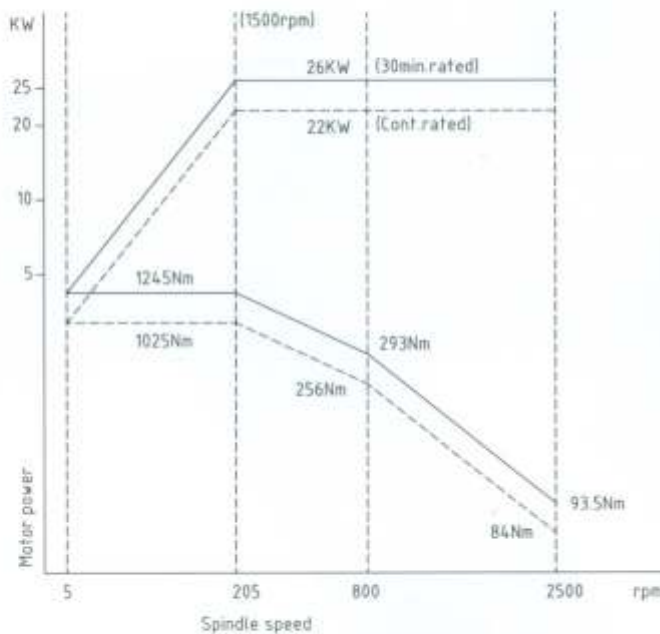
High Productivity

The AC digital wrap around spindle drive and motor are more accurate and responsive than traditional analog spindle drives and motors.

The spindle performance is continuously monitored to provide the most efficient cutting conditions. Each axis is independently controlled to provide maximum feed as required.

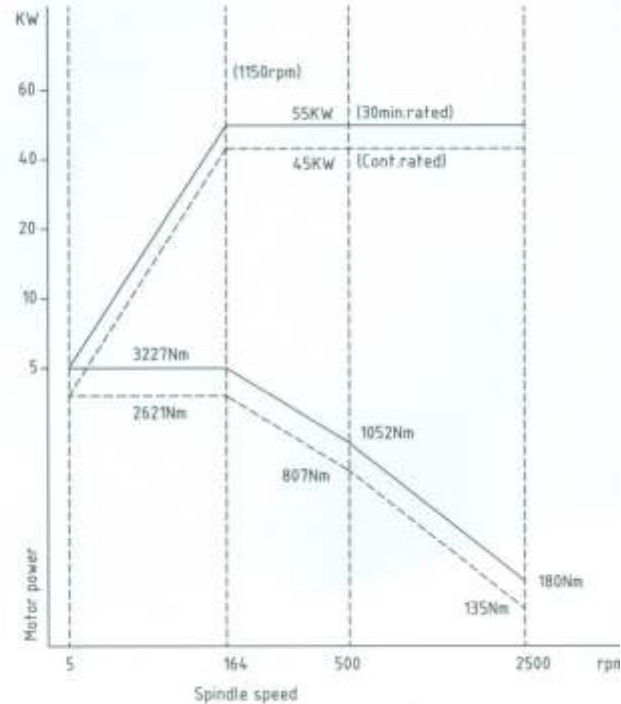


Spindle motor - α 22 / 7000i



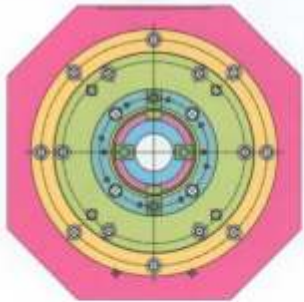
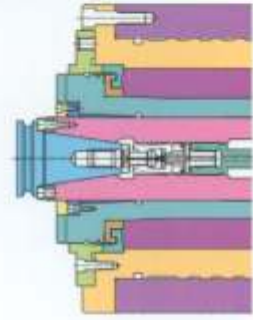
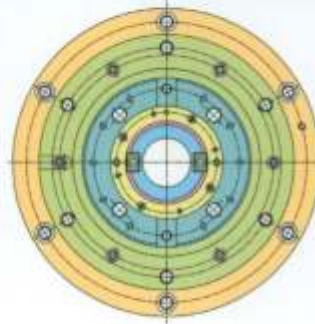
CBA-110

