## **Technical parameters**

Parameter	X, Y ,Z Working Area:	2000*6000mm
	Travelling Position Accuracy	±0.05mm
	Repositioning Accuracy:	±0.05mm
	Max. Traveling speed:	60000mm/min
	Max. Working speed:	30000mm/min
	Working Voltage:	AC380V/3ph

# **Configurations and descriptions**

Name		Туре	Unit	Brand	Index
Spindle		Air cooled	1	Italy	9kw HSD ATC spindle
Tool bank		Linear	6	6 tool changers (gantry following type)	
Control system			1	SYNTEC 60WE	
	X.Yaxis	Gear rack		Taiwan 2mol	
Transmission	Z axis	Ball screw	1	Taiwan TBI	
	Guide rail	Square rail	6	Taiwan	25mm
Drive system		Servo	4	Japan YASKAWA 850w servo motor	
Reducer		Japan	3	Japan Shimpo	
Inverter		China	1	11 kw Fuling Inverter	
Table surface		Vacuum	1	Vacuum table with T-slot	
Vacuum pump		Tongyou	2	2 pieces 5.5kw 160m³ Tongyou rotary vane	
				pumps with filter	
Auto oil system			1	Yes	
Tool sensor			1	Yes	
Auto mist system			1	Yes	
Software		Official Ucancam			

## Heavy duty bed structure



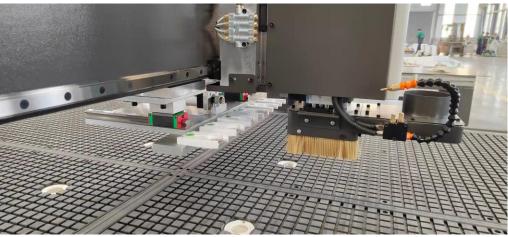


8mm thickness pipe welding bed structure, high strength welded bed with tempering aging treatment, five-axis CNC maching center processing, guarantee the stablity of the machine structure.

High rigidity body structure design with material stress analysis; tempering aging treatment, guarantee the accuracy of the machine, ensure the bed structure will be not deformed after long time using, via the high precision machining center processing, guarantee the machine working precision

## **Gantry and motor**

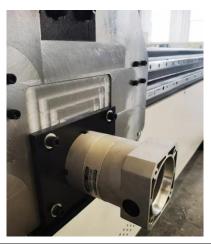




380V Italy HSD 9.6kw ISO30 ATC air cooling system with linear 6 tools changers following gantry, meet your needs on all kinds of materials cutting, milling and carving work, which is specially perfect for acrylic, aluminum, wood, mdf, pvc, acp ..., equipped with auto mist spray system, can meet the aluminum cutting and carving work which no need the water tank. The best water-cooled spindle in China, it has a very good effect when cutting acrylic and aluminum.







X,Y axis adopt Japan YASKAWA 850w servo motor driver with Japan Shimpo Reducer, make the machine working with high speed, but will not shake when high speed working.

## Control system & inside of Cabinet box



Syntec 60WE controlling system , can meet all kinds of functional when operating machine. Aviation plug of the cabinet, guarantee the parts working long life

#### **Worktable**



Vacuum & T-slot working table with the electronic vacuum switch on controlling cabinet, convenient to operate.

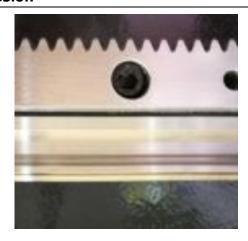




Vacuum tube use PP pipe to adopt to minus 30 low to 60 degrees high temperature, the service life can be ten years without deformation.

2 pieces of 5.5KW Tongyou 160m³ rotary vane pumps with filters. Perfect for the vacuum adsorption, can make the materials fixed more stable on the worktable,can bear much big power pressure without air leak.

## **Transimission**



Taiwan high quality 2mol helical gear rack



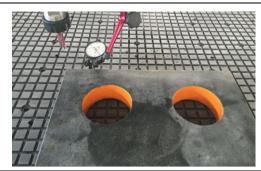
Taiwan 25 sqaure guide rails



Lubricating system: Automatically oil the guide rails, protect the guide rails in some degree

## Others

Installation of rails, rack, reducer, screw and other mechanical parts which have been calibrated to ensure that the installation accuracy is within  $\pm$  0.05mm. M series of quality inspection processes up to more than 92 steps.



Manufactured using (TBI) Precision Ball Screws, High Precision, Heavy Duty and Long Service Life.



All castings of the machine using high-precision machining center milling and drilling. The assembly accuracy is the leadership of other manufacturer in same industry.



Electronic control components using the standard components with Europe CE certification



Fully enclosed towline blocking the dust into the cable to ensure smooth operation.



Different from other company connect the wires directly, we use aviation plug to connect the wires between machine and control cabinet, more safely and longer lifespan.



Auto tool sensor, can remember the path of the tool, make it is convenient when change the tools



Locker for tools



Dust cover for X aixs , more clean		
Mist spray for aluminium cutting		

## **Applications:**

- 1. Wood industry: wood furniture making, 3d wood relief carving, wooden craftwork production Speakers, game consoles cabinets, computer tables, sewing machine table etc.
- 2. Advertising products industry: 3D letters sign making, acrylic and aluminium & copper cutting and engraving.
- 3. Board processing industry: insulation piece, acrylic board, plastic chemical products, PCB, compact grade laminate, ABS, PP, PE and other cementitious mixtures's milling process.
- 4. Decoration industry: folding screen, wave plates, advertising boards, sign making and logo's processing.
- 5. Arts & Crafts industries: Engrave on artificial stones, woods, bamboos, marbles.
- 6. Processing material: engraving, milling and cutting processing for acrylic, PVC, artificial stones plastics and soft metal sheets and so on.

## Samples





Machine Photos (machine will be with 6 linear tool changers, gantry following type )









Gantry following tool changer

## **Brief introduction of M5S CNC Router:**

M5S is the flagship model of Missilecnc. M5S comes with 9kw HSD Italy ATC spindle with linear 6 tools changers, so that make M5S has versatile functions: routing, drilling, cutting, etc.

M5S equipped with famous brand servo system and reducer, guarantee the machine working stality, Taiwan square guide rails and high precision gear rack, which guarantee the working precision