



## **HORIZONTAL BORING MACHINE**

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CBA Series

***CNC-TAKANG***

**CNC-TAKANG CO., LTD.  
MANUFACTURER & EXPORTER**

**CBA  
Series**

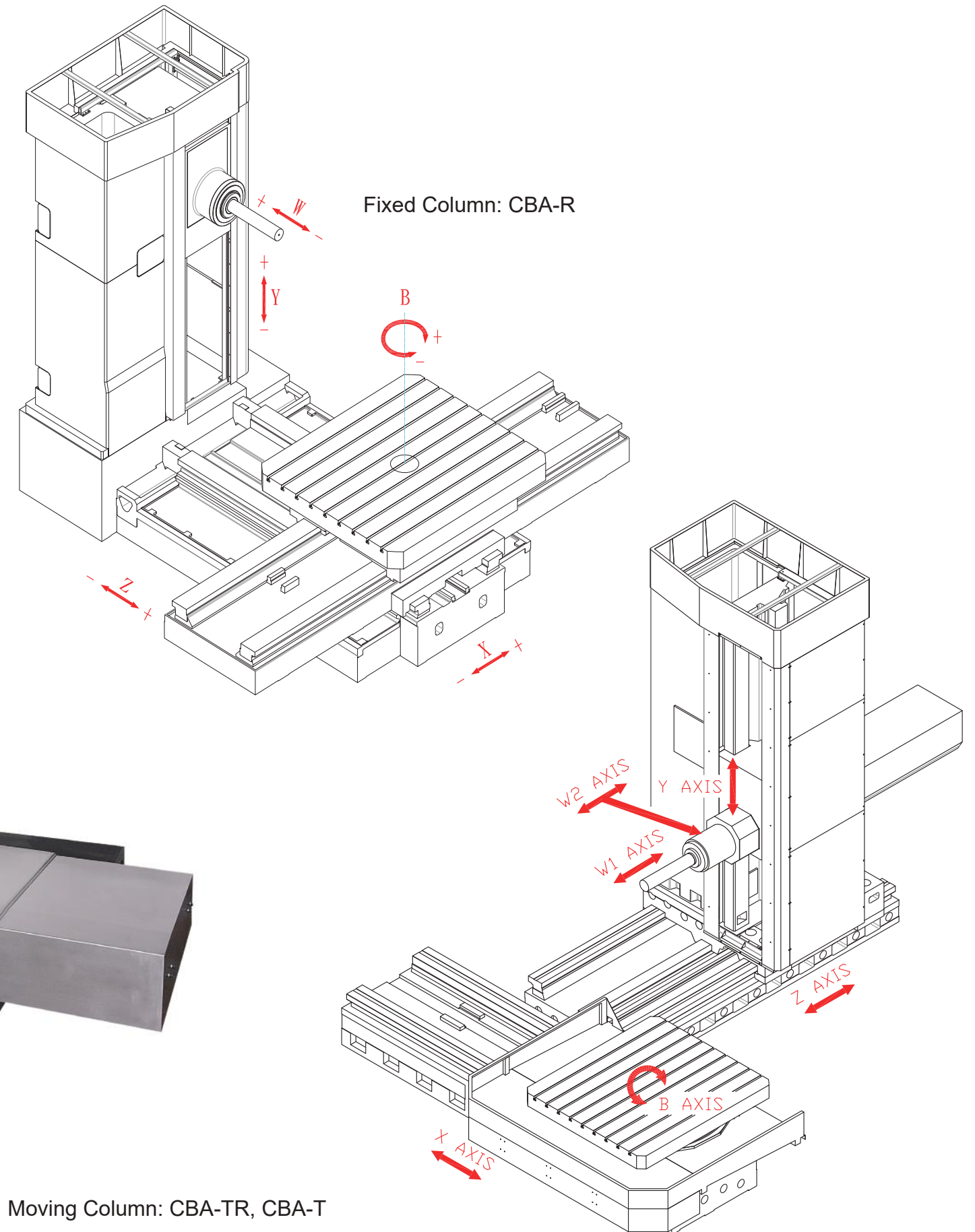
- High Accuracy • High Quality • High Rigidity

