

①We continuously developed and improved our product specifications. We may change the parameters with out prior notice.

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QUALITY AND SERVICE FOCUSED



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CNC VERTICAL MACHINING CENTER SERIES
CNC HORIZONTAL MACHINING CENTER SERIES
HIGH-SPEED DRILLING AND TAPPING CENTER SERIES
HORIZONTAL BORING MACHINING CENTER SERIES
DOUBLE COLUMN MACHINING CENTER SERIES
HIGH-SPEED, HIGH-PRECISION ENGRAVING AND MILLING SERIES



FOCUS ON HIGH-END INTELLIGENT MANUFACTURING
 FOCUS ON INDUSTRY TALENT TRAINING
 FOCUS ON PROMOTING THE TRANSFER OF KNOWLEDGE ACHIEVEMENTS
 FOCUS ON LEAD SOCIAL AND ECONOMIC DEVELOPMENT

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COMPANY PROFILE

Established in 2007, YangSen has complete production lines comprising CNC machine tool products. YangSen continues developing multi-axis and multi-functional machining centers that will drastically improve customer productivity with smaller floor space that allows customers to make more with lesser investments.

Yangsen focuses on the development and production of CNC Vertical Machining Center Series, CNC Horizontal Machining Center Series, High-Speed Drilling and Tapping Center Series, Horizontal Boring Machining Center Series, Double-Column Machining Center Series, High-Speed and High-Precision Engraving Milling Series.

YangSen products are widely used in aerospace, pharmaceutical, electronics, mold/die fields.

MISSION

Becoming one of the top value machine tool manufacturers in the industry.

CODE OF CONDUCT

YangSen offers remarkable products, fast services, and punctual delivery time.

CORE VALUES

Quality & Service Focused

VISION

Build a world-class CNC equipment enterprise, making precision manufacturing easier.





HISTORY



2003

Choice

- First CNC machining center was produced.

2007

Established

- Registered and established Xiamen Yangsen NC Equipment Co., Ltd.

2011

Construction

- Independently design and assemble the first CNC engraving milling machine.

2012

Persistent

- First CNC vertical machining center was put into production.
- First DMC machining center launched for production.

2014 & 2015

Development & Strength

- With independent research and development, a number of patents were registered.
- First horizontal machining center launched.
- The self-developed CNC controller system is patented and registered.
- 17 million USD were invested to build a world-class production facility.
- Independently developed precision engraving and milling machine with patent registered.

2017 & 2018

Innovation & Leap

- Obtained 12 utility model patents.
- First Five-Axis controlled launched.
- CSAIII certified.
- Obtained Independently developed patents for horizontal machining center.
- Independent development of multi-spindle machining center with a number of patents.
- Obtained a number of patents for fixed and moving column type gantry machining centers.
- Horizontal boring machining center launched.
- Yangsen Industrial Park officially in production.
- Additional invest for constructing a new production facility in Jimei Industrial Park.

2022 & 2023 ...

Development

- YANGSEN Jimei Industrial Park putting into use.
- Independently developed five-axis double column machining center mass production.
- Independently developed horizontal lathes and obtained a number of patents.
- Independently developed moving crossbeam double column machining center.
- Independently developed vertical lathe machining center, and obtained a number of patents.

BUILD A WORLD-CLASS CNC EQUIPMENT COMPANY TO MAKE PRECISION MANUFACTURING EASIER.

MACHINING SHOP & PRODUCTION LINES



• Nicholas Gantry Machining Center



• Yangsen Double-Column Machining Center



• Taiwan Freeport Grinder



• Japan Toshiba Boring & Milling Machine



• Casting Workshop



• Casting Workshop



• Vertical Machining Center Production I



• Vertical Machining Center Production II



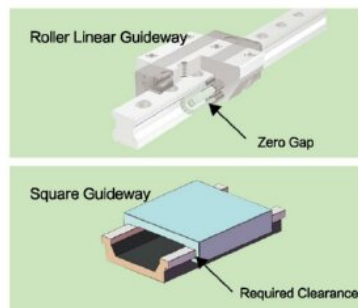
• Double-Column Machining Center Production

NAME BRAND MACHINE COMPONENTS



Recirculating roller linear guides has the significant advantage

The recirculating roller linear guide is pre-tensioned to ensure that there is no gap between the sliding surfaces. This not only increases rigidity but also improves accuracy and stability. The friction coefficient of the linear guideway is low, so it can ensure repeat positioning accuracy and positioning accuracy during rapid movement. Yangsen installs THK roller linear guideway from Japan. The motion medium of the roller linear guideway is in contact with line and surface rolling, and the motion medium of the ball linear guideway is in contact with the point surface rolling. Therefore, the roller linear guideway has higher rigidity and greater accuracy than the ball linear guideway. The square guideway requires a gap between the sliding surfaces to move, and the friction coefficient is large, which is prone to adhesion and may cause machining errors.



PRODUCTION PROCESS



Strive for Perfection, Create High-Quality Products

Yangsen takes science and technology as the driving force. Focused unrelentingly grasps product quality, creates a high-quality brand and casts a first-class corporate image. Adapting the production system to the ever-changing production requirements and to better satisfy our customers, the factory has always advocated lean production and created high-quality brands.

QUALITY CONTROL



①、Spindle table type dynamic balance test to ensure spindle machining accuracy.



②、Spindle deflection test, 300mm is required to be within 0.005mm to ensure the accuracy and verticality of the spindle.



③、Spindle tension test to detect the broaching force of each spindle.



④、Each spindle is equipped with an online dynamic balancer to ensure that the spindle vibration accuracy is 0.5um.



⑤、Perpendicularity parallelism test, test the parallelism and perpendicularity of each axis, within 0.01mm.



⑥、Laser detection, the accuracy of the full stroke movement has been corrected and compensated by laser to ensure the positioning accuracy and repeat positioning accuracy of the machine.



⑦、Ballbar roundness test, 300mm must be within 0.012mm to ensure the accuracy of the machine tool.

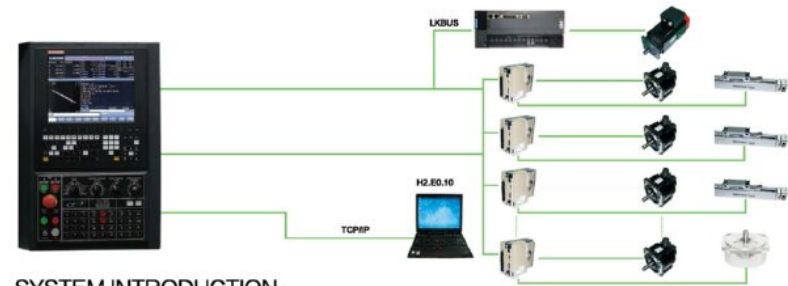


⑧、Processing inspection, each machine tool is made a standard test piece to inspect the processing accuracy.



⑨、Each machine tool must be tested by the Hexagon CMM before leaving the factory.

INDEPENDENT RESEARCH AND DEVELOPMENT OF S800 CNC SYSTEM



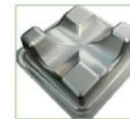
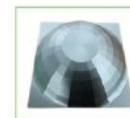
SYSTEM INTRODUCTION:

- The company's self-developed YS-S800 system uses a 32-bit micro-processing embedded chip as the core of the system's main control module. It has powerful functions, rich built-in resources, and a 15-inch TFT color LCD screen man-machine interface display.

Main technical advantages:

- The CPU has fast processing speed and supports floating-point operation, which greatly improves the speed and accuracy of motion interpolation calculation;
- The system supports ten-axis control and 4-axis linkage interpolation function. It can perform various two-dimensional and three-dimensional complex processing;
- The communication interface of the system is universal. It adopts 100M network interface technology for the transmission of NC codes, and through the network interface technology, the unified management and on-line diagnosis of the production workshop can be easily realized, and the MECHATROLIN high-speed servo synchronous bus control technology can be supported, which is in line with the world-class bus NC control technology.

