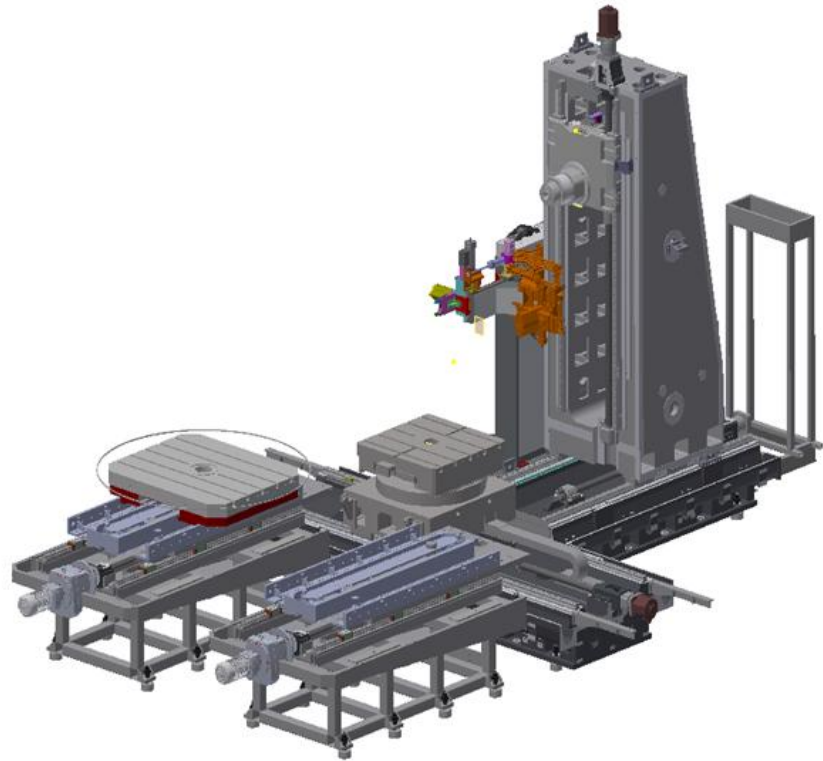


All We Do Are Clients Demand



**Pre-sales technical information**

**YSHD-1250D**

**Horizontal Machining Center**

**Xiamen Yangsen CNC Equipment Co., Ltd.**

**Exporting Company: Great Magtech (Xiamen) Electric Co., Ltd.**

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## 1. Company Culture

Yangsen CNC equipment co., LTD., is a professional engaged in development and design, manufacturing of CNC machine tools and CNC tools of high-tech enterprises, the company on the basis of Taiwan manufacturing technology, and the equipment manufacturing enterprise many years of manufacturing experience, continuously absorb the industry at home and abroad, developed into today has perfect production and assembly processing center machine specialized manufacturers.

The company's products include vertical processing center, high-speed processing center machine, high-speed drilling tooth tapping machine, gantry processing center machine, horizontal processing center machine and other main customer groups are precision mold manufacturing industry, automobile manufacturing industry, electronic communication industry, precision parts processing industry and aerospace industry, etc. The company has always been operating in good faith. Sustainable innovation business philosophy, with the most cost-effective products and perfect products and perfect services, to provide customers with the best solution, to create the greatest value for customers, improve the competitiveness of customers.

In the future, the company will continue to adhere to the high-quality policy " customer first, market to be the first; technology first, quality win: the concept, to create value for customers. Innovative research, excellence, dedicated to meet customer needs and expectations.

Main business: high-speed high-precision carving and milling machine, vertical machining center series, high-speed drilling tooth tapping machine, gantry machining center series, horizontal machining center series.

Enterprise service: to provide better products and services, we have been working hard and always unremitting, we aim to build a brand, honest and trustworthy and reciprocal win-win, we through continuous technical update and perfect service system to help users better use of equipment, because professional we continue to progress.