Fully automatic operation

Spindle made in house

Ideal for fabricating molds

High efficiency



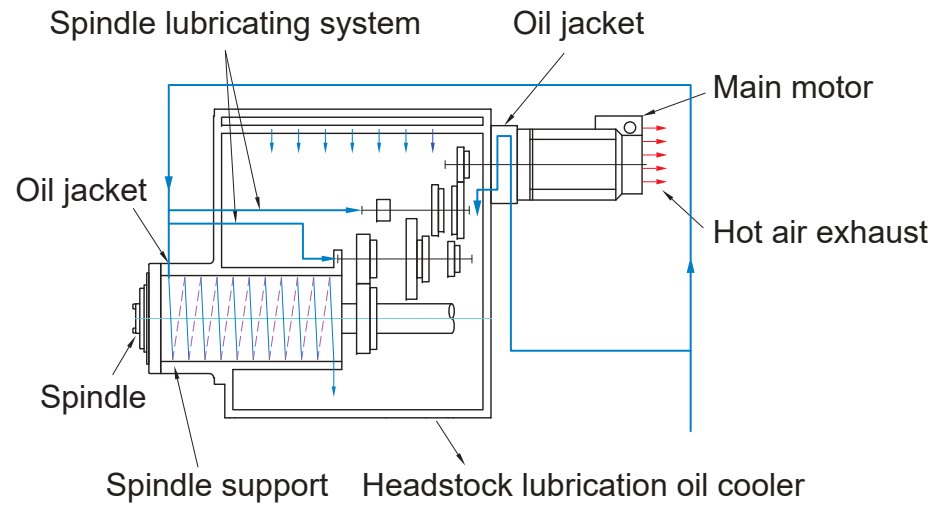
## Features

### 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.



### CBA Series box way

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.

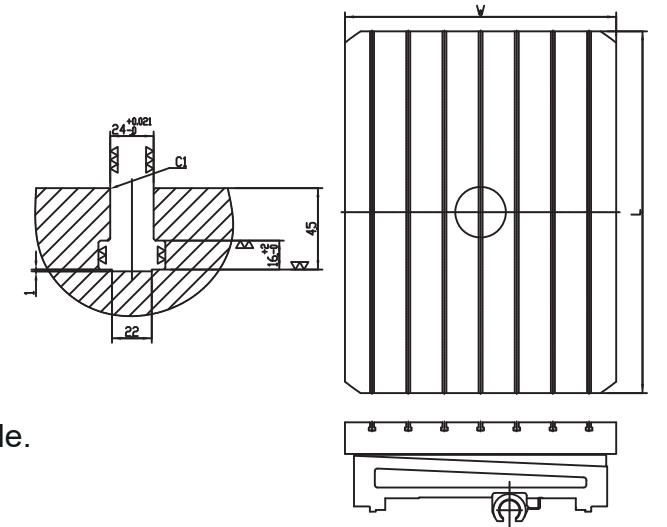
### Rotary table

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  $0^\circ$ ,  $90^\circ$ ,  $180^\circ$  and  $270^\circ$  are included features.

Hence resulting in superior accuracy and cutting efficiency.



### 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.

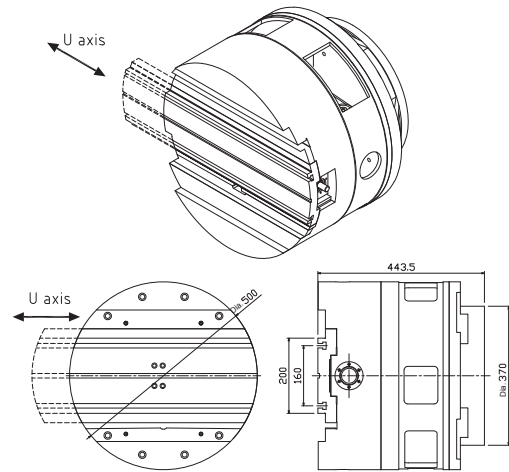
This significantly improves machine cutting accuracy.