SYSTEM PROCESSING COMPARISON TABLE:



System		Yangsen S800	Nordson H	Brand 21MA	Brand M80
Processing 1 Gem surface (polished)	Processing tech.	Tool: D4R2 F3000/S18000 Time: 25' 5"	Tool: D4R2 F3000/S18000 Time: 28' 15"	Tool: D4R2 F3000/S18000 Time: 34' 53"	Tool: D4R2 F3000/S18000 Time: 27' 43"
	Comparison Results	The corner effect is best. No overcut on the surface.	The corner effect is good. No overcut on the surface.	The corner effect is good. Overcut on the surface.	The corner effect is very good. No overcut on the surface.
		The processing effect of Yangsen S800 & M80 is the best, system S a little faster, overcut on the surface in MA21.			
Processing 2 Four stage mode (polished)	Processing tech.	Tool: D6R3 F3000/S18000 Time: 15' 18"	Tool: D6R3 F3000/S18000 Time: 18' 32"	Tool: D6R3 F3000/S18000 Time: 22' 25"	Tool: D6R3 F3000/S18000 Time: 17' 26"
	Comparison Results	The surface effect is good.	The surface effect is good.	The surface effect is good.	The surface effect is good.
		Surface processed by several systems has good effect, and Yangsen S800 potential in processing speed.			

Engraving machine samples:



YANGSEN

YS SERIES

YS-870 Structural Characteristics of Engraving and Milling Machine:

- The product can be precisely processed for different materials: steel, copper, aluminum, graphite, glass, etc. It is widely used in precision molds, copper electrodes, shoe mold manufacturing, batch processing of clocks, watches and glasses products, etc.



YS-870 Engraving and Milling Machine Features:

- A patented spindle box of engraving and milling machine
- There is a stepped hole inside the spindle box; the electric spindle is installed in the stepped hole, and a flange is used to fix the spindle box.
- Worktable
- Box structure and ballscrew are integrally formed.
- Optical linear scales
- Optional Heidenhain, Fagor optical linear scales with accuracy of under $\pm 5\mu\text{m}$.
- Base
- Multi-layer wall box structure, rear chip extractions.
- A triangular rib structure of bridge column
- The utility model of the triangular rib structure of the door bridge improves the dynamic and static rigidity of the machine tool and enhances the processing accuracy.
- Optional Direct-Driven BBT40 spindle
- Upgrade Configuration
- Standard servo carousel tool magazine; HSK-E40 motor spindle; graphite protection package; laser tool probe; oil mist collector system, and more.
- Stable Accuracy
- The closed loop optical linear scales with high positioning accuracy can effectively suppress the positioning error caused by the thermal extension of the lead ballscrew.
- System Stability
- Equipped with Siemens 828D system.

YS Series Parameters

Model			YS-760A	YS-760B	YS-770	YS-870A	YS-870B	YS-870C	YS-8012
Subject	Specifications	Units							
Travel	X/Y/Z axis	mm	700/600/300	700/600/300	700/700/350	800/700/300	800/700/300	800/700/390	800/1200/300
	Spindle Nose to Worktable	mm	90-390	225-525	175-525	130-430	205-505	205-585	195-495
	Three-Axis Guideway		Linear Guideway						
	Door Width		760	760	740	810	810	810	810
Worktable	Worktable Size (L*W)	mm	700*600	700*600	700*700	720*640	720*640	800*700	1200*800
	Maximum Table Load	kg	400	400	400	400	400	400	1000
	T-Slot	no/mm	5-16x125	5-16x125	5-16x120	5-16x120	5-16x120	5-16x120	7-18x100
Spindle	Spindle taper	type	BT-30	ER32	ER32	BT-30	ER32	ER32	BT-40
	Spindle speed	rpm	24000	24000	24000	24000	24000	18000	15000
	Spindle Drive Type		Built-In						DDS
Feedrate	Rapid Traverse (X/Y/Z)	m/min	15/15/12	15/15/12	15/15/12	15/15/12	15/15/12	15/15/12	15/15/12
	Cutting Feedrate (X/Y/Z)	m/min	12	12	12	12	12	12	12
Tool Changer	Tool Changer		Carousel Servo ATC						ARMATC
Motor	Spindle Motor	kw	7.5	7.5	7.5	7.5	7.5	11	5.5
	Three-Axis Servo Motor	kw	0.85/0.85/1.3	0.85/0.85/1.3	0.85/0.85/1.3	0.85/0.85/1.3	0.85/0.85/1.3	1.3/1.3/1.3	1.3/3.0/1.3
Accuracy	Accuracy	mm	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005
	Repeatability	mm	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003
Power Required	Power Requirement	kva	10	10	10	10	10	9	12
	Air Pressure Requirement	kg/cm ²	6^8	6^8	6^8	6^8	6^8	6^8	6^8
Others	External Dimensions (L*W*H)	mm	2100×2500×2550	2100×2500×2550	2100×2700×2600	2100×2700×2550	2100×2700×2550	2100×2100×2550	3000×2500×2600
	Gross Weight	t	3.8	3.9	4.2	4.7	4.8	5	6.8

Standard Accessories

- ★ 7.5KW-ER32-24000
- ★ Coolant Tank & Oil Skimmer
- ★ Automatic Lubricating System
- ★ Transmission Software and Cables 20m
- ★ Auto Tool Length Measurement
- ★ Hand Wheel (MPG)
- ★ Transformer
- ★ LED 3 Color Warning Light
- ★ Spindle Oil Cooler
- ★ Leveling Bolts and Pads
- ★ LED Work Light
- ★ Maintenance and Operational Manual
- ★ Fully Enclosure Guard
- ★ Tool Box
- ★ Spindle Air & Coolant Blast
- ★ Heat Exchange for Electric Cabinet

Options

- ★ Oil Mist Collector
- ★ 7.5KW-BT30-24000
- ★ BBT40-15000
- ★ Rotary Table
- ★ ATC

YANGSEN

YST SERIES

YST-800 Drilling and Tapping:

- The YST series is widely used for rapid drilling, tapping and milling of small parts such as electronic, sanitary ware, automobiles and parts, medical equipment, etc.; it is also suitable for small molds and precision copper processing.



YST-800 Drilling and Tapping Structural Characteristics:

Higher Z-axis

- The effective stroke of the Z axis is 410mm, the distance between the nose of the spindle and the table surface is 150~560mm, four axes can be installed without additional raiser blocks, and the rigidity of the machine tool is not affected.

Large table

- Table size: 1000X450mm. The larger worktable allow bigger parts processing.

Optical linear scales

- Optional Heidenhain, Fagor optical linear scales with accuracy of under $\pm 5\mu m$.

Stable base

- Shared V8 base, 1020mm span, high rigidity, high precision bed.



Powerful motor

- Standard 20000rpm BT30 high-speed motor, power 5.5kw; optional 12000rpm for large torque motor, power 7.5kw.

Fast tool change speed

- Equipped with 21T servo tool magazine, tool change time is 1.8s; X/Y axis rapid traverse at 60m/min, Z axis rapid traverse at 48m/min.

Powerful spindle

- YSV800 configuration BBT40 outer diameter 150mm with higher rigidity, and short nose spindle, five bearings, coolant nozzles.

Upgrade Configuration

- German Rexroth roller linear guideway, Taiwan servo tool magazine, Taiwan spindle.

Beautiful appearance

- European and American style sheet metal design, beautiful and practical.

YSV800/YST800

YST Series Parameters

Model			YST-600	YST-700	YST-800
Subject	Specifications	Units			
Travel	X/Y/Z axis	mm	500/400/350	700/400/350	800/450/410
	Spindle Nose to Worktable	mm	145~495	145~495	150~560
	Spindle Center to Column	mm	420	420	520
	Three-Axis Guideway	——	Ball Linear Guideway		
Worktable	Worktable Size (L*W)	mm	700x420	800 x 420	1000x450
	Maximum Table Load	kg	350	300	350
	T-Slot	no/mm	3~14x125	3~14x125	3~14x125
Spindle	Spindle taper	type	BT-30	BT-30	BT-30
	Spindle speed	rpm	20000	20000	20000
	Spindle Drive Type	——	DDS		
Feedrate	Rapid Traverse (X/Y/Z)	m/min	60/60/48	60/60/48	60/60/48
	Cutting Feedrate (X/Y/Z)	m/min	10	10	10
Tool Changer	Automatic Tool Changer	——	Fast Wheel		
	Type of Tool Shank	type	BT-30	BT-30	BT-30
	Tool Storage Capacity	tools	21	21	21
	Max. Tool Diameter (Adjacent)	mm	60	60	60
	Max. Tool Diameter (Empty)	mm	80	80	80
	Max. Tool Length	mm	200	250	200
	Max. Tool Weight	kg	3.5	3	3.5
	Tool Change Time	sec	1.8	1.8	1.8
Motor	Spindle Motor	kw	5.5	5.5	5.5
	Three-Axis Servo Motor	kw	1.5/1.5/3.0	1.5/1.5/3.0	1.5/1.5/3.0
Accuracy	Accuracy	mm	± 0.005	± 0.005	± 0.005
	Repeatability	mm	± 0.003	± 0.003	± 0.003
Power Required	Power Requirement	kva	15	15	15
	Air Pressure Requirement	kg/cm ²	6"8	6"8	6"8
Others	External Dimensions (L*W*H)	mm	2000x2650x2750	2000 x 2402 x 2340	2300x2850x2750
	Gross Weight	t	3.6	4.2	4.8

