

客户的需求就是我们所做的一切

All We Do Are Clients Demand



Xiamen Yangsen NC Equipment Co., Ltd

Technical Document

YSV-855

**Address: No. 586-590 Shanbian Rd. Dongfu Industrial Zone Haicang Dist,
Xiamen, Fujian Province, China 361027**

Tel: (0086) --0592—6682467



Content

1. Corporate Culture Introduction
2. Features of the whole machine
3. Optomechanical characteristics
4. Technical parameters
5. List of main accessories
6. Machine tool standard configuration
7. Machine tool selection and configuration
8. Attached tools and information list
9. Installation, commissioning, training and acceptance
10. After-sales service concept
11. Working conditions of machine tools

1. Corporate Culture Introduction



Yangsen CNC Equipment Co., Ltd. is a high-tech enterprise specializing in the development, design, production and manufacture of CNC machine tools and CNC machine tools.

The company is based on Taiwan's manufacturing technology, and at the same time integrates many years of manufacturing experience from many equipment manufacturers, constantly absorbing domestic and foreign. With the advanced scientific research achievements in the same industry, it has developed into an exclusive manufacturer with complete production and assembly machining centers today.

The company's products include vertical machining center, high-speed machining center, high-speed drilling and tapping machine, gantry machining center, horizontal machining center, etc. The main customer groups are precision mold manufacturing, automobile manufacturing, electronic communication industry, precision parts Processing industry and aerospace industry, etc. The company has been operating with integrity. The business philosophy of sustainable innovation, with the most cost-effective products, perfect products and perfect services, provides customers with the best solutions, creates the greatest value for customers, and enhances the competitiveness of customers' products.

In the future, the company will continue to adhere to the high-quality policy of "customer first, market first; technology-based, quality wins: the concept, to create value for customers. Innovate research, keep improving, and wholeheartedly meet customer needs and expectations.

Main business: high-speed high-precision engraving and milling machine, vertical machining center series, high-speed drilling and tapping machine, gantry machining center series, horizontal machining center series. Enterprise service: To provide better products and services, we have been working hard and persevering forever. We aim to build a brand, be honest and trustworthy, and achieve mutual benefit and win-win. We help users use equipment better through continuous technological updates and perfect service system, because of our profession we keep improving.

Technical support: professional engineers come to solve equipment selection for customers. Solve the processing requirements of various products of customers, help users choose suitable and economical solutions, and make the products selected by users more cost-effective.

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

After-sales service: The after-sales service network all over the country is the guarantee for our products to be sold all over the country.



2. Machine Features:



3. YSV-855 Machine Features:

Ultra High-Performance Machining Center

1. The Taiwan frequency conversion tool magazine is adopted, the tool change time is shortened to 1.4S, and the knife arm is controlled by the frequency converter, which effectively improves the product processing efficiency;
2. The Z-axis is equipped with a 3KW motor as standard, a servo motor that is one level larger than the same model of other brands, with high torque output and fast and accurate positioning;
3. The spindle motor is equipped with β ii8/12000 high-torque generalized motor, and the spindle torque is significantly improved compared with other brands of the same model, which is very suitable for heavy cutting;
4. The machine tool parts belong to the famous brand of famous factory, and the top configuration in the industry.



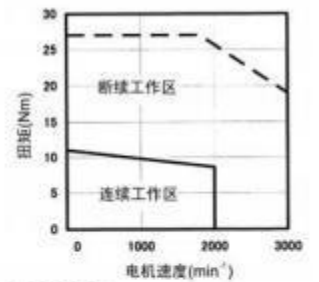
Spindle and Triaxial Torque

Charts

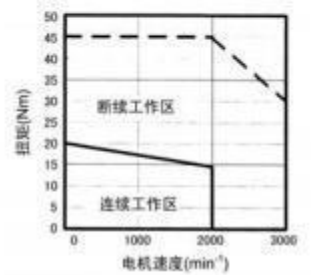


系统	0i-MF Plus (5)	额定功率kW	额定扭矩N.m	最大扭矩N.m
X轴	β /SC 12/3000-B	1.8	11	27
Y轴	β /SC 12/3000-B	1.8	11	27
Z轴	β /S 22/3000-B	3	20	45
主轴SP	β /I 8/12000-B	7.5	35.8	95.5

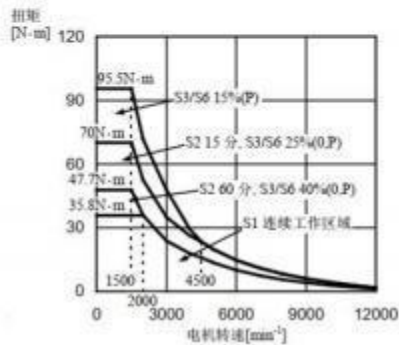
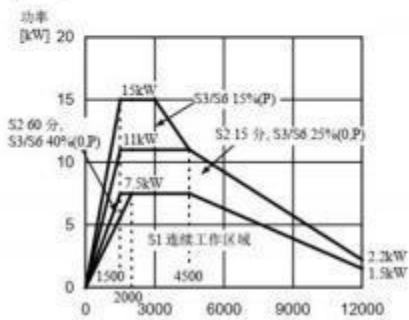
β /SC 12/3000-B