Technical support: professional engineers come to the home to solve the equipment selection for customers. To solve the processing requirements of various products, help users choose suitable, economic solutions, so that users choose products more cost-effective.

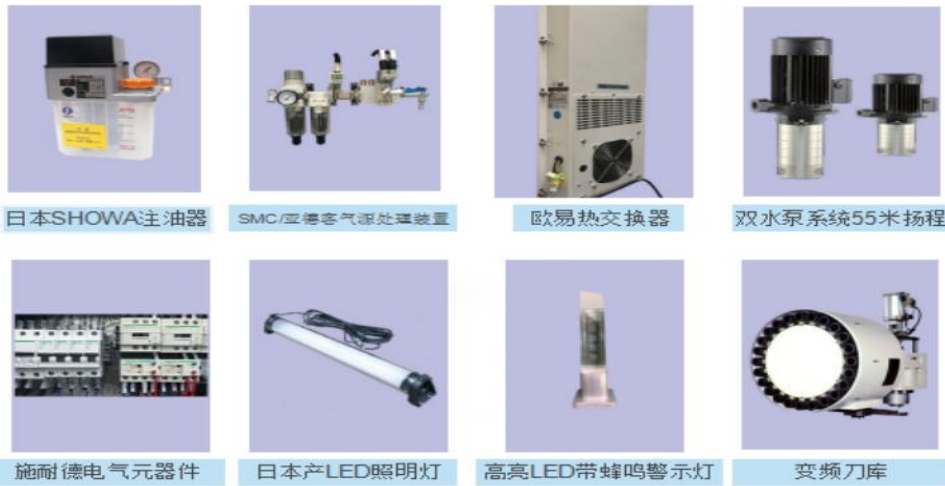
Quality control: our products have passed the ISO9001 quality system and the ISO14000 environmental management system certification

After-sales service: the nationwide after-sales service network is the guarantee of our product sales throughout the country.



## 2. Machine features

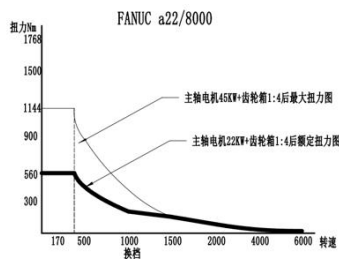
1. The X/Y/Z axis adopts high-strength high-speed linear roller guide rails, and the rapid feed can reach 10/10/10 (m/min); the guide rails of each axis adopt imported heavy-duty roller linear guide rails, with high load bearing and stable precision;
2. The spindle motor is equipped with 22/26KW high torque motor as standard. There is a unique labyrinth device and labyrinth blowing device at the nose of the spindle, which can effectively protect the spindle and is equipped with a spindle ring spray. The maximum speed of the spindle can reach 6000rpm, which has the characteristics of high speed, high rigidity and high precision;
3. The machine tool parts belong to the famous brand of famous factory, and the top configuration in the industry.



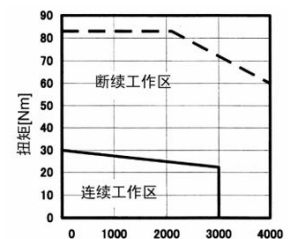
## 4. Three-axis and main-axis torque diagram

系统	0i-MF Plus	额定功率kW	额定扭矩N.m	最大扭矩N.m
X轴	$\alpha i F$ 40/3000-B	6	38	130
Y轴	$\alpha i F$ 30/4000-B	7	30	83
Z轴	$\alpha i F$ 30/4000-B	7	30	83
主轴SP	$\alpha i l$ 22/8000-B	22	140	286