Standard Accessories

- ★ Safety Door
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Coolant Tank & Chip Tray
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Spindle Oil Cooler
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ Chip Conveyor System
- ★ Tool Breakage Probe
- ★ Oil Skimmer
- ★ Oil Mist Collector
- ★ Workpiece & Tool Probe
- ★ CTS
- ★ Rotary Table

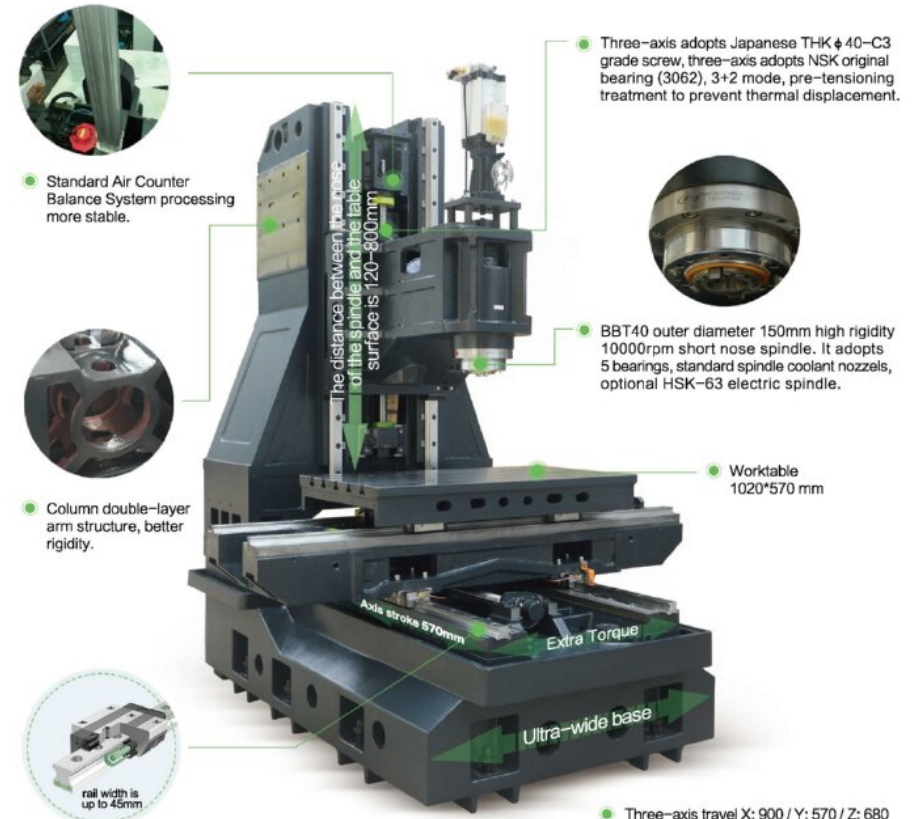
YANGSEN**YSV SERIES****YSV-957 Vertical Machining Structural Characteristics:**

- The machine tool of this product is equipped with name brand components in the industry, equipped with a large torque, high speed motor and a super rigid bed design.

Taking into account high torque, high speed and high precision, it is suitable for processing all kinds of products and molds.

**Machine cutting performance:**

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
Cutting depth	5mm	Cutter diameter	Ø60	Tapping	M24
Cutter	Ø63mm*5T		Ø60mm*2T	Cutter	M24*3P
Spindle speed	1000rpm	Spindle speed	1200rpm	Spindle speed	150rpm
Feed	F600	Feed	F100	Feed	F450
Width	56mm	Width	60mm	Width	40mm

YSV-957 Vertical Frame Machine Structural Characteristics:

- It installs Japanese THK or German Rexroth linear guideway, the linear guideway width is up to 45mm.

- Three-axis travel X: 900 / Y: 570 / Z: 680
The reserved installation position of the Optical Linear Scales can be equipped with a hollow oil-cooled ballscrew.

The bed is made of precision HT300 high grade cast iron

Optical Linear Scales

- Optional Heidenhain, Fagor optical linear scales, accuracy $\pm 5\mu\text{m}$, to ensure the positioning accuracy of the machine tool.

YANGSEN**YSV SERIES****YSV-1265 Vertical Machining Structural Characteristics:**

- The machine tool of this product is equipped with name-brand components in the industry. It comes with high torque and a high-speed motor. With a super rigid bed design. It takes into account large torque, high speed, and high precision. It is suitable for high-speed precision machining in small and medium-sized mechanical parts in the automotive, aerospace, textile machinery, and other industries.

**Machine cutting performance:**

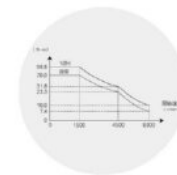
Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
Cutting depth 6mm		Cutter diameter Ø80		Tapping M30	
Cutter	Ø125mm*5T	Cutter	Ø80mm*2T	Cutter	M30*3P
Spindle speed	550rpm	Spindle speed	800rpm	Spindle speed	120rpm
Feed	F500	Feed	F100	Feed	F420
Width	80mm	Width	80mm	Width	50mm

YSV-1265 Vertical Frame Machine Structural Characteristics:

- Three-axis adopts Japanese THK $\phi 40$ -C3 grade screw, three-axis adopts NSK original bearing (3062), 3+2 mode, pre-tensioning treatment to prevent thermal displacement.
- The rear of the spindle head is box-shaped design, triangular structure, Z-axis 6 sliding block support, super rigidity.
- Standard air configuration device to ensure more stable processing.
- Column double-arm structure, shoulder-type tool magazine design, better rigidity.
- Worktable 1320*650 mm
- Outer diameter 150mm high rigidity BBT40, 10000r/min short nose spindle, spindle equipped with five bearings, coolant nozzels design.
- The distance between the nose of the spindle and the table surface is 120-800mm
- Rail torque 800mm
- Ultra-wide base
- Optical Linear Scales
- Optional Heidenhain, Fagor grating optical linear scales, accuracy $\pm 5\mu m$, to ensure the positioning accuracy of the machine tool.
- Three-axis stroke X:1200 / Y:680 / Z:680 The reserved installation position of the Optical Linear Scales can be equipped with a coolant through ballscrew feature.
- Install Japanese THK or German Rexroth line guideway, linear guideway width up to 45mm.



- Taiwan servomotor tool magazine with tool change time 1.4 sec.



- The spindle motor is equipped with a standard 15kW (SJ-D15-08) powerful spindle motor with a maximum speed of 8000rpm, suitable for heavy cutting.

The bed is made of precision HT300 high grade cast iron

YANGSEN**YSL SERIES****YSL-1482 Vertical Machining Structural Characteristics:**

- The machine tool of this product is equipped with name-brand components in the industry. It comes with high torque and a high-speed motor. With a super rigid bed design. It takes into account large torque, high speed, and high precision. It is suitable for high-speed precision machining in small and medium-sized mechanical parts in the automotive, aerospace, textile machinery, and other industries.

