

## Special Purpose CNC Grinder (For Slabs of the Railway Table Board)



### Machine efficiency

Under normal condition, the allowance of slab is 2mm, the machine can finish machining 10 - 100 pc slabs per 20 working hours.

| Item  | Unit    | Specification   |
|---|---------|---|
| Machining Range   | mm      | 6500 x 2550 x 1200                                    |
| X Axis Travel   | mm      | 8700  |
| L/R Grinding head cross travel                          | mm      | From the center line of the machine<br>+1800 or -1800 |
| Z1/Z2 Axis Travel                                       | mm      | 1200  |
| Distance between gantry                                 | mm      | 6300  |
| A1/A2 Rotating Range                                    |         | -3o ~ 93o   |
| C1/C2 Rotating Range                                    |         | -3o ~ 183o  |
| Grinding wheel size (OD x ID x W)                       | mm      | 525 x 305 x 200                                       |
| Grinding wheel speed                                    | rpm/min | 500 - 3000  |
| Grinding wheel motor power<br>(Continuous/intermittent) | kW      | 103/124   |
| Grinding wheel torque<br>(Continuous/intermittent)      | Nm      | 820/1110  |
| X/Y2/Y1 Axis Moving speed                               | m/min   | 0 - 20  |
| Z1/Z2 Axis moving speed                                 | m/min   | 0 - 6   |
| Coolant flow rate                                       | L/min   | 750   |
| Linear positioning accuracy                             |         | 0.020/1000; full length 0.07mm                        |
| X / Z1 / Z2 Axis motor                                  |         | 8.17kW, 48Nm  |
| Y1/Y2/A1//A2/C2/C1 Axis motor                           |         | 3.3kW, 16Nm   |
| Engrave spindle motor power                             | kW      | 5   |
| Engrave spindle speed                                   | rpm/min | max. 9000   |
| Total Power   | kW      | 350   |
| Machine Weight  | ton     | 70  |