Spindle motor - α 50 / 4500i

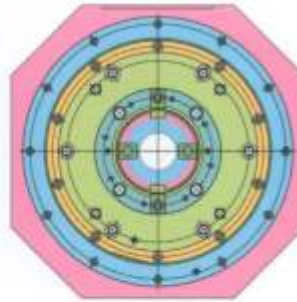
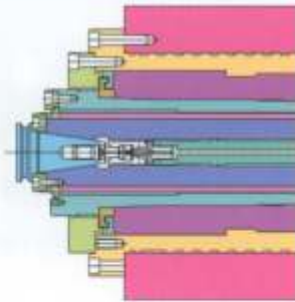


CBA-135

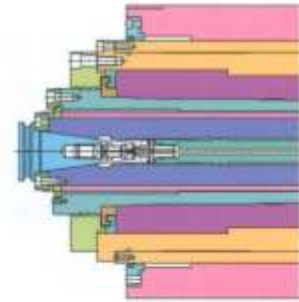
Spindle Dia. \varnothing 110mm



Spindle 135P



Spindle 135Q



Powerful Spindle

The specially designed spindle outer ring cooling system maintains constant bearing accuracy under normal operating conditions. This gear type auto-shift design and grease lubrication system also provides superior machine performance and reliability.

The spindle and boring bar are made of SACM645 alloy. The spindle has been Nitrided to HRC62~68. This hardness maintains spindle form and insures high reliability. This increased rigidity increases the overall machine capability.

We use the very highest quality spindle bearings from SKF and NSK. These high quality bearings insure machine consistency and a longer machine life.



CBA Series Box Ways

These highly rigid box way structures give you the very best machine durability. The material is high-frequency-heat-treat for stress relief. The 4-in-1 design for CBA-110R and CBA-110R2 bed slide ways enhance the cutting capabilities in the Z-axis



Ease of Operation

Fanuc, Siemens, and Heidenhain control panels are available options. These value added features will enhance your working capability, efficiency, and much more. We are sure that you will be very satisfied with the high level of quality and improved machine performance.



High Precision Slide Ways

Our auto grease lubricating system provides several advantages for the overall machine capability. It not only maintains high accuracy during the long working hours, but also functions perfectly with low speed machining. The high precision ball screw axis transmission provides superior machine stability resulting in highly accurate work pieces.

The CBA-110R3 provides 2 additional linear slide ways to enhance durability and eliminate unwanted deflection. This significantly improves machine cutting accuracy.

Rotary Table

This special combination of highly rigid box ways, ball screws, and worm gear automatic lubrication system provides a highly satisfying compact rotary table design. With the Heidenhain angle encoder installed in the rotary table center shaft, combined with our specially designed hydraulic clamping system and positioning index pins, our machines can achieve any cutting angle. Reinforced heavy cutting angles at 0° , 90° , 180° , and 270° are included features. Hence resulting in superior accuracy and cutting efficiency.