**Machine cutting performance:**

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
Cutting depth 6mm		Cutter diameter Ø80		Tapping M30	
Cutter	Ø125mm*5T	Cutter	Ø80mm*2T	Cutter	M30*3P
Spindle speed	550rpm	Spindle speed	800rpm	Spindle speed	120rpm
Feed	F500	Feed	F100	Feed	F420
Width	80mm	Width	80mm	Width	50mm

YSL-1482 Vertical Frame Machine Structural Characteristics:

- THK C3 ball screw: ball screw prestretched to prevent thermal extension.
 - Spindle head rear part box-type design, triangle structure, Z-axis 6 slider support, super rigidity.
 - Taiwan $\phi 155$ high-rigidity BBT50 spindle, 6000r/min, 6 bearings, ring spray design.
 - Z-axis box way design optional.
 - BF gear box
 - optional Italy BF gear box, super cutting ability, using high and low gear switch, stepless shifting.
 - Worktable 1500*800mm
 - Travel: X/Y/Z 1400/800/750, reserve the installation position of the optical scale.
 - THK linear guideway, super strong rigidity
- The machine bed casting adopt precision HT300 high-grade casting iron



YANGSEN**YSP SERIES****YSP-857 Vertical Machining Structural Characteristics:**

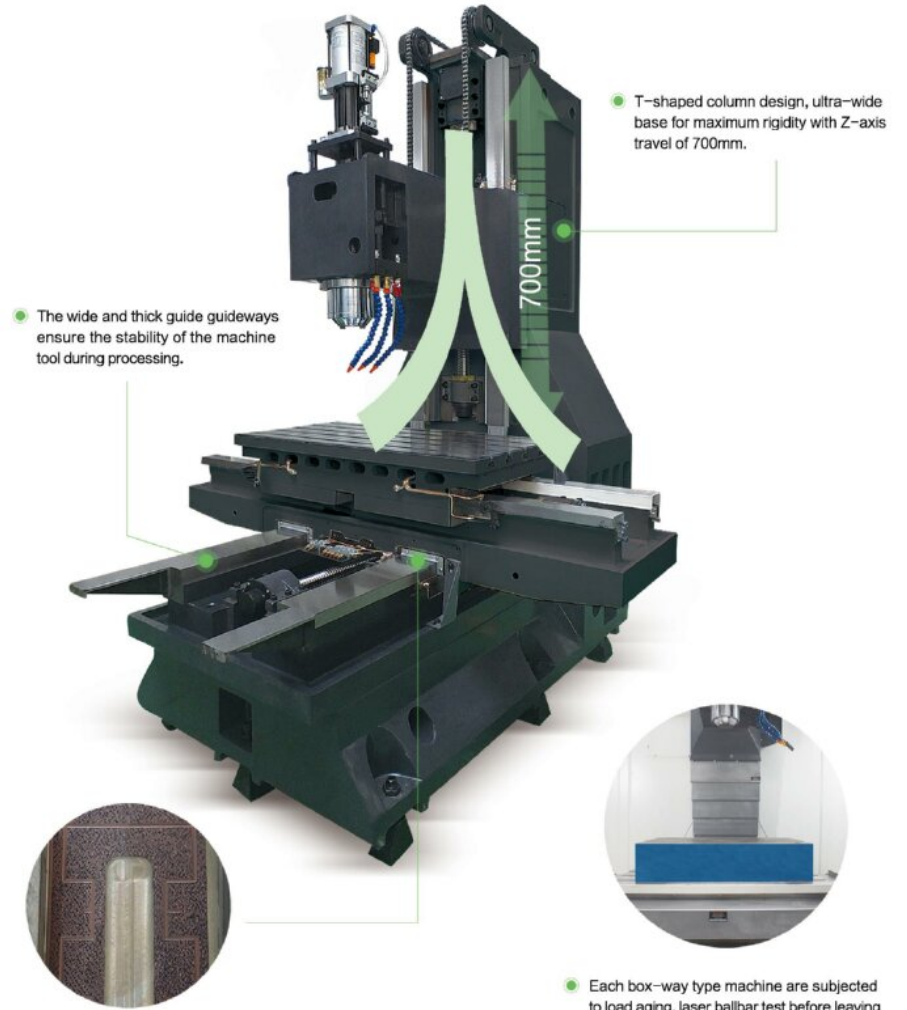
- All three axes are equipped with servomotors that are one grade larger than the same models of other brands, with large torque output, fast and accurate positioning.

**Machine cutting performance:**

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
Cutting depth	6mm	Cutter diameter	Ø80	Tapping	M30
Cutter	Ø63mm*5T	Cutter	Ø80mm*2T	Cutter	M30*3P
Spindle speed	550rpm	Spindle speed	800rpm	Spindle speed	120rpm
Feed	F500	Feed	F100	Feed	F420
Width	80mm	Width	80mm	Width	50mm

YSP-857 Vertical Machining Frame Structural Characteristics:

- The bed is made of H300 cast iron, quenched, and all slide surfaces are precisely polished and covered with imported wear-resistant leather TURCITE-B. Ensure the accuracy and durability of the machine tool.



- Scraping process

- Each box-way type machine are subjected to load aging, laser ballbar test before leaving the plant.

YANGSEN YSD SERIES

YSD4-260 Structural Characteristics of Quad-Head Spindle Machining Center:

- High rigidity

The compact double-column structure design;
It ensures stability and accuracy during high-speed processing.

- High efficiency

4 parts can be processed at the same time;
4 pcs of $\phi 125$ -BT30 motor spindles with a maximum speed of 24000rpm, equipped with 32 tool magazines, high surface quality and high processing efficiency.

- High configuration

The Mitsubishi E80A system is stable, high-speed, and high-precision;
The three-axis motor is upgraded to 1.5KW (HG153), and the high-power torque motor can better adapt to the high rigidity characteristics of the machine tool;
The machine tool is equipped with name brand components, such as Taiwan roller linear guideway, Schneider Electric, Taiwan AirTac pneumatic components.



Application industry:

- This machine tool is widely used in processing industries such as sanitary ware, decorations, parts, etc.



● CPU heat sink



● Polished surface of heat sink

YSD8-565 Structural Characteristics of Eight-Spindle Machine:

- High rigidity

Column double-arm structure design; X/Z axis 6 sliding seat support, strong rigidity to ensure powerful cutting; three axis installs NSK $\phi 40$ mmC3 grade ballscrew, NSK original bearing (3062), 3+2 mode, pre-tensioning treatment to prevent thermal change bit.

- High efficiency

It can process 8 parts at the same time, the maximum speed of the eight electric spindles is 18000rpm, and the surface quality of the processing is high.

- High configuration

Mitsubishi M80 system is stable, high-speed and high-precision; the three-axis motor upgrades XY axis 3KW (HG303), Z axis 4.5KW (HG453), and the configuration of high-power torque motor can better adapt to the high rigidity characteristics of the machine tool; the machine tool is equipped with brand-name components, such as : Schneider Electric, Japanese SHOWA oil pump lubrication system, SMC pneumatic components.



Application industry:

- This machine tool is widely used in processing industries such as sanitary ware, decorations, parts, etc.



● Faucet peeling



● Polished surface of heat sink

YANGSEN**YSCP/YS SERIES****YSCP-835 Structural Characteristics of Shovel Machine:**

- High efficiency

Special multi-station fixture: at least two mounting seats are fixed at the bottom of the shovel seat, and the shovel blades on each mounting seat respectively shovel the work piece fixed on the shoveling table, and the shovel blade can be obtained by shoveling at one time. Multiple heat sinks greatly improve the processing efficiency of the heat sink.

- High precision

The blade seat, blade components, sliding table and supporting components are designed to be light and portable, which reduces the difficulty of their movements and improves the accuracy of their movements. Ensure the machining accuracy of shoveling metal parts.

- High configuration

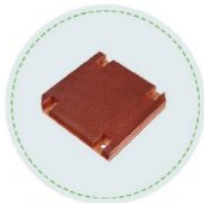
Mitsubishi E80 CNC system, HG303 motor with 1:3 reducer, high torque; Japan THK 50mm diameter lead ballscrew, 45 wide roller linear guideway; The machine tool is equipped with name brand components, such as: Schneider Electric, Japanese SHOWA oil pump lubrication system, SMC pneumatic components.

Application industry:

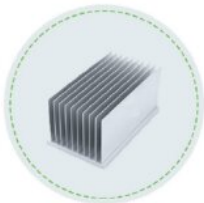
- The machine tool is mainly used in the processing of heat sinks for aviation, new energy, LED, IC and other related electrical products.



- PC series heat sink



- Server heat sink



- Power supply/LDE heat sink



- CPU heat sink

YS650-5AX Structure Characteristics:

- The five-axis machining center is equipped with five-axis linkage RTCP tool tip following function, TCP can directly command the movement path of the tool front point, which is convenient for programming. It is widely used in the fields of multi-angle deep cavity slot molds, aircraft impellers, blades, automobile tires, and gear processing.

**5-axis linkage + RTCP processing advantage**

- Program pre-reading function: avoid pauses during program segment conversion, realize constant path speed and smooth speed to achieve the best surface quality;
- Continuous path mode: intelligently control the trajectory at the junction of the program segments to eliminate pauses to reduce processing time;
- Dynamic feedforward control: avoid track deviation caused by compensating follow-up error, and no loss of accuracy due to increased speed;
- Dynamic compressor: Compress G0/G1/G2/G3 blocks into a 5-degree polynomial spline curve within the specified tolerance, and smooth the processing path with a constant curvature.