β /S 22/3000-B



β /I 8/12000-B





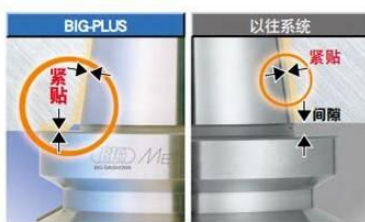
3. Optomechanical characteristics



YSV-855 Optomechanical characteristics:

1. Adopt German Rexroth/THK line rail, and the width of Y/Z line rail is up to 45mm;
2. The Y-axis stroke is extended, up to 550mm, and the width of the worktable is widened to 550mm;
3. The X-axis sliding seat has a super-large span, and the "herringbone"-shaped column design is as stable as Mount Tai;
4. The three-axis adopts C3 grade screw, and the three-axis adopts NSK original bearing (3062), 3+2 mode, pre-tensioning treatment to prevent thermal displacement;
5. High rigidity BBT40 spindle with outer diameter of 150mm, ring spray

两面定位系统
BIG-PLUS 两面定位主轴系统 **BIG PLUS SPINDLE SYSTEM**



- 通过确立完善的量规系统,实现了锥面、端面同时两面定位的系统。
- 采用BIG-PLUS系统的公司: 日本66家 其它国家90家

获得第23届发明大奖/ 池本发明功劳奖

BIG-PLUS的种种优点:

- 提高加工表面和加工尺寸精度
- 提高ATC的重复精度
- 延长刀具寿命
- 高速旋转时Z方向尺寸稳定
- 抑制重切削时因振动引起的锥柄变色 (微动磨损)
- 提高镗孔加工的圆度

design;

6. Adopt Taiwan original ultra-high-speed cutting cylinder, the cutting time can reach 0.28S;
7. The bed of the machine tool is made of precision HT300 high-grade cast iron.



4. Technical parameters:

Item	Spec	Units	YSV-855
Travel	X/Y/Z axis	mm	850/550/550
	Spindle nose to table distance	mm	120-670
	Distance from spindle center to column track	mm	610
	track form		Linear guide
Worktable	Table size (L*W)	mm	1000*550
	The Max. load capacity of the workbench	kg	800
	T-slot	No/mm	5-18×90
Spindle	Spindle taper hole (model/installation size)	mm	BBT40
	Spindle RPM	rpm	10000
	Max. spindle speed	rpm	8000
	Spindle drive mode		belt type
Feed	X/Y/Z axis rapid feed	m/min	36/36/36
	cutting feed	mm/min	10000
Tool Changer (Optional)	Tool change		side mount
	Handle Specifications	type	BT40
	Tool Capacity	tools	24T
	Max. Tool Diameter (Proximity Tool)	mm	80
	Max. Tool Diameter (Without Proximity Tool)	mm	120
	Max. Tool Length	mm	300
	Max. Tool Weight	kg	7
	Fastest tool change time	sec	1.4
Motor	Spindle motor	kw	Bii8/12000
	3 axis servo motor	kw	Bisc12/3000/ Bisc12/3000/ Bis22B/3000
	Cutting water pump motor	m/h-m	4-60
Accuracy	positioning accuracy	mm	±0.005
	Repeatability	mm	±0.003
Power requirement	power requirements	kva	20
	Air source requirements	Kg/cm	6~8
Machine size	L*W*H	mm	2550*2900*2750
	weight	t	5.8



4. List of main accessories

ITEM	DESCRIPTION	Q'TY	MANUFACTURER	SPECIFICATION
1	CNC system	1	Japan FANUC	FAUNC-OI-MF-plus
2	Spindle servo motor		Japan FANUC	Bii8/12000
3	X, Y, Z Servo Motor	Each 1	Japan FANUC	Bisc12/3000/ Bisc12/3000/ B is22B/3000
4	Spindle Front Bearings	1 set	Japan KOYO	7014*3
5	Spindle rear bearing	1 set	Japan KOYO	7014*2
6	X, Y, Z axis screw bearing	Each 1	Japan NSK	30TAC62
7	X, Y, Z axis screw	Each 1	Japan THK	Ø40*P12*C3
8	X-axis linear guide	2	Japan THK/Germany Rexroth	35
9	Y-axis linear guide	2	Japan THK/Germany Rexroth	45
10	Z-axis linear guide	2	Japan THK/Germany Rexroth	45
11	Spindle unit	1	YANGSEN	BBT40/ 150
12	Tool magazine	1	YANGSEN	24T
13	Cutting fluid pump	1	YANGSEN	4-60- 750W
14	automatic lubrication system	1	SKF	2L
15	Knife cylinder assembly	1 set	Taiwan China and Japan	
16	Main pneumatic components	1	AirTAC	
17	main electrical components	1	Schneider	
18	Spindle drive components	1 set	American Gates	
19	X, Y, Z axis coupling	Each 1	Japan NBK	
20	heat exchanger	1	Ou Yi	

If any supplier cannot supply it, it will be replaced by a brand of the same quality.



6. Machine tool standard configuration

ITEM	Spec	ITEM	Spec
1	Fully Enclosure Guard	11	Rigid Tapping
2	Tool Box	12	Network Transmission
3	Spindle Coolant Nozzles	13	Hand Wheel
4	Coolant System	14	Spindle Nose Air Blow
5	Coolant Tank & Chip Tray	15	Air Gun
6	Safety Door	16	Auto Off
7	Heat Exchange for Electric Cabinet	17	Leveling Bolts and Pads
8	Work Light	18	
9	Water Gun	19	
10	Warning Light	20	

7. Machine Tool Selection and Configuration

NO.:	Items	NO.:	Items
1	Siemens, Mitsubishi CNC system	9	Oil Mist Collector System
2	28T Disc Tool Magazine	10	Automatic Tool Presetter
3	CTS (Coolant through Spindle)	11	Tool Breakage System
4	Spindle Oil Cooler	12	4th Axis Rotary Table (Taiwan Xuyang)
5	X/Y/Z Optical Linear Scale	13	Disc Oil Skimmer
6	Chain Plate Chip Conveyor	14	DDS 12000RPM
7	Air Conditioner for Electric Cabinet	15	DDS 15000RPM
8	Coolant System		

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

8. List of attached tools and materials

No.:	Item	Specification	QTY	Remarks
1	Allen Wrench	1.5-10	1 Set	
2	Screwdriver	Slotted	1 Each	
3	Screwdriver	Phillips	1 Each	
4	Raw Tape		2 Rolls	
5	Glass Glue	Porcelain white	1 Bottle	
6	Electronic Handwheel		1 PCs	
7	Card Reader		1 PCs	
8	Memory Card		1 PCs	
9	Cable	5 Meters, 20 Meters	2 Pieces	
10	Snap Ring		1 PCs	
11	Screw		1 Package	
12	Machine Tool Ground		1 Stick	



13	Bellows Connector		1 PCs	
14	Toolbox		1 PCs	
15	Floor Mat		1 Set	
16	Operation Manual		1 PCs	
17	Certification		1 PCs	

9. Installation, commissioning, training and acceptance

1. Installation and commissioning: After the machine tool arrives at the customer's factory, our service engineer will go to the customer's factory in time to carry out installation and commissioning and on-site training.
2. Customers can choose to send operators to our company to be responsible for the preliminary training for about a week, and then our company will conduct on-site training at the customer's place during installation and commissioning.
3. Acceptance: Accuracy acceptance, according to the ex-factory accuracy inspection table provided by the supplier, inspect the items that are conditionally inspected at the customer's place, and test the inspection items that do not meet the inspection conditions, such as positioning accuracy, spindle taper hole accuracy inspection stick test etc., no testing shall be carried out at the buyer's place, or the buyer shall send personnel to the supplier's factory for inspection and acceptance through negotiation between the two parties.

10 Xiamen Yangsen NC Equipment After-sales Commitment Letter

1. Pre-sales service: Janssen'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 projects.
2. Maintenance response time: Our company has a service team of up to 50 people and is equipped with a complete service vehicle. After receiving the user's notification of failure, we will respond within 8 hours.
3. Parts inventory: Janssen has a special production workshop and parts inventory in Xiamen, with strong strength and complete inventory. There are commonly used parts inventories in each office to provide users with the fastest repair parts.
4. Machine tool maintenance: All machine tools within the warranty period enjoy free maintenance services, and machine tools outside the warranty period can purchase maintenance services at an economical and



reasonable price. And PCs can plan equipment maintenance processes according to customer needs.

management and

5. Maintenance charges after the warranty period: The charging standard is clearly marked and the real price is charged, only the cost is charged, and the user is served with the concept of openness, fairness and fairness. After the maintenance period, our company is responsible for providing spare parts at preferential prices for a long time, and the maintenance service fee time is not more than 48 hours;

6. Ad hoc old user service department: closely track the use of machine tools, and deal with maintenance complaints in a timely manner.

7. Maintenance supervision: the general manager also serves as the director of the after-sales service department, supervises the quality of maintenance services in real time, and protects the rights of customers.

8. Warranty: From the date of acceptance of the equipment, a one-year warranty period is provided. During the warranty period, our company is responsible for free maintenance for equipment failures caused by users. If the fault is caused by improper use by the user, the cost fee will be charged after the service.

11. Machine Tool Working Conditions

1. Three-phase AC power supply: 380V±10%, -15%; 50Hz±1Hz
2. Ambient temperature: 8 ~ 40C°
3. Relative humidity: ≤80%
4. Air pressure: 0.6 ~ 0.8 MPA

Xiamen Yangsen NC Equipment Co., Ltd

The company's products are constantly being developed and improved, and specifications may be changed without notice. Some images in this document may contain optional items.

The pictures in this document are for reference only, and the actual product shall prevail.