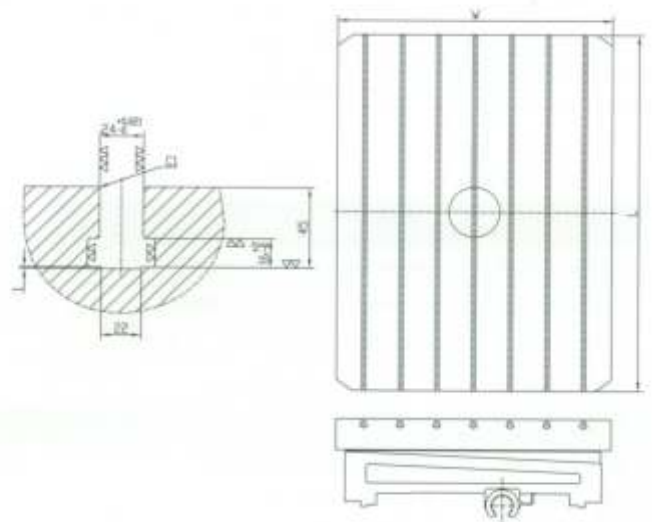


TABLE TYPE			CBA-110R	CBA-110R2	CBA-110R3
Spindle	Main Motor (30min/cont.)	kw	18/22		
	Spindle Speed	rpm	5-2500		
	Spindle Tapper		ISO 50 / BT-50		
	Spindle Diameter	mm	Ø 110		
	Spindle Nose Diameter	mm	Ø 215		
	Max. Spindle Torque	Nm	1245		
	Max. Spindle Thrust	N	19600		
Travel	Work Table Travel X axis (Horizontal)	mm	1500	2000	3000
	Spindle Travel Y axis (Vertical)	mm	1500	1800	2000
	Work Table Travel Z axis (Vertical)	mm	1100	1300	1500
	Spindle Travel W axis	mm	600		
Rotary Table	Table Dimension	mm	1250×1400	1400×1600	1600×1800
	T-Slot	mm×No.	22×7	22×7	22×9
	Max. Loading Weight	kg	6,500	8,500	10,000
	Index	degree	0.001°	0.001°	0.001°
	Max. Rotation Diameter	mm	1877	2126	2408
	Table Rotation Speed	rpm	0.8	0.8	0.8
	Max. Table Thrust	N	6480	6480	6480
Feed	Rapid Feed	XYZW axis	mm/min	XYZ axis = 10000 / W axis = 3000	
	Feed Rate	X/Y/Z axis	mm/min	1-5000	
		W axis	mm/min	1-3000	
	Power Capacity	KVA	65	65	65
	Machine Dimension (L×W×H)	mm	4650×6200×3800	5230×6280×4100	6230×6510×4300
	Machine Weight	kg	22800	24000	26000
	Controller Type		Fanuc / Siemens / Heidenhain		

Standard Accessories		
	Special Tools and Tool Box	1
	Foundation Screws and Bolts	1
	Spindle Oil Cooler	1
	Hydraulic Spindle Device	1
	Work Lamp	1
	Electronic Cabinet Cooler	1
	X axis Dust Cover	2
	Y axis Dust Cover	2
	Z axis Dust Cover	2
	MPG (Manual Pause Generator)	1
	RS232 Interface	1
	Automatic Lubrication System	1

Optional Accessories		
	ATC (Automatic Tool Changer)	1
	Coolant Through Spindle	1
	Screw Chip Conveyor	1
	Steel Belt Chip Conveyor (with cart)	1
	Linear Scale	1
	Spindle Support	1
	Face Plate	1
	Transformer	1
	Splash Guard	1
	Tool Measuring Device (TS-27R)	1
	Work Piece Measuring Device (OMP-60)	1