Features of the whole machine:

- Equipped with German Siemens ONE system, five-axis linkage, powerful functions;
- Equipped with DD motor $\phi 650$ five-axis rotating worktable, which can realize high-speed cutting processing, installs direct drive mode. It does not cause precision errors through worm gear transmission, and achieves high-precision positioning.
- Use servo tool magazine, the tool change time is shortened to 2 S. Also, the tool arm is controlled by the frequency converter, which effectively improves the processing efficiency of the product.
- The machine tool parts belong to the name brand. We have the top configuration in the industry.

Frame machine characteristics:

- The castings of the machine body are made of HT300 resin sand, which has undergone overall annealing, natural aging and two high-frequency vibration aging treatments, which has high rigidity, high stability. It could achieve the effect of not deforming for a long time.
- Equipped with high-speed and high-precision electric spindle HSK-A63 spindle with 20,000 rpm to ensure high-speed cutting ability.
- X, Y, Z three-axis installs high-precision ballscrew pairs to ensure the machining accuracy of the machine tool. It has the characteristics of fast response, good stability, high transmission accuracy, high component rigidity, low friction and it can eliminate transmission gaps.

YSV Series Parameters

Model			YSV-855	YSV-966	YSV-957	YSV-1060Z
Subject	Specifications	Units				
Travel	X/Y/Z axis	mm	850/550/550	900/600/600	900/570/680	1000/600/600
	Spindle Nose to Worktable	mm	120~670	120~720	110~790	110~790
	Spindle Center to Column	mm	610	610	610	610
	XYZ Guideway	Roller Linear Guideway				
Worktable	Worktable Size (L*W)	mm	1000 × 550	1020 × 570	1020 × 570	1100 × 570
	Maximum Table Load	kg	800	1000	1000	1000
	T-Slot	No/mm	5~18 × 90	5~18 × 90	5~18 × 90	5~18 × 90
Spindle	Spindle taper	type	BBT-40	BBT-40	BBT-40	BBT-40
	Spindle speed	rpm	10000	10000	10000	10000
	Spindle Drive Type	Belt				
Feedrate	Rapid Traverse(X/Y/Z)	m/min	48 × 48 × 48	36 × 36 × 36	30 × 30 × 30	30 × 30 × 30
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10	10
Tool Changer	Automatic Tool Changer	ARM Type				
	Type of Tool Shank	type	BT-40	BT-40	BT-40	BT-40
	Tool Storage Capacity	tools	24	24	24	24
	Max. Tool Diameter (Adjacent)	mm	80	80	80	80
	Max. Tool Diameter (Empty)	mm	120	120	120	120
	Max. Tool Length	mm	300	300	300	300
	Max. Tool Weight	kg	7	7	7	7
	Tool Change Time	sec	1.4	1.4	1.4	1.4
	Spindle Motor	kw	7.5/11	7.5/11	7.5/11	7.5/11
Motor	Three-Axis Servo Motor	kw	2.0/2.0/3.0	2.0/2.0/3.0	2.0/2.0/3.0	2.0/2.0/3.0
Accuracy	Accuracy	mm	± 0.005	± 0.005	± 0.005	± 0.005
	Repeatability	mm	± 0.003	± 0.003	± 0.003	± 0.003
Power Required	Power Requirement	kva	20	20	20	20
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	2720 × 2740 × 2637	2480 × 3260 × 2410	2830 × 2760 × 3000	2830 × 2760 × 2900
	Gross Weight	t	5.8	5.8	6.8	7

Standard Accessories

- ★ Safety Door
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Air Gun
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Spindle Coolant Nozzles
- ★ Coolant Gun
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Coolant Tank & Chip Tray
- ★ Tool Box
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off
- ★ Maintenance and Operational Manual

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Workpiece & Tool Probe
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Laser Tool Probe
- ★ 12000rpm DDS Spindle
- ★ 15000rpm DDS Spindle
- ★ HSK-63-18000 Built-In Motor

Model			YSV-1160	YSV-1265	YSV-1270	YSV-1482	YSV-1782
Subject	Specifications	Units					
Travel	X/Y/Z axis	mm	1100/600/600	1200/680/680	1200/700/700	1400/800/750	1700/800/750
	Spindle Nose to Worktable	mm	120~720	120~800	120~800	150~900	150~900
	Spindle Center to Column	mm	650	700	700	890	880
	XYZ Guideway	Roller Linear Guideway					
Worktable	Worktable Size (L*W)	mm	1200 × 600	1320 × 650	1320 × 650	1500 × 800	1800 × 800
	Maximum Table Load	kg	1000	1200	1200	1500	1500
	T-Slot	no/mm	5~18 × 100	5~18 × 100	5~18 × 100	6~22 × 110	7~22 × 110
Spindle	Spindle taper	type	BBT-40	BBT-40	BBT-40	BBT-40	BBT-50
	Spindle speed	rpm	10000	10000	10000	10000	6000
	Spindle Drive Type	Belt					
Feedrate	Rapid Traverse(X/Y/Z)	m/min	30 × 30 × 30	30 × 30 × 30	30 × 30 × 30	24 × 24 × 24	24 × 24 × 24
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10	10	10
Tool Changer	Automatic Tool Changer	ARM Type					
	Type of Tool Shank	type	BT-40	BT-40	BT-40	BT-40	BT-50
	Tool Storage Capacity	tools	24	24	24	24	24
	Max. Tool Diameter (Adjacent)	mm	80	80	80	80	105
	Max. Tool Diameter (Empty)	mm	120	120	120	120	200
	Max. Tool Length	mm	300	300	300	300	350
	Max. Tool Weight	kg	7	7	7	7	15
	Tool Change Time	sec	1.4	1.4	1.4	1.4	4.9
	Spindle Motor	kw	15	15	15	15	15
Motor	Three-Axis Servo Motor	kw	3.0/3.0/4.5	3.0/3.0/4.5	3.0/3.0/4.5	3.0/3.0/4.5	3.0/3.0/4.5
Accuracy	Accuracy	mm	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005
	Repeatability	mm	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003
Power Required	Power Requirement	kva	25	25	25	25	25
	Air Pressure Requirement	kg/cm ²	6*9	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	3170 × 2900 × 2900	3300 × 2940 × 3100	3300 × 2940 × 3100	4800 × 3800 × 3800	5300 × 3800 × 3800
	Gross Weight	t	7	8.7	8.7	10.5	11.5

Standard Accessories

- ★ Safety Door
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Air Gun
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Spindle Coolant Nozzles
- ★ Coolant Gun
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Coolant Tank & Chip Tray
- ★ Tool Box
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off
- ★ Maintenance and Operational Manual

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Workpiece & Tool Probe
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Rotary Table
- ★ 12000rpm DDS Spindle
- ★ 15000rpm DDS Spindle
- ★ HSK-63-18000 Built-In Motor

YSL Series Parameters

Model			YSL-1060	YSL-1270	YSL-1375
Subject	Specifications	Units			
Travel	X/Y/Z axis	mm	1000 × 600 × 680	1200 × 700 × 700	1300 × 750 × 600
	Spindle Nose to Worktable	mm	120~800	120~820	70~670
	Spindle Center to Column	mm	620	715	785
	XYZ Guideway	—	XY Linear Guideway, Z Box Way		
Worktable	Worktable Size (L*W)	mm	1100 × 570	1320 × 650	1360 × 700
	Maximum Table Load	kg	1000	1200	1500
	T-Slot	No/m	5-18 × 90	5-18 × 100	5-18 × 135
Spindle	Spindle taper	type	BBT-40	BBT-40	BBT-50
	Spindle speed	rpm	10000	10000	6000
	Spindle Drive Type	—	Belt		
Feedrate	Rapid Traverse(X/Y/Z)	m/min	30/30/15	30/30/15	20/20/10
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10
Tool Changer	Automatic Tool Changer	—	ARM Type		
	Type of Tool Shank	type	BT-40	BT-40	BT-50
	Tool Storage Capacity	tools	24	24	24
	Max. Tool Diameter (Adjacent)	mm	80	80	105
	Max. Tool Diameter (Empty)	mm	120	120	200
	Max. Tool Length	mm	300	300	350
	Max. Tool Weight	kg	7	7	15
	Tool Change Time	sec	1.4	1.4	4.9
	Spindle Motor	kw	7.5/11	15	15
Motor	Three-Axis Servo Motor	kw	2.0/2.0/3.0	3.0/3.0/4.5	3.0/3.0/4.5
Accuracy	Accuracy	mm	±0.005/300	±0.005/300	±0.005/300
	Repeatability	mm	±0.003	±0.003	±0.003
Power Required	Power Requirement	kva	20	20	25
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	2630 × 2760 × 3330	3300 × 2940 × 3570	4700 × 3800 × 3250
	Gross Weight	t	7.0	9.0	11