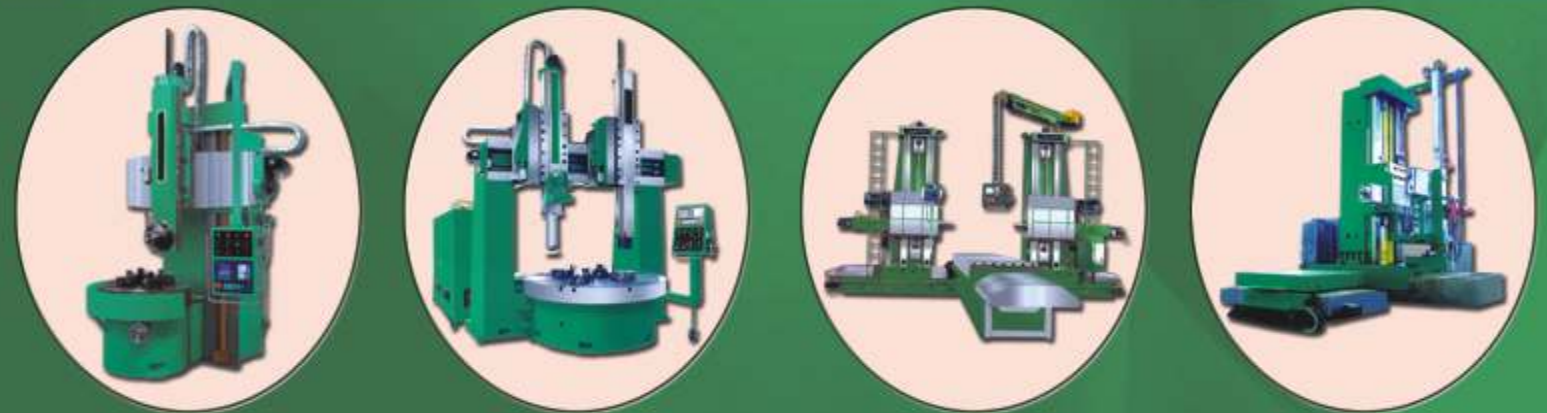


## VTL, HEAVY MILLING & BORING MACHINES

# CUPER

## HEAVY ENGINEERING MACHINE TOOLS

Conventional / CNC



## RAILWAY, NUCLEAR POWER, WINDMILLS MANUFACTURING MACHINES



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**Model :  
XC3822**



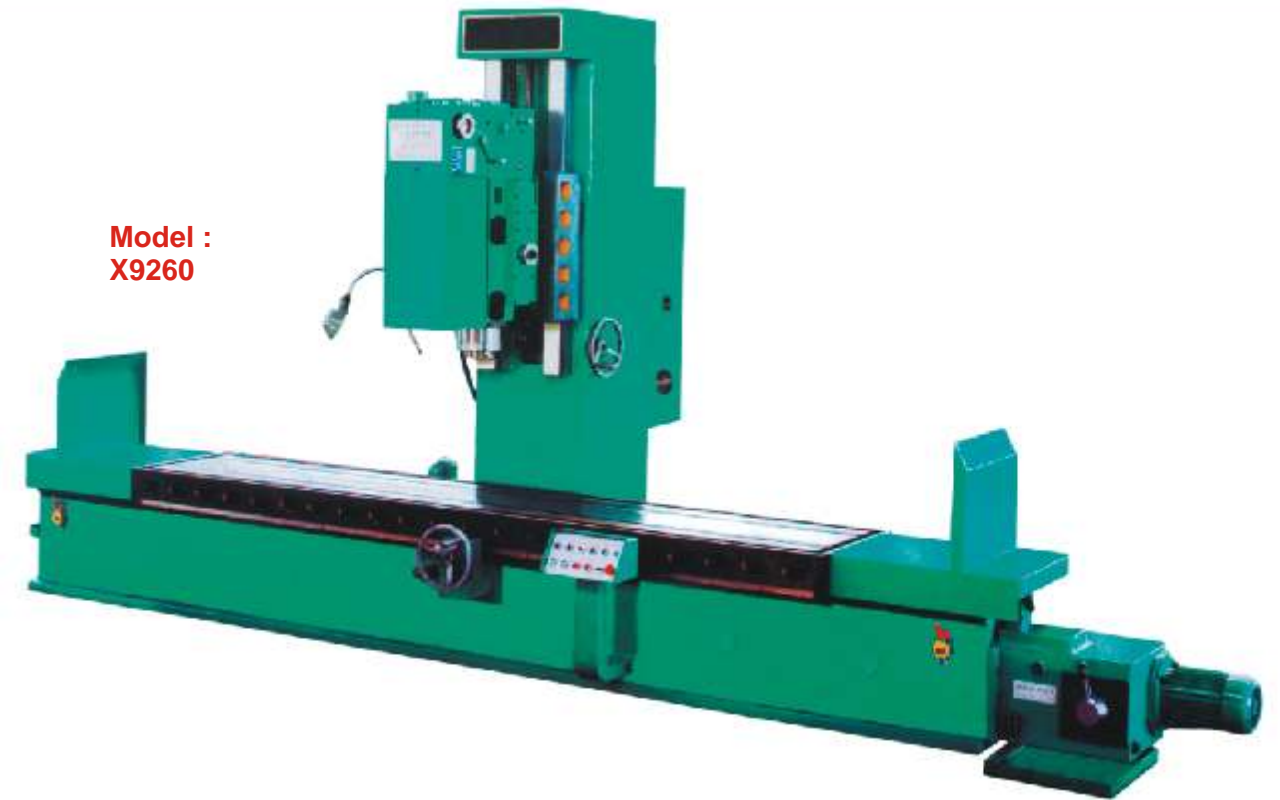
This machine is designed as an integrated structure. The column slide moves horizontally along bed guide ways. The milling head box moves vertically along column guide ways and the shift sleeve of milling arbor moves axially. Since the motor of milling head is powerful, it can be used for rough milling with the large-sized milling cutter. This machine is widely used in mechanical industry for rough machining.

### Technical Specifications

|  |        |                        |
|--|--------|------------------------|
| Spindle taper diameter                       |        | 7: 24 ISO60: 107.95    |
| Outer diameter of spindle                    | mm     | 221.44                 |
| Sleeve diameter                              | mm     | 300                    |
| Speed range of spindle                       | r/min  | 80, 100, 125           |
| Longitudinal movement of bed slide (X)       | mm     | 1500                   |
| Vertical movement of column slide (Y)        | mm     | 1500                   |
| Shift sleeve movement (Z)                    | mm     | 300                    |
| Size of workpiece (LxW)                      | mm     | 1500x1200<br>4500x1500 |
| Rapid movement of bed, column and slide      | mm/min | 2000                   |
| Feed range of bed, column and slide          | mm/min | 2-2000                 |
| Min. height between spindle centre and floor | mm     | 1150                   |
| Main motor power                             | kw     | 55, 980r/min           |
| Feed motor for bed slide and column slide    |        | 1FK7 105 - 5           |
| Motor for shift sleeve movement              |        | 1FK7 063 - 5           |
| Machine weight (net)                         | kg     | 25000                  |

All specifications are subject to change without prior notice.

**Model :  
X9260**



This machine is designed for motor manufacture. It can be used for processing large major axes. The machine is applied to drilling and milling the workpiece in the range of dia 600x3200 specifications. The machine can instead of planer type milling machine when processing large size parts.

### Technical Specifications

|   |       |                |
|---|-------|----------------|
| Milling arbor taper                             |       | ISO50          |
| Diameter of milling arbor end                   | mm    | 128.57         |
| Width of milling key-way                        | mm    | 12 - 60        |
| Diameter of installing tool plate               | mm    | 125 - 315      |
| Max. diameter of axes part                      | mm    | 600            |
| Max. weight of workpiece                        | kg    | 2000           |
| Rotary speed of spindle (6 steps)               | r/min | 200 - 630      |
| Main motor                                      | kw    | 5.5            |
| Area of working table (WxL)                     | mm    | 600 x 3300     |
| Travel of working table (X)                     | mm    | 3200           |
| Feed speed of working table (6 steps)           | r/min | 28 - 109       |
| Rapid speed of working table                    |       | 1020           |
| Distance from spindle end face to working table | mm    | 400 - 1100     |
| Machine weight                                  | kg    | 9000           |
| Overall dimension (LxWxH)                       | mm    | 5440x1650x2600 |

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**Model :  
TKJ6513x2**



Machine is assembled with two CNC Milling and Boring Machines and a digital read conventional working table in the middle. With a high axiality accuracy (1000:0.05), machine has a high efficiency in opposite face machining, especially for large scale workpiece with hole distance more than 2000mm. By using CNC programs, machine is not only possible to be used for machining different process in two ends, but also all types of holes with high requirement in axiality accuracy.

This machine is widely used for emery, transportation, mine, petrochemical, war industry and machine manufacture and etc. It is the key equipment for machining large case. It can be extended the machining range with equipped accessories.

## Technical Specifications

|   |        |                               |
|---|--------|-------------------------------|
| Diameter of boring spindle                    | mm     | 130                           |
| Diameter of milling spindle                   | mm     | 221.44                        |
| Spindle taper                                 |        | BT50                          |
| Spindle speed                                 | r/min  | 3 - 700                       |
| Power of spindle motor (frequency conversion) | kw     | 22                            |
| Max. torque of boring spindle                 | N.m    | 3500                          |
| Max. axial resisting power                    | N      | 30000                         |
| Table size (LxW)                              | mm     | 6000x1400                     |
| Table weight                                  | T      | 10                            |
| Transverse travel of table (X)                | mm     | 6000                          |
| Vertical travel of spindle head (Y)           | mm     | 2000                          |
| Axial travel of spindle (Z)                   | mm     | 1000                          |
| Longitudinal travel of vertical column (W)    | mm     | 1200                          |
| Feed rate (X)                                 | mm/min | 2.5-112<br>(rapid speed 2000) |
| Feed rate (Y, W)                              | mm/min | 5 - 2000                      |
| Feed rate (Z)                                 | mm/min | 1 - 3000                      |
| CNC System                                    |        | SIEMENS 840D                  |
| Overall dimensions (LxWxH)                    | mm     | 8800x4300x5900                |
| Weight of Machine                             | T      | 70                            |

All specifications are subject to change without prior notice.



**Model :  
HTK (X) 250**

HTK (X) 250 is the accessory for CNC floor-type milling and boring machine. It can be associated with the machine tool for milling angle, reverse boring, polyhedral machining and other complex processing. The main machine fitted with right angle milling head in order to realize five sides processing.

The main characteristics:

1. The rotary bearings of the table adopts double row cylindrical roller bearings and central unloader equipment which enhanced the accuracy of the table.
2. The working table linear guide way is coated with plastic tapes and the rotary motion fitted with the compound guide way, bonded plastic and rolling to realize high accuracy, enough abrasability, high contact rigidity, convenient maintenance. So the moving parts can move stably.
3. The linear motion feed mechanism of the working table is composed by anti-backlash reducer and ballscrew. The rotary motion feed mechanism adopts the drive structure that the rim gear wheel is driven by servo motor and double pinion drive on the anti-backlash worm gear box. It can guarantee the high drive accuracy.
4. The linear motion fitted with linear grating scale. The high resolution rotary encoder for the rotary motion to realize full close cycle control. It is to ensure the high accuracy of positioning.
5. This table can used separately with operational electric carbinet, it can also associated with the digital display or electrical handwheel rotary table.

## Technical Specifications

|   |        |                                  |
|---|--------|----------------------------------|
| Size of rotary table surface              | mm     | 2500 x 3000                      |
| Total height of rotary table              | mm     | 1300                             |
| Max. load of rotary table                 | T      | 50, 60                           |
| Linear travel of rotary table             | mm     | 2000, 3000                       |
| Linear travel speed range of rotary table | mm/min | 2.5 - 2000                       |
| Rotary speed range of rotary table        | r/min  | 0.001 - 0.55                     |
| CNC System                                |        | SIEMENS/FANUC                    |
| Servo Motor                               |        | 14kw 75N.m                       |
| Total weight of rotary table              | T      | 25, 30                           |
| Overall dimension (LxWxH)                 | mm     | 6744x2810x1300<br>5744x2810x1300 |

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