# CBA Series

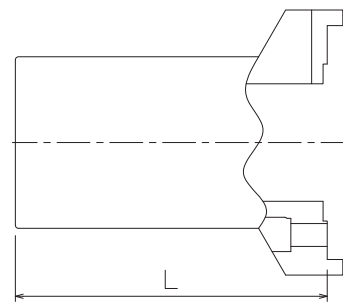
## CBA-110

### Face plate FH-500



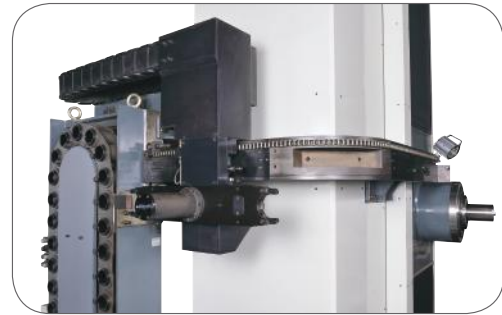
U axis travel : 160mm

### Spindle support



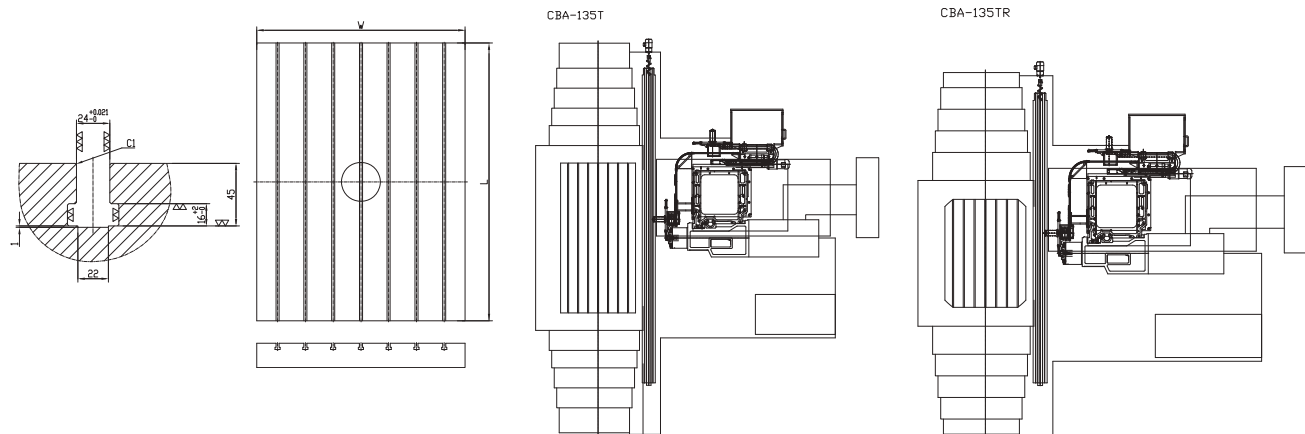
Length (mm)	
200	300

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	Dia. 125 mm (Dia. 250 mm)



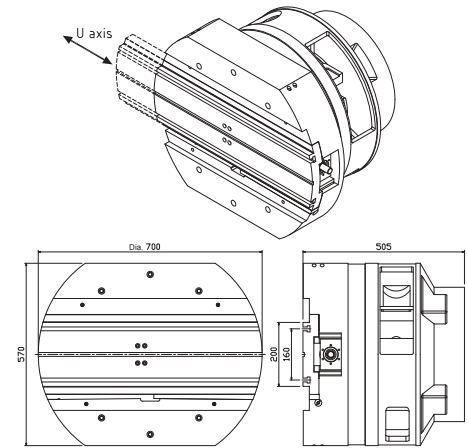
## CBA-135

Work table (Optional accessories)					
Table dimension	mm	1250 x 1500	1500 x 2000	1500 x 3000	1500 x 4000
T-slot	mm x No.	24 x 7	24 x 9	24 x 9	24 x 9
Max. loading weight	kg	8,500	10,500	12,500	12,500