Standard Accessories

- ★ Safety Door
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Air Gun
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Spindle Coolant Nozzles
- ★ Coolant Gun
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Coolant Tank & Chip Tray
- ★ Tool Box
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off
- ★ Maintenance and Operational Manual

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Workpiece & Tool Probe
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Laser Tool Probe
- ★ Rotary Table

Model			YSL-1482	YSL-1782	YSL-1890
Subject	Specifications	Units			
Travel	X/Y/Z axis	mm	1400 × 800 × 750	1700 × 800 × 750	1800 × 900 × 600
	Spindle Nose to Worktable	mm	150~900	150~900	150~750
	Spindle Center to Column	mm	880	880	950
	XYZ Guideway	—	XY Linear Guideway, Z Box Way		
Worktable	Worktable Size (L*W)	mm	1500 × 800	1700 × 800	2000 × 900
	Maximum Table Load	kg	1500	1500	1600
	T-Slot	No/m	6-22 × 110	5-22 × 135	5-22 × 165
Spindle	Spindle taper	type	BBT-50	BBT-50	BBT-50
	Spindle speed	rpm	6000	6000	6000
	Spindle Drive Type	—	Belt		
Feedrate	Rapid Traverse(X/Y/Z)	m/min	24/24/10	20/20/10	20/20/10
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10
Tool Changer	Automatic Tool Changer	—	ARM Type		
	Type of Tool Shank	type	BT-50	BT-50	BT-40
	Tool Storage Capacity	tools	24	24	24
	Max. Tool Diameter (Adjacent)	mm	80	105	105
	Max. Tool Diameter (Empty)	mm	120	200	200
	Max. Tool Length	mm	300	350	350
	Max. Tool Weight	kg	7	15	15
	Tool Change Time	sec	1.4	4.9	4.9
	Spindle Motor	kw	15	18.5	18.5
Motor	Three-Axis Servo Motor	kw	3.0/3.0/4.5	7.0/4.5/4.5	7.0/4.5/4.5
Accuracy	Accuracy	mm	±0.005/300	±0.005/300	±0.005/300
	Repeatability	mm	±0.003	±0.003	±0.003
Power Required	Power Requirement	kva	25	35	35
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	4700 × 2550 × 2766	4800 × 3800 × 3800	5300 × 3800 × 3800
	Gross Weight	t	10.5	13	16.5

Standard Accessories

- ★ Safety Door
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Air Gun
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Spindle Coolant Nozzles
- ★ Coolant Gun
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Coolant Tank & Chip Tray
- ★ Tool Box
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off
- ★ Maintenance and Operational Manual

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Workpiece & Tool Probe
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Rotary Table

YSP Series Parameters

Model			YSP-857	YSP-1060	YSP-1580	YSP-1890
Subject	Specifications	Units				
Travel	X/Y/Z axis	mm	800/500/700	1100/500/600	1500/800/700	1800/900/680
	Spindle Nose to Worktable	mm	110-810	180-780	185-885	160-840
	Spindle Center to Column	mm	575	655	810	950
	Three-Axis Guideway		Box Way			
Worktable	Worktable Size (L*W)	mm	1000x530	1300x600	1700x800	2000x900
	Maximum Table Load	kg	600	800	1500	1600
	T-Slot	no/mm	5-18x100	5-18x120	5-22x135	5-22x165
Spindle	Spindle taper	type	BBT-40	BBT-40	BBT-50	BBT-50
	Spindle speed	rpm	8000	8000	6000	6000
	Spindle Drive Type		Belt			
Feedrate	Rapid Traverse(X/Y/Z)	m/min	15/15/12	15/15/12	10/10/10	10/10/10
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10	10
Tool Changer	Automatic Tool Changer		ARM Type			
	Type of Tool Shank	type	BT-40	BT-40	BT-50	BT-50
	Tool Storage Capacity	tools	24	24	24	24
	Max. Tool Diameter (Adjacent)	mm	80	80	105	105
	Max. Tool Diameter (Empty)	mm	120	120	200	200
	Max. Tool Length	mm	300	300	350	350
	Max. Tool Weight	kg	7	7	15	15
	Tool Change Time	sec	1.4	1.4	4.9	4.9
Motor	Spindle Motor	kw	7.5/11	15	18.5	18.5
	Three-Axis Servo Motor	kw	2.0/2.0/3.0	3.0/3.0/4.5	7.0/4.5/4.5	7.0/4.5/4.5
Accuracy	Accuracy	mm	±0.01	±0.01	±0.01	±0.01
	Repeatability	mm	±0.005	±0.005	±0.005	±0.005
Power Required	Power Requirement	kva	20	30	40	40
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	2450*2400*2850	3300*2600*2800	4420*3800*3650	4850*3900*3700
	Gross Weight	t	6.5	8.5	14	17

Standard Accessories

- ★ Safety Door
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Air Gun
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Spindle Coolant Nozzles
- ★ Coolant Gun
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Coolant Tank & Chip Tray
- ★ Tool Box
- ★ Spindle Nose Air Blow
- ★ Levelling Bolts and Pads
- ★ M30 Auto Off
- ★ Maintenance and Operational Manual

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Workpiece & Tool Probe
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Umbrella Type Auto Tool Changer (16/20)
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Rotary Worktable (4Th-Axis)
- ★ Arm Type Tool Changer

YS Customized Parameters

Model			YSD4-260	YSD8-565	YSCP-835	YS650-5AX
Subject	Specifications	Units				
Travel	X/Y/Z axis	mm	260/280/200	550/650/550	800/450	700/450/400
	Spindle Nose to Worktable	mm	150-350	150-700	250-700	200-600
	Spindle Center to Column	mm	810	700	740	400
	Three-Axis Guideway		Roller Linear Guideway			
Worktable	Worktable Size (L*W)	mm	800*700	2100*550	800*700	φ650
	Maximum Table Load	kg	800	1500	1000	200
	Countertop bolt hole	mm				
	T-Slot	no/mm	5-16 × 120	3-18 × 140	5-18*120	5-18*100
	Worktable Indexing					0.001°
Spindle	Spindle taper	type	BT30	BT30		HSKA63
	Spindle speed	rpm	24000	24000		18000
	Spindle Drive Type		Built-In			
Feedrate	Rapid Traverse(X/Y/Z)	m/min	12/12/12	30/30/30	10/10	30/30/30
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10	10
Tool Changer	Automatic Tool Changer		In-line	In-line		ARM
Motor	Spindle Motor	kw	7.5*4	7.5*8		20
	Three-Axis Servo Motor	kw	1.5/1.5/1.5	3.0/3.0/4.5	3.0/3.0	3.0/3.0/3.0
Accuracy	Accuracy	mm	±0.005	±0.005	±0.005	±0.005
	Repeatability	mm	±0.003	±0.003	±0.003	±0.003
Power Required	Power Requirement	kva	5	20	10	30
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	2100*2100*2550	3100*2600*3050	3000*2500*2300	
	Gross Weight	t	4.8	9.8	5	12

Standard Accessories

- ★ Safety Door
- ★ Heat Exchange for Electric Cabinet
- ★ Coolant Tank & Chip Tray
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Air Gun
- ★ Spindle Nose Air Blow
- ★ Levelling Bolts and Pads
- ★ Coolant Gun
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ Oil Skimmer
- ★ Tool Breakage System
- ★ Workpiece & Tool Probe
- ★ Oil Mist Collector
- ★ Arm Type Tool Changer
- ★ CTS

YANGSEN**YSH SERIES****YSH-500 Features:**

- Suitable for complex processing of box parts. Reliable Automatic Tool Change and pallet change. can be a clamping four face milling, drilling, reaming, boring, reaming, tapping, and other processes. High Rigidity Structural Design, to ensure high efficiency and high precision of single or small batch products processing requirements.