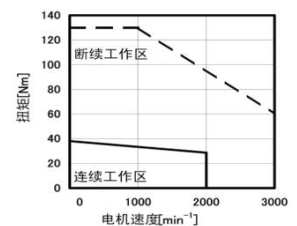
$\alpha i l$  22/8000-B



$\alpha i F$  30/4000-B

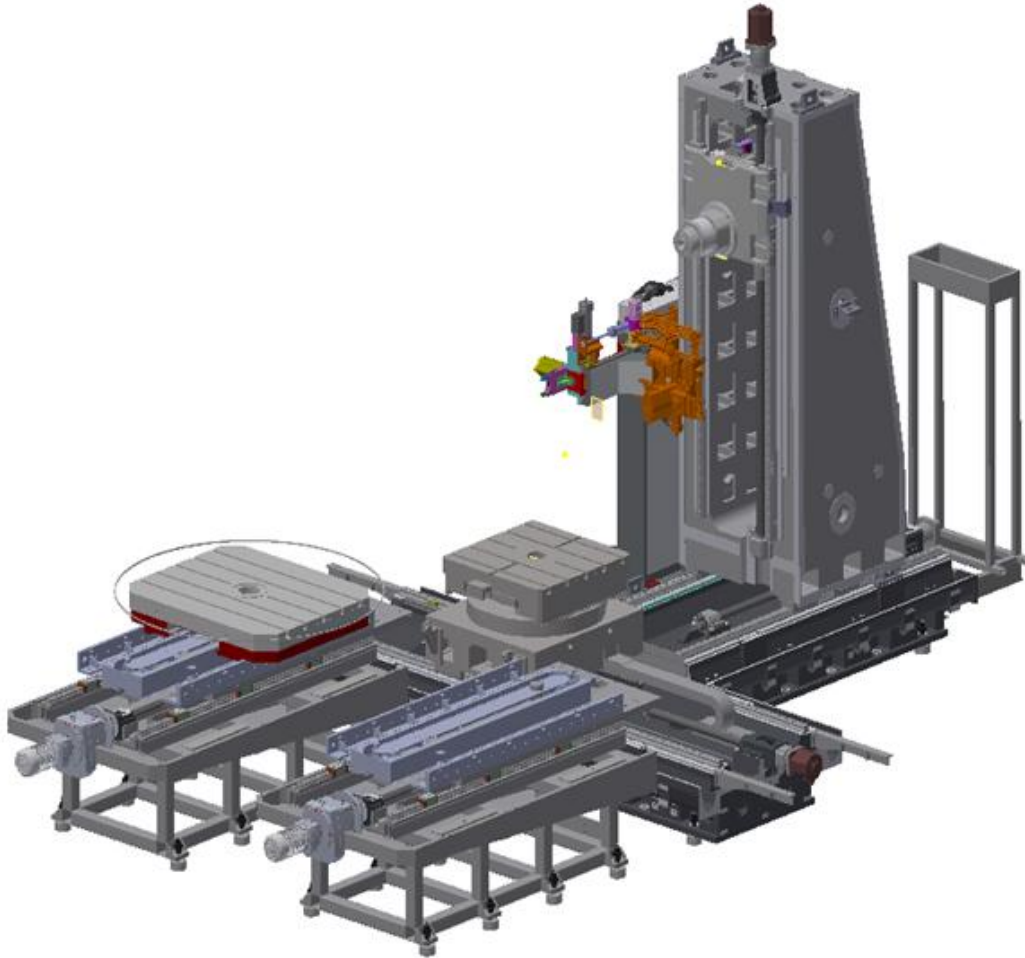


$\alpha i F$  40/3000-B





### 3. Optomechanics



#### Optomechanical Features:

1. The worm gears and worms of the indexing single machine tool and the indexing exchange table are all connected by keys, and the link is reliable and stable. (The worm gear of the original machine tool is connected by a tensioning sleeve. Because of the alternating load here, the worm gear has already slipped and cannot be tightened)
2. The spiral chip conveyor interface is reserved in the machine, and the cutting flushing device is equipped to automatically discharge the chips in time, avoiding the thermal influence of the chips on the machine tool, and ensuring the high precision of the machine tool processing;
3. It adopts the internationally popular inverted T-shaped moving column, the overall bed structure, the reasonable layout of the reinforcement optimizes the chip removal structure and improves the guide rail lubrication recovery system, which improves the overall rigidity and appearance quality of the casting.
4. The wood mold of the casting adopts aluminum-wood combination, resin sand casting, and workbench HT300.