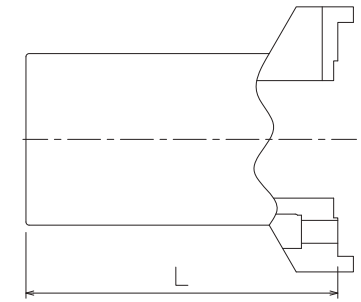
## CBA-135

### Face plate FH-700



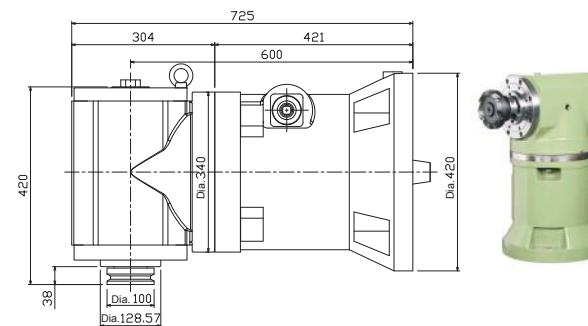
U axis travel : 240mm

### Spindle support

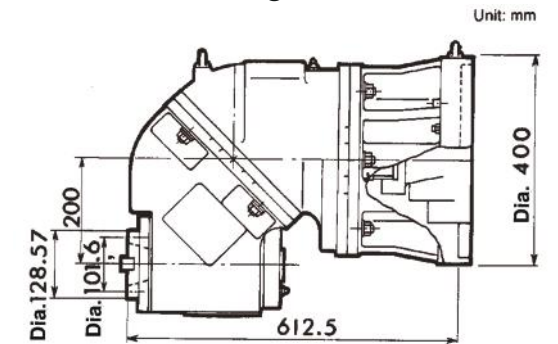


Length (mm)	
220	300

### Angular milling head



### Universal milling head



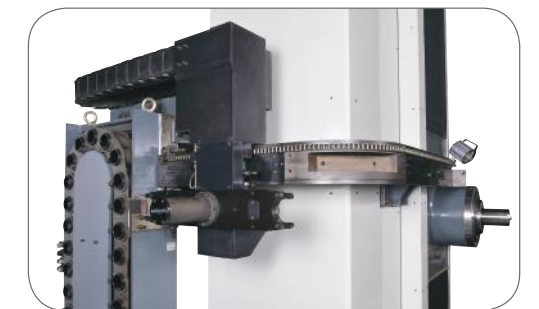
### Spindle rotation speed 1000 rpm

Model : A50	
Spindle taper	ISO No. 50
Max. utter diameter	8 inch

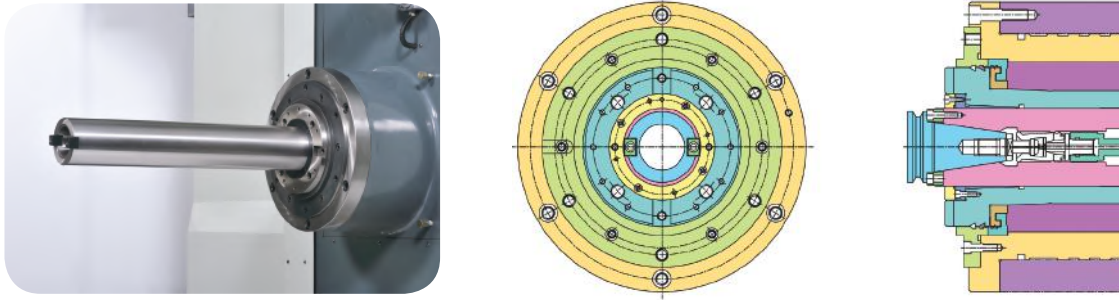
### Spindle rotation speed 3 ~ 200 rpm

Model : U50	
Spindle taper	ISO No. 50
Max. utter diameter	8 inch

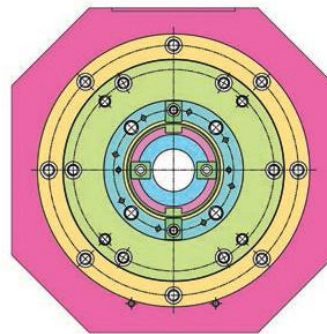
Automatic tool changer (Optional accessories)	
Tool capacity	24 / 32 / 40 / 60
Tool shank	MAS 403 BT-50
Pull stud	MAS 403 P50T-1
Tool weight	25 kg
Max. tool length	300 mm
Max. tool diameter	Dia. 125 mm (Dia. 250 mm)



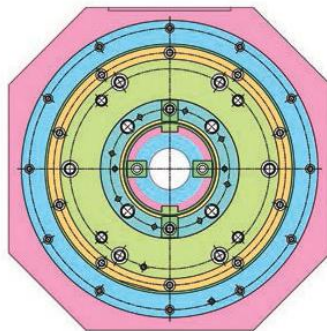
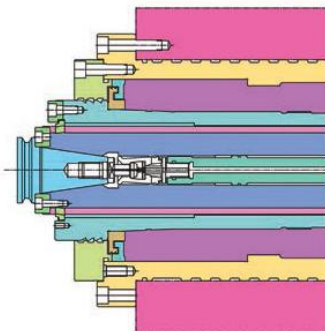
Spindle Dia. 110mm