**機臺切削性能:**

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
Cutting depth		Cutter diameter		Tapping	
5mm		Ø82		M36	
Cutter	Ø120mm*5T	Cutter	Ø68mm*2T	Cutter	M24*3P
Spindle speed	560rpm	Spindle speed	680rpm	Spindle speed	200rpm
Feed	F500	Feed	F80	Feed	F600
Width	80mm	Width	68mm	Width	24mm

YSH-500 Features of machine body:

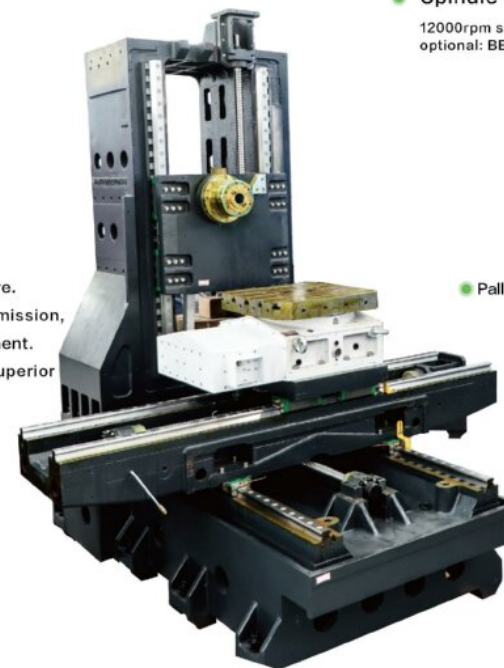
- **Base:** Adopted FEM analysis for layout of the reinforcement to ensure strength, rigidity, and the stability of the accuracy.
- **Column:** The herringbone frame structure is adopted, and the longitudinal and transverse rib are designed in the cavity, ensure the column has high torsional and bending rigidity.
- **Headstock:** BBT DDS spindle, equipped with automatic constant temperature circulation cooling device, ensure the smallest temperature rising and the thermal deformation of spindle, maintain high machining accuracy.

● **Spindle**

12000rpm spindle.
optional: BBT50, 6000RPM, Adopt 5pcs bearing

● **Single pallet**

- No gap roller structure.
- High efficiency transmission, no thermal displacement.
- Maintenance-free, superior brakes.
- Strong structure.

● **Pallet: 500 × 500mm**

● **Three-axis travel:**
X:900/ Y:570/ Z:680mm
The reserved installation position of the Optical Linear Scales

● **ATC**

Optional: 24T/32T

● **Optical Linear Scales**

Optional Heidenhain, Fagor optical linear scales, accuracy ±5um, to ensure the positioning accuracy of the machine tool.

YSH-800 Horizontal Machining Structure Characteristics:

- This product installs T design, worktable rotating structure form, ultra-wide guide guideway structure, the standard configuration of large torque, and high-speed motor. You could order exchange worktable separately. Our products are suitable for processing various complex parts. It is the preferred equipment in the field of automobile engines and cavity processing in the 5G field.



Machine cutting performance:

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
					
Cutting depth 7mm		Cutter diameter Ø82		Tapping M36	
Cutter Ø120mm*5T		Cutter Ø82mm*2T		Cutter M36*3P	
Spindle speed 420rpm		Spindle speed 500rpm		Spindle speed 120rpm	
Feed F500		Feed F100		Feed F480	
Width 100mm		Width 82mm		Width 36mm	

YSH-800 Horizontal Machining Frame Machine Characteristics:

Machine bed, Column

- Equilateral triangle structure of the column, multi-layer stiffeners are arranged to improve the stability of the machine bed.
- Positive T structure bed, X-axis stepped layout, enlarged line guideway span, rigid support.
- Adopt high-strength Rexroth roller guide, high load bearing, stable precision.



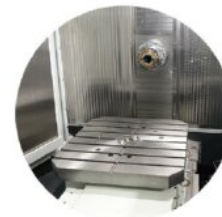
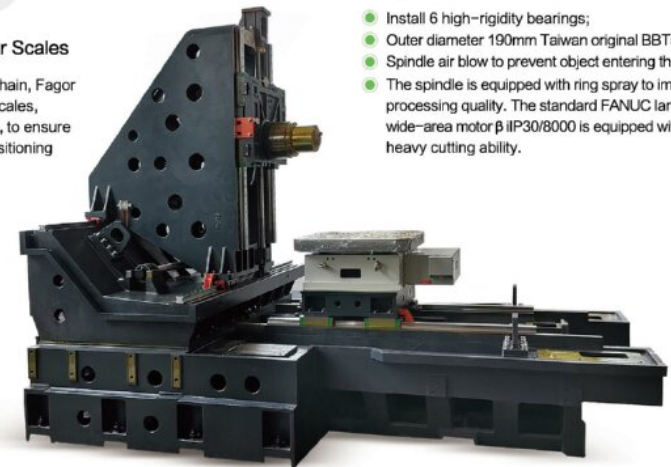
Optical Linear Scales

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy $\pm 5\mu\text{m}$, to ensure machine tool positioning accuracy.



Spindle

- Install 6 high-rigidity bearings;
- Outer diameter 190mm Taiwan original BBT50 spindle;
- Spindle air blow to prevent object entering the spindle;
- The spindle is equipped with ring spray to improve the processing quality. The standard FANUC large-torque wide-area motor β IP30/8000 is equipped with stronger heavy cutting ability.



Double exchange table/ four-axis turntable

- Realize workpiece exchange and improve processing efficiency;
- The workpiece is placed outside for easy clamping;
- High rigidity alloy turbine, wear-resistant, high positioning accuracy;
- Heavy locking, reduce deformation, resistant to heavy cutting.



Tool magazine

- Using Taiwan imported frequency conversion tool magazine, tool change speed is fast and stable.

YANGSEN**YSH SERIES****YSH-700D Horizontal Machining Structure Characteristics:**

- This product installs T design, worktable rotating structure form, ultra-wide guide guideway structure, the standard configuration of large torque, and high-speed motor. You could order exchange worktable separately. Our products are suitable for processing various complex parts. It is the preferred equipment in the field of automobile engines and cavity processing in the 5G field.

**Machine cutting performance:**

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
					
Cutting depth 7mm		Cutter diameter Ø82		Tapping M36	
Cutter Ø120mm*5T		Cutter Ø82mm*2T		Cutter M36*3P	
Spindle speed 420rpm		Spindle speed 500rpm		Spindle speed 120rpm	
Feed F500		Feed F100		Feed F480	
Width 100mm		Width 82mm		Width 36mm	

YSH-700D Horizontal Machining Frame Machine Characteristics:**Machine bed, Column**

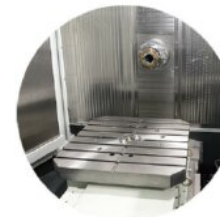
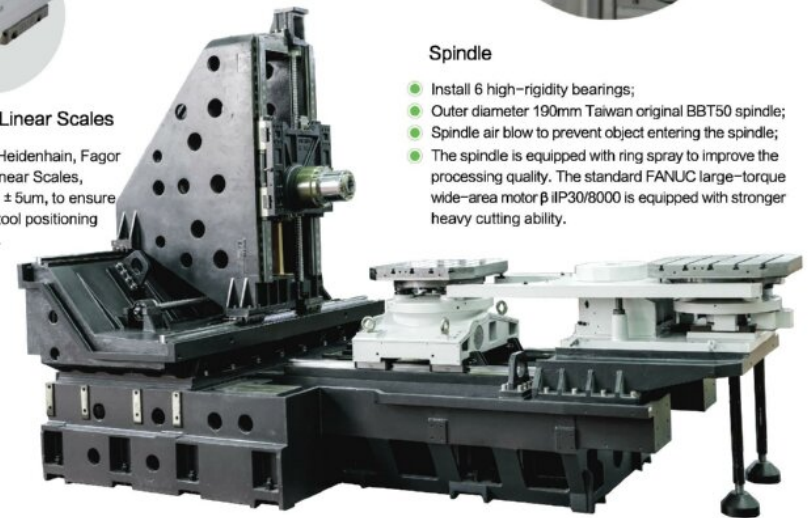
- Equilateral triangle structure of the column, multi-layer stiffeners are arranged to improve the stability of the machine bed.
- Positive T structure bed, X-axis stepped layout, enlarged line guideway span, rigid support.
- Adopt high-strength Rexroth roller guide, high load bearing, stable precision.

**Optical Linear Scales**

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy $\pm 5\mu m$, to ensure machine tool positioning accuracy.

**Spindle**

- Install 6 high-rigidity bearings;
- Outer diameter 190mm Taiwan original BBT50 spindle;
- Spindle air blow to prevent object entering the spindle;
- The spindle is equipped with ring spray to improve the processing quality. The standard FANUC large-torque wide-area motor β IP30/8000 is equipped with stronger heavy cutting ability.