5. Turntable parameters

Parameters		
Area	mm	1250*1250
Min. split angle	deg	1°
Max load	kg	5000
Table surface screw disc (groove number-groove width x spacing)	-	7-22H7×150
Number of worktables	PC	2
Max machining diameter	mm	Φ2000
Max working height	mm	1500

4. Technical parameters

Project	Specification	Unit	YSHD-1250D
Travel	X/Y/Z axis	mm	2500/1500/1600
	Distance from spindle centerline to worktable surface	mm	-50-1450
	Distance from spindle end face to table center	mm	300-1900
	XYZ orbital form		Roller guide rail
Working table	Table size (L*W)	mm	1250*1250*2
	Workbench max load	kg	5000
	Workbench indexing	No/mm	1°*360
Spindle	Spindle taper hole (model/installation size)	mm	BBT50
	Spindle RPM	rpm	6000
	Spindle drive mode		Belt Type (Gear Box)
Feed	X/Y/Z axis rapid feed	m/min	10/10/10
	Max Cutting Feed	mm/mi	10-10000
Tool Changer (Optional)	Tool change		Chained
	Handle Specifications	type	BT50
	Tool Capacity	tools	60
	Max Tool Diameter (Proximity)	mm	125



	Max Tool Diameter (Without Proximity Tool)	mm	250
	Max Tool Length	mm	400
	Max Tool Weight	KG	25
	Fastest tool change time	sec	10
Motor	Spindle motor	kw	AII22/8000
	Three-axis servo motor + B-axis	kw	AIF40/3000/AIF30B/4000/AIF30/4000
	Cutting pump motor	m/h-m	4-60
Precision	Positioning precision	mm	0.012
	Repeatability	mm	0.008
Power requirement	Power Requirements	kva	50
	Air requirements	Kg/cm	6~8
	Weight	t	<b>30</b>


**5. List of main accessories**

No.	Name	Quantity	Manufacturer	Specification Model
1	CNC system	1	Japan FANUC	OI-MF Plus
2	Spindle servo motor	1	Japan FANUC	Aii22/8000
3	X, Y, Z servo motor	Each 1	Japan FANUC	Aif40/300AIF430B/4000/AIF30/4000
4	Main shaft front bearing	1	Japanese KOYO	7020*4
5	Spindle rear bearing	1	Japanese KOYO	7020*2
6	X, Y, Z axis screw bearings	Each 1	Japan NSK	
7	X, Y, Z axis ball screw	Each 1	Japan/Germany/Taiwan	Ø63*P12*C3/Ø63*P12*C3 Ø63*P12*C3
8	X-axis linear guide	2	Japan/Germany/Taiwan	55
9	Y-axis linear guide	2	Japan/Germany/Taiwan	55
10	Z axis linear guide	2	Japan/Germany/Taiwan	55
11	Spindle unit	1	Taiwan	BBT50
12	Tool magazine (optional)	1	Okada/YANGSEN	60T chain cutter
13	Cutting fluid pump	1	YANGSEN	LDPB4V-60-1350W
14	Automatic Lubricating System	1	SKF/Zhenghe	4L
15	Main pneumatic components	1	SMC	
16	Main Electrical Components	1	Schneider	
17	Heat Exchanger	1	Ou Yi	
20	CNC turntable	1	Genlong/Xuyang	1250*1250
21	Hydraulic station components	1	Taiwan	
22	Gearbox (optional)	1	Italy BF	

If the supplier can not supply, it will be replaced with the brand of the same quality.