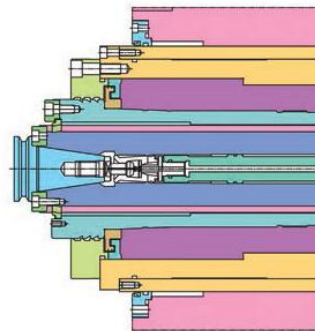
Spindle Dia. 135mm



Spindle 135P



Spindle 135Q



## Power 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

## SPECIFICATIONS

TABLE TYPE			CBA-110R	CBA-110R2	CBA-110R3
Spindle	Main motor (cont. / 30 min)	kw	18 / 22		
	Spindle speed (Max.)	rpm	5 – 2000		
	Spindle taper		ISO 50 / BT-50		
	Spindle diameter	mm	Dia. 110		
	Spindle end diameter	mm	Dia. 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
	Spindle travel Z axis (Vertical)	mm	1100	1300	1500
	Spindle travel W axis	mm	600		
Rotary table	Table dimension	mm	1250 x 1400	1400 x 1600	1600 x 1800
	T-slot	mm x No.	22 x 7	22 x 9	22 x 9
	Max. loading weight	kg	6500	8500	10000
	Index	degree	0.001°		
	Max. rotation	mm	1877	2126	2408
	Table rotation speed	rpm	0.8		
	Max. table thrust	N	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	80	100	
	Machine dimension	mm	5100 x 8350 x 4300	5400 x 8350 x 4800	6350 x 8900 x 4800
	Machine weight	kg	26000	29000	32000
	Controller		Fanuc / Siemens / Heidenhain		

※ THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### ■ STANDARD ACCESSORIES:

1. Tools and tool box
2. Foundation screws and bolts
3. Spindle oil cooler
4. Spindle box vertical movement counter weight
5. Work lamp
6. Electronic cabinet cooler
7. X axis dust cover
8. Y axis dust cover
9. Z axis dust cover
10. MPG (manual pause generator)
11. Automatic lubrication system
12. Screw chip conveyor
13. Steel belt chip conveyor with cart

### ■ OPTIONS:

1. ATC (automatic tool changer)
2. Coolant through spindle
3. Linear scale
4. Spindle support
5. Face plate
6. Transformer
7. Splash guard for rotary table
8. Splash guard for operator
9. Work piece measuring device

## SPECIFICATIONS

T - TYPE			CBA-135TR	CBA-135TR2	CBA-135TR3	CBA-135TR4
Spindle	Main motor (cont. / 30 min)	kw	AC 37 / 45			
	Spindle speed (Max.)	rpm	P : 5 – 2000, Q : 5 – 1200 (P : w / o Quill Q : Quill)			
	Spindle taper		ISO 50 / BT-50			
	Spindle diameter	mm	Dia. 135			
	Spindle end diameter	mm	Dia. 215			
	Quill diameter	mm	Dia. 380			
	Max. spindle torque	Nm	2154			
	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 Z axis (Vertical)		1100	1100	1400	1700
	Spindle travel W axis	mm	700			
	Quill travel W2 axis	mm	350			
	Total spindle travel (W1 + W2)		1050			
Rotary table	Table dimension	mm	1250 x 1400	1400 x 1600	1600 x 1800	1800 x 2000
	T-slot	mm x No.	22 x 7	22 x 9	22 x 9	22 x 9
	Max. loading weight	kg	6500	8500	10000	12000
	Index	degree	0.001°			
	Max. rotation dimension	mm	1877	2126	2408	2691
	Table rotation speed	rpm	0.8			
	Max. table thrust	N	6480			
Feed	Rapid feed	XYZW1 axis	mm / min	XY axis = 8000 / W1 axis = 3000 / Z axis = 5000		
	Feed rate	X / Y / Z axis	mm / min	1 – 5000		
		W1 axis	mm / min	1 – 3000		
	Quill feed rate	W2 axis	mm / min	1 – 1500		
	Power capacity	KVA	110	130	130	140
	Machine dimension	mm	6750 x 6950 x 4700	6900 x 7100 x 4900	7500 x 7500 x 5500	7580 x 7850 x 5950
	Machine weight	kg	38500	49000	54000	56700
	Controller		Fanuc / Siemens / Heidenhain			

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### ■ STANDARD ACCESSORIES:

- |   |  |
|---|--|
| 1. Tools and tool box                           | 7. X axis dust cover                   |
| 2. Foundation screws and bolts                  | 8. Y axis dust cover                   |
| 3. Spindle oil cooler                           | 9. Z axis dust cover                   |
| 4. Spindle box vertical movement counter weight | 10. MPG (manual pause generator)       |
| 5. Work lamp                                    | 11. Automatic lubrication system       |
| 6. Electronic cabinet cooler                    | 12. Screw chip conveyor                |
|   | 13. Steel belt chip conveyor with cart |

### ■ OPTIONS:

1. ATC (automatic tool changer)
2. Coolant through spindle
3. Linear scale
4. Spindle support
5. Face plate
6. Transformer
7. Splash guard for rotary table
8. Splash guard for operator
9. Work piece measuring device

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