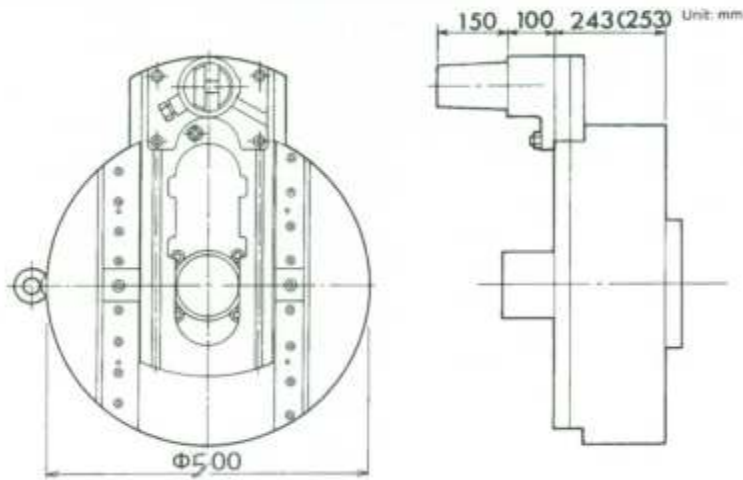
T-TYPE			CBA-135TR	CBA-135TR2	CBA-135TR3	CBA-135TR4
Spindle	Main Motor (30min/cont.)	kw	AC 45/37			
	Spindle Speed	rpm	P : 5-2500 , Q : 5-2000 (P : w/o Quill Q : Quill)			
	Spindle Tapper		ISO 50 / BT-50			
	Spindle Diameter	mm	Ø 135			
	Spindle Nose Diameter	mm	Ø 215			
	Quill Diameter	mm	Ø 380			
	Max. Spindle Torque	Nm	3227			
	Max. Spindle Thrust	N	29400			
Travel	Work Table Travel X axis (Horizontal)	mm	1500	2000	3000	4000
	Spindle Travel Y axis (Vertical)	mm	1500	1800	2300	2800
	Column Moving Travel V axis		800	1100	1400	1700
	Spindle Travel W axis	mm	700			
	Quill Travel Z axis	mm	350			
	(W+Z) Total Spindle Travel (W+Z)		1050			
Rotary Table	Table Dimension	mm	1250×1400	1400×1600	1600×1800	1800×2000
	T-Slot	mm×No.	22×7	22×7	22×9	22×9
	Max. Loading Weight	kg	6,500	8,500	10,000	12,000
	Index	degree	0.001°	0.001°	0.001°	0.001°
	Max. Rotation Diameter	mm	1877	2126	2408	2565
	Table Rotation Speed	rpm	0.8	0.8	0.8	0.8
	Max. Table Thrust	N	6480	6480	6480	19600
Feed	Rapid Feed	XYVW axis	mm/min	XY axis=8000 / W axis=3000 / V axis=5000		
	Feed Rate	X/Y/V axis	mm/min	1-5000		
		W axis	mm/min	1-3000		
	Quill Feed Rate	Z axis	mm/min	1-1500		
Power Capacity	KVA		70	70	70	70
Machine Dimension (L x W x H)	mm		5230×6640×3750	5730×6950×4120	6730×7250×4620	7780×7550×5320
Machine Weight	Kg		33400	36300	40000	43700
Controller Type			Fanuc / Siemens / Heidenhain			

Standard Accessories		
	Special Tools and Tool Box	1
	Foundation Screws and Bolts	1
	Spindle Oil Cooler	1
	Hydraulic Spindle Device	1
	Work Lamp	1
	Electronic Cabinet Cooler	1
	X axis Dust Cover	2
	Y axis Dust Cover	2
	MPG (Manual Pause Generator)	1
	RS232 Interface	1
	Automatic Lubrication System	1

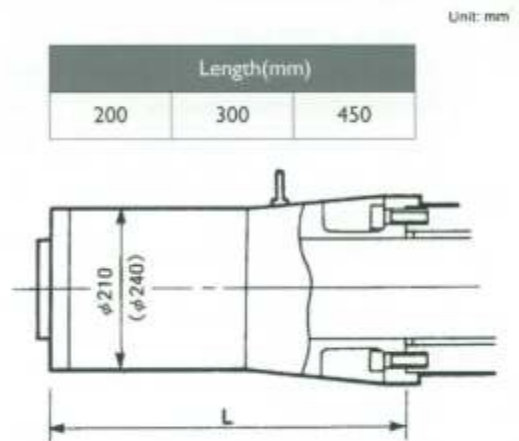
Optional Accessories		
	ATC (Automatic Tool Changer)	1
	Work Table	
	Coolant Through Spindle	1
	Screw Chip Conveyor	1
	Steel Belt Chip Conveyor (with cart)	1
	Linear Scale	1
	Spindle Support	1
	Face Plate	1
	Angular Milling Head	1
	Universal Milling Head	1
	Transformer	1
	Splash Guard	1
	Tool Measuring Device (TS-27R)	1
	Work Piece Measuring Device (OMP-60)	1