## 6. Standard accessories

No.	Name	No.	Name
1	Fully enclosed hood	13	Warning light (with buzzer)
2	automatic lubrication system	14	Floor blocks
3	Toolbox	15	Workpiece Cooling System
4	working lamp	16	Network transmission and CF card function
5	Electrical box heat exchanger	17	Chip removal machine
6	Spindle air curtain dustproof system	18	Disc oil-water separator
7	Machine cleaning water gun		
8	Rigid tapping		
9	Iron chipping disc and chip storage box		
10	M30 automatic power off device		
11	Portable chip blowing air gun		
12	Rigid tapping		

## 7. Optional accessories

No.	Name	No.	Name
1	Chain 60T tool magazine		
2	Italy BF Gearbox		
3			
4			
5			

If the user chooses other special configurations, please contact the technical department.



## 8. List of random tools and documents

No.	Name	Specifications or markings	quantity	Remark
1	Allen key	1.5---10	1	
2	Screwdriver	Flathead	1	
3	Screwdriver	Phillips	1	
4	Thread seal tape		2	
5	Glass cement	Porcelain white	1	
6	Manual Pulse Generator		1	
7	Card Reader		1	
8	Memory card		1	
9	Data cable	5 meters, 20 meters	2	
10	Bail wire		1	
11	Screw		1	
12	Triode		1	
13	Corrugated pipe joints		1	
14	Hold-all		1	
15	Foundation bolt		6	
16	Instruction book		1	
17	Certificate of conformity		1	

## 9. Installation, testing, training and inspection

1. Installation and commissioning: After the machine tool reach the customer factory, our service engineer will go to the customer factory in time and conduct installation, debugging and on-site training.



2. Customers can choose to send operators to the company to be responsible for the early training for about a week, and the company will provide working meals, transportation expenses and accommodation at their own expense. Then the company in the customer installation and debugging field training.

3. acceptance: precision acceptance, according to the supplier to provide the factory accuracy inspection table, in the customer conditional inspection, inspection, to do not have the inspection conditions of inspection items, such as positioning accuracy, spindle cone hole accuracy inspection rod test, not in the buyer, or negotiate by the buyer to the supplier factory for testing acceptance.

## 10. After-sales service concept

1. Pre-sale service: Yangsen's sales team will provide users with the best processing solutions, including machine tool selection, option configuration, tool and fixture selection, lubricating oil, cutting fluid management and other series of services. And can provide turnkey works.

2. Repair reaction time: Our company has a service team of up to 100 people, and equipped with a complete service vehicle, after receiving the user notice, the response within 2 hours.

3. Parts inventory: Yangsen has a special production workshop and parts inventory in Xiamen, strong strength, complete inventory, commonly used parts inventory in each office, to provide users with the fastest maintenance parts.

4. Machine maintenance: All the machine tools within the warranty period enjoy free maintenance service, and the machine tools outside the warranty period can be purchased at an economical and reasonable price. And according to customer needs, planning equipment management, maintenance process.

5. Charge for maintenance after the warranty period: The charge standard is clear, only the cost, to open, fair, fair concept service users.

6. Special old user service department: Closely track the use of machine tools and handle maintenance complaints in time.

7. Maintenance supervision: The general manager is also the director of the after-sales service department to supervise the maintenance service quality in real time and protect the rights of customers.

## 11. Working conditions of machine tools

1. Three-phase AC power supply:  $380V \pm 10\%$ ,  $-15\%$ ;  $50Hz \pm 1Hz$



2. Ambient temperature: 8~40C
3. Relative humidity: 80%
4. Pressure of air source: 0.6 ~ 0.8 MPA

## Xiamen Yangsen NC Equipment Co., Ltd.

The company's products are constantly developed and improved, and the specifications may be changed without notice. Some pictures in this material may include a selection item.

This information picture is for reference only, subject to the actual product. We will be as accurate as possible, but we are not responsible for errors or missing information.