**Double exchange table/
four-axis turntable**

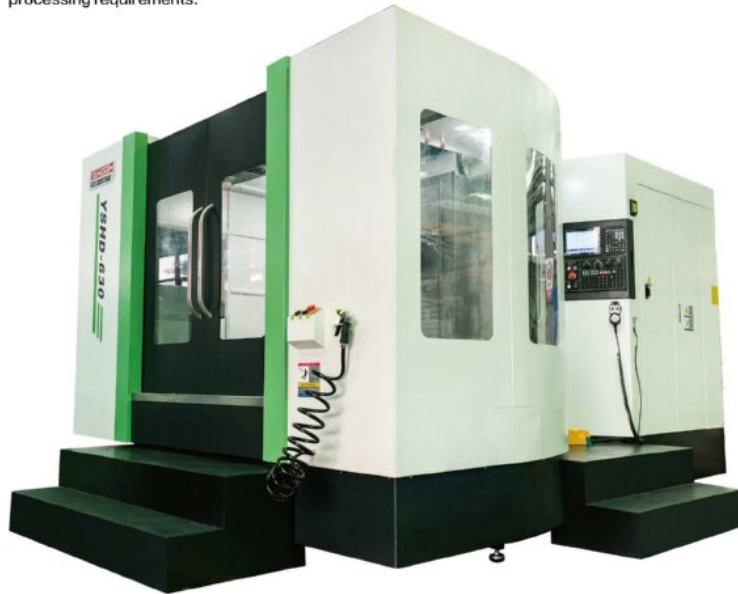
- Realize workpiece exchange and improve processing efficiency;
- The workpiece is placed outside for easy clamping;
- High rigidity alloy turbine, wear-resistant, high positioning accuracy;
- Heavy locking, reduce deformation, resistant to heavy cutting.

**Tool magazine**

- Umbrella type 45T frequency conversion ATC

YSHD-630 Horizontal Machining Structure Characteristics:

- One piece T-type base structure with rib construction for unprecedented rigidity. Suitable for complex processing of box parts, in the processing process can automatically exchange the tool, can be a clamping four face milling, drilling, reaming, boring, reaming, tapping, modern machine tools and control concept, compact structure design, to ensure high efficiency and high precision of single or small batch product processing requirements.



Machine cutting performance:

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
Cutting depth		Cutter diameter		Tapping	
6mm		Ø82		M36	
Cutter	Ø120mm*5T	Cutter	Ø78mm*2T	Cutter	M36*3P
Spindle speed	420rpm	Spindle speed	500rpm	Spindle speed	120rpm
Feed	F500	Feed	F80	Feed	F480
Width	90mm	Width	78mm	Width	36mm

YSHD-630 Horizontal Machining Frame Machine Characteristics:

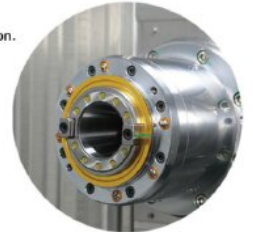
Machine bed, Column

- One piece T-type base structure with rib construction for unprecedented rigidity.
- Wood casting is made of aluminum-wood combination, resin sand casting and HT300 cast iron.
- Design adopted FEM analysis for layout of M-type ribs, ensure their strength and rigidity, optimized the performance indicators of each component, ensure the stability of accuracy.



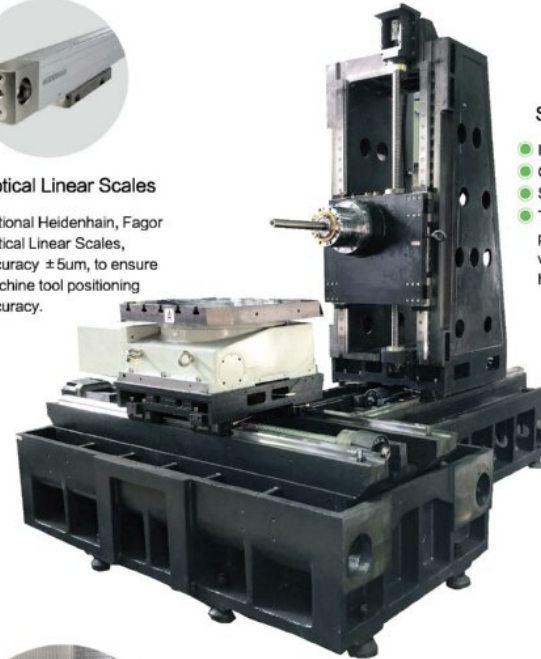
Optical Linear Scales

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy $\pm 5\mu\text{m}$, to ensure machine tool positioning accuracy.



Spindle

- Install 6 high-rigidity bearings;
- Outer diameter 190mm Taiwan original BBT50 spindle;
- Spindle air blow to prevent object entering the spindle;
- The spindle is equipped with ring spray to improve the processing quality. The standard FANUC large-torque wide-area motor β II P30/8000 is equipped with stronger heavy cutting ability.



Double exchange table/ four-axis turntable

- CNC rotary table adopts high rigidity nickelo alloy copper turbine, durable wear resistance, high segmentation stability;
- Double strong locking device, large locking surface, heavy cutting resistance;
- Positioning with three high-precision clutch teeth, repeated positioning accuracy of 5".



ATC

- Standard 24T, DISC-type. optional: 40T/60T chain type.

YANGSEN**YSHD SERIES****YSHD-1250 Horizontal Machining Structure Characteristics:**

- One piece T-type base structure with rib construction for unprecedented rigidity. Suitable for complex processing of box parts; can be a clamping four face milling, drilling, reaming, boring, reaming, tapping, and other processes. High Rigidity Structural Design, to ensure high efficiency and high precision of single or small batch products processing requirements.

**Machine cutting performance:**

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
					
Cutting depth 7mm		Cutter diameter Ø82		Tapping M36	
Cutter Ø120mm*5T		Cutter Ø88mm*2T		Cutter M36*3P	
Spindle speed 420rpm		Spindle speed 480rpm		Spindle speed 120rpm	
Feed F600		Feed F80		Feed F480	
Width 100mm		Width 88mm		Width 36mm	

YSHD-1250 Horizontal Machining Frame Machine Characteristics:**Machine bed, Column**

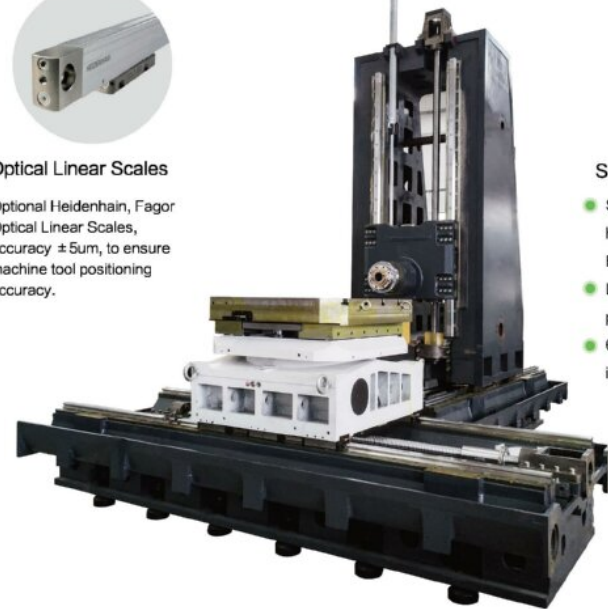
- The CNC rotary table worm gear type, four tapered clamping positioning mechanism, super clamping force to ensure the stability of the worktable and positioning precision.
- Strong blowing system depends on the tapered positioning to blow out strong air column, clear up iron chips, and ensure the clamping stability as well as position precision of worktable by means of the airtight detection of tapered hole.
- One piece T-type base structure with rib construction for unprecedented rigidity. The reasonable fabric optimized the chip removal structure and improved the guide lubrication recovery system, and improved the overall rigidity and appearance quality of the casting.

**Optical Linear Scales**

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy $\pm 5\mu m$, to ensure machine tool positioning accuracy.

**Spindle**

- Spindle motor equipped with high-torque wide-range motor, BBT50/190 spindle made in Taiwan.
- Labyrinth and labyrinth blow protection design.
- 6000rpm speed, ensure high-rigidity and high-accuracy.

**ATC**

- Hydraulic arm-type ATC: Optional 24T/40T/60T

Single pallet

- Adopt high rigidity Nickel alloy copper turbine, durable wear resistance, high segmentation stability;
- double strong locking device, large locking surface, heavy cutting resistance;
- Three pieces of high precision clutch teeth positioning, high repeated positioning accuracy.



YANGSEN**YSH SERIES****YSH-1000D Horizontal Machining Structure Characteristics:**

- One piece T-type base structure with rib construction for unprecedented rigidity. Suitable for complex processing of box parts; can be a clamping four face milling, drilling, reaming, boring, reaming, tapping, and other processes. High Rigidity Structural Design, to ensure high efficiency and high precