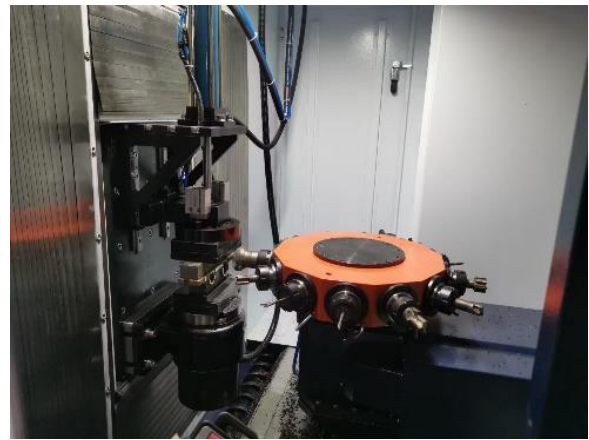


12 Spindle Horizontal CNC Drilling Tapping Machine



Technical Data

RB-F6-0402-Z04/ZG12

Fujian RBT Intelligent Equipment Co.,Ltd

July 8, 2022

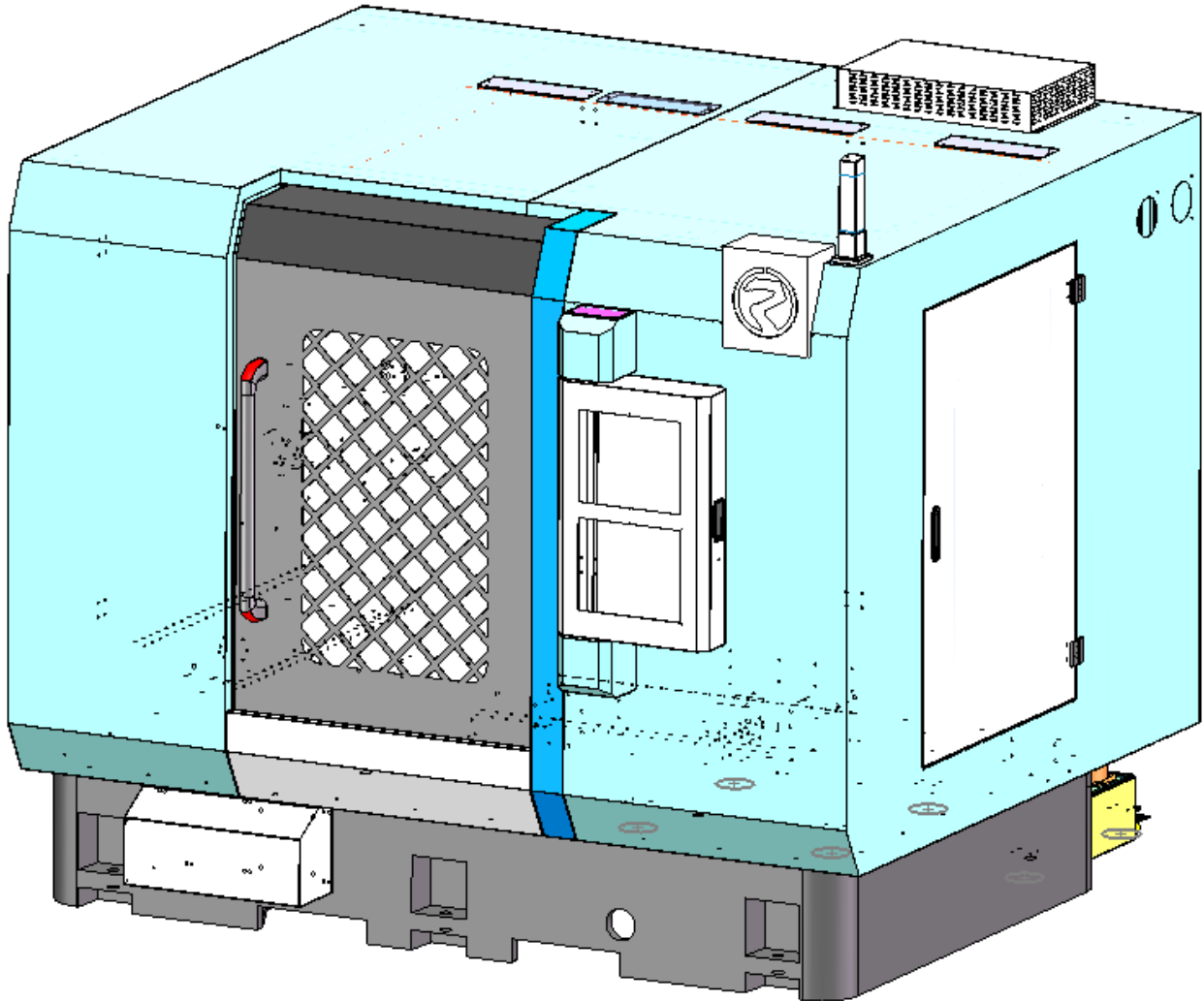
Fujian RBT Intelligent Equipment Co.,Ltd.

Address: 1st Floor, Building 1, Concord Opto Electric Industrial Park, East-West Main Road, Dongyuan Town, Taiwan-investment area, Quanzhou, Fujian

Tel: 86-13860709162 **Email:** rbt006@rbt-robot.com

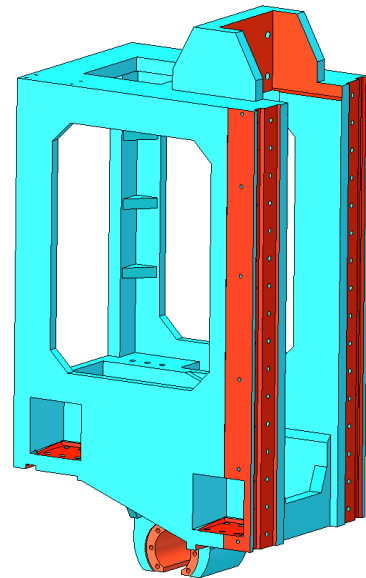
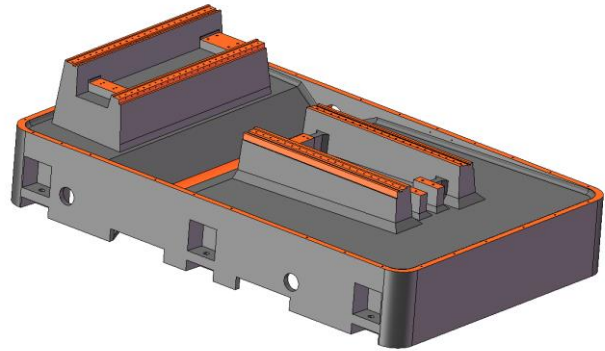
I. Machine Summary

1、Machine Outline drawing



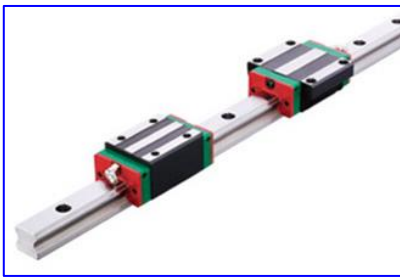
2. Machine structure

- The base adopts cast iron bed, which is firm and not easily deformed.
- Novel horizontal machining center structure + 12 spindle turret rotation transmission mechanism. The two major cast iron structures of the machine tool are solid, with good precision, anti-deformation frame body and high stability. Adapt to the requirements of environmental protection work, suitable for engraving and milling of the outer skin of cast copper, cast aluminum and other bathroom products.
- Fully enclosed cover: sound insulation, dust insulation, water insulation.
- Push-pull working door, convenient for loading and unloading.
- With good stiffness and static characteristics after aging treatment, providing a good guarantee for the high-speed movement of the machine tool.
- Milling, drilling and tapping are all done by CNC to ensure the accuracy of the bed.
- The X/Y/Z-axis guide rails and screw rods are installed and calibrated with a precision bridge ruler and a dial indicator to ensure the axial running accuracy



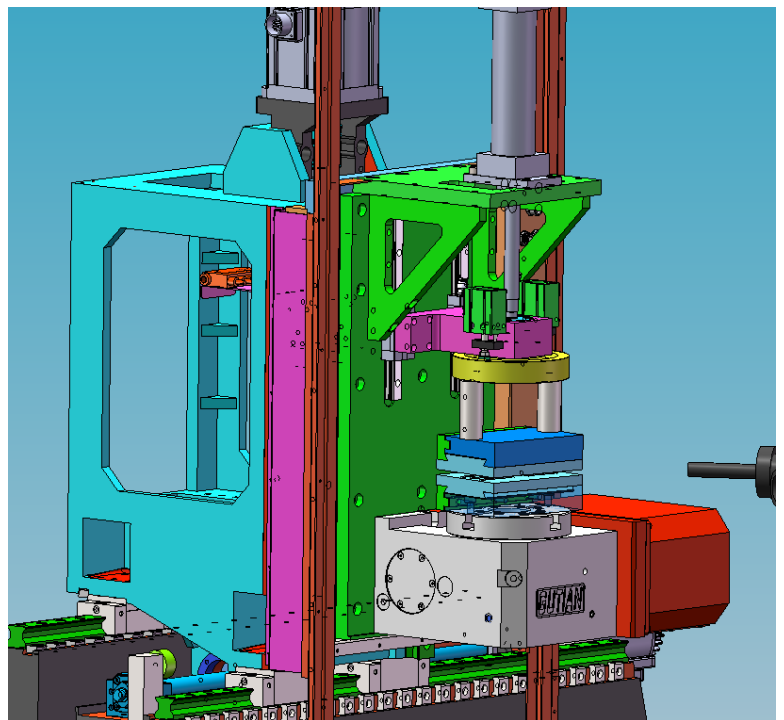
3. Transmission

- The machine power is standardly equipped with Innovance servo motor system, the power of X, Y and Z axis is 2KW;
- The machine adopts Taiwan HIWIN precision roller linear guide;
- The machine adopts Taiwan HIWIN C3 grade precision screw rod. Ball screw has enough precision, strength, rigidity and wear resistance. The screw pitch of the screw rod is 16mm. Ball screw support structure is stable and reliable, good rigidity. High quality (imported) large contact Angle (60°) ball screw special bearing support is adopted to ensure that the supporting mechanism has enough rigidity and precision stability;



4.Processing clamping part

- The workpiece clamping uses a hydraulic system: an oil cylinder to clamp the workpiece.
Advantages: fast and stable clamping
- Workpiece rotary machining uses a CNC servo turntable to rotate the angle.
Advantages: Accurate and efficient
- Workpiece clamping tooling: specially



Fujian RBT Intelligent Equipment Co.,Ltd.

Address: 1st Floor, Building 1, Concord Opto Electric Industrial Park, East-West Main Road, Dongyuan Town, Taiwan-investment area, Quanzhou, Fujian

Tel: 86-13860709162 **Email:** rbt006@rbt-robot.com

designed to use 6-slot mounting holes, with dovetail slot adjustable tooling base

Advantages: high compatibility, wide application

5、 Control system

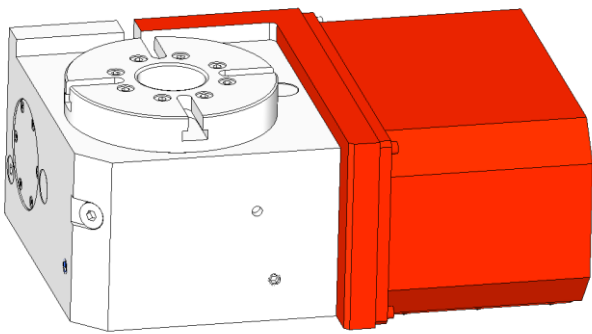
- Control software: using analog quantity control mode, control system and driver closed loop, realize high-speed, accurate control.
- Compatible with MasterCAM, ArtCAM, Pro-E, UG, AutoCAD and other programming software.
- NURBS function, curve motion interpolation;
- HPCC high speed and high precision contour control
- The operation application function is simple and easy to learn
- Processing preparation, trial processing, processing monitoring screen, clear interface, easy to learn and understand.
- Equipped with emergency stop switch for access control, press the emergency stop switch button by hand.



6. Technical Parameter

Speed	Fast moving speed/G00	30m/min
	Processing speed/G01	10m/min
Spindle	Power	6.5KW
	Cutter holder spec	ER40
	Maximum tool holding capacity	30mm
	Type of cooling	Fan cooling
	RPM	≤3000RPM
Travel	X axis	450mm
	Y axis	230mm
	Z axis	400mm
Accuracy	positioning accuracy	±0.02mm
	Repeat positioning accuracy	±0.01mm
Worktable	Table Turning Radius	150
	Maximum load	50KG (depends on numerical control rotary table maximum loading)
Station (Spindle)		12
Turret Turning Radius		R310mm
numerical control rotary table turning radius		R150mm
Spindle spacing angle		30°
Input Voltage		AC380V±15%
Compressed air requirements		pressure: 0.55~0.65mpa; flow : 0.4 M3/min

7、CNC servo turntable parameters



Parameter Item		
Working table diameter	mm	φ170
Center height	Mm	160
T-slot	Mm	12H7
Total reduction ratio	-	1:40
Maximum speed of worktable	RPM	80
Table hardness	HB	170-220
Segmentation accuracy	Arc.sec	25
Repeat accuracy	Arc.sec	12

8、Configuration:

Item	Brand	Remark
Control system	Syntec	Standard
Servo system	Innovance	Standard
Linear	Taiwan HIWIN	
Ball Screw	Taiwan HIWIN	
Spindle Motor	CTB(Beijing)	
Screw rod seat bearing	Japan/NSK	
Coupling	Korea/SUNGIL	
Thermal Switch	Chinese	-
Hydraulic System	Chinese	-
Automatic lubrication system	Chinese	-
Coolant system	Chinese	
Electrical compon	France/ Schneider	-
Chip removal machine	Chinese	Slag water separation type

II. Equipment on-site installation requirements and conditions of use

Machine rated power: 15.97KW

Equipment Voltage Requirements: 380V/50Hz

Device Mounting Conductor Cross Section 4x6+1x4mm²

Air pressure: 0.5-0.65Mpa (air source must be dry and clean)

Equipment installation ground requirements: concrete ground

After the equipment is installed, use a 0.02mm/300mm gradienter to adjust the level of the machine.

III. Packing method

Packing preparation before leaving the factory

Cleaned and packed with plastic film for shipment

III. Acceptance of equipment

Acceptance Criteria: Acceptance shall be carried out in accordance with this technical specification.