CBA-I10

Face Plate



Spindle Support



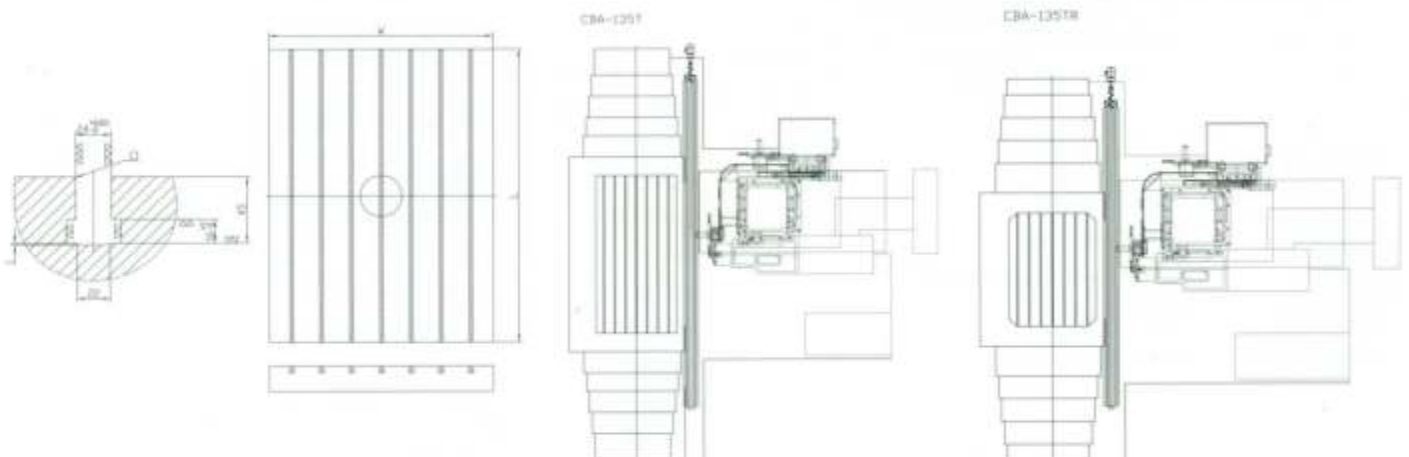
Automatic Tool Changer (Optional Accessories)		
Tool Capacity		24 / 32 / 40 / 60
Tool Shank		MAS 403 BT-50
Pull Stud		MAS 403 P50T-1
Tool Weight		25 kg
Max. Tool Length		300 mm
Max. Tool Diameter		Ø 125 mm (Ø250mm)



CBA-I35

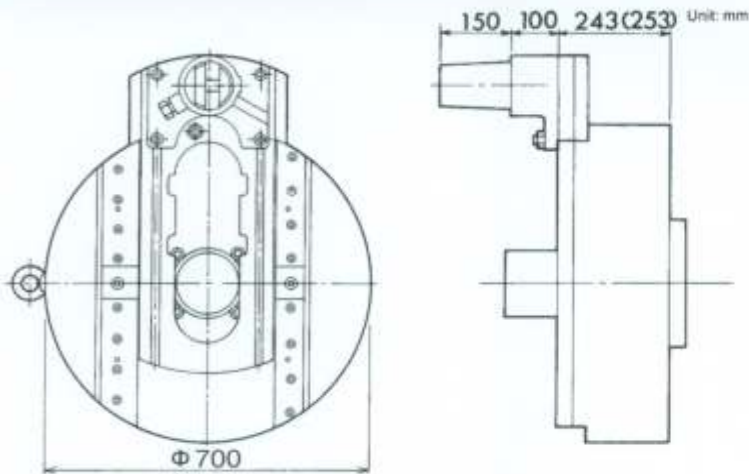
Work Table (Optional Accessories)						
Table Dimension	mm	1250 × 1500	1500 × 2000	1500 × 3000	1500 × 4000	
T-Slot	mm × No.	24 × 7	24 × 7	24 × 7	24 × 7	
Max. Loading Weight	kg	8,500	10,500	12,500	12,500	

Please note that you can choose the work table that meets your needs.

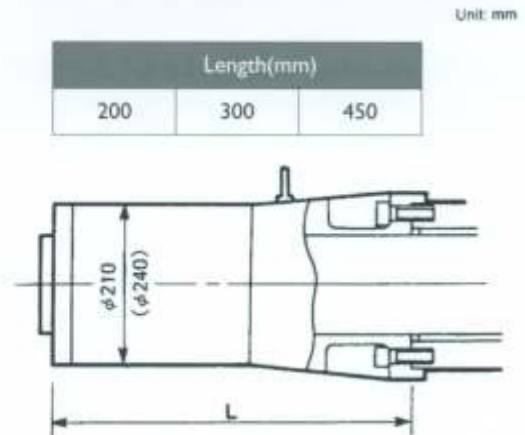


CBA-135

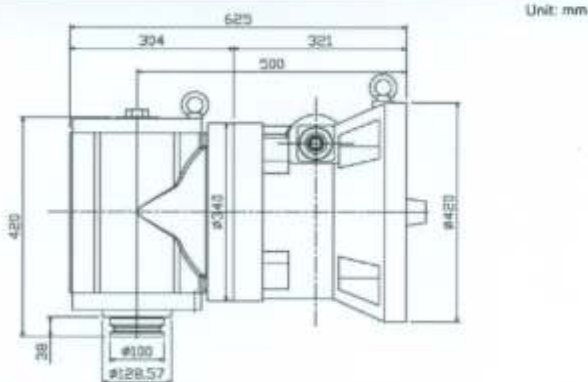
Face Plate



Spindle Support



Angular Milling Head

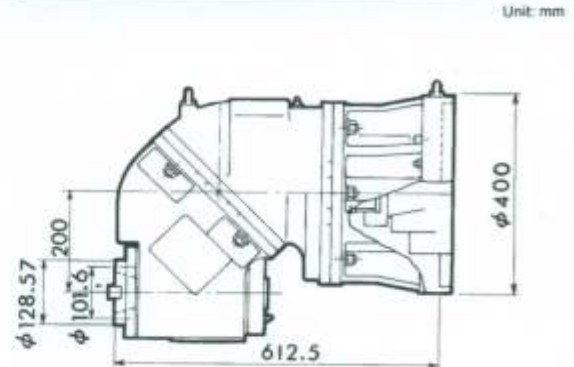


Spindle Rotation Speed

3~200 rpm (Continuous rotation) 3~200 rpm
 200~400 rpm (1 hour rotation) 200~400 rpm

Model : A50		
Spindle Tapper	ISO No.50	
Max. Cutter Diameter	8 inch	
Max. Cutter Torque	588 Nm (60kgf-m)	

Universal Milling Head



Spindle Rotation Speed

3~200 rpm (Continuous rotation) 3~200 rpm
 200~400 rpm (1 hour rotation) 200~400 rpm

Model : U50		
Spindle Tapper	ISO No.50	
Max. Cutter Diameter	8 inch	
Max. Cutter Torque	490 Nm (50kgf-m)	

Automatic Tool Changer (Optional Accessories)

Tool Capacity	24 / 32 / 40 / 60	
Tool Shank	MAS 403 BT-50	
Pull Stud	MAS 403 P-50T-I	
Tool Weight	25 kg	
Max. Tool Length	300 mm	
Max. Tool Diameter	Ø 125 mm (Ø250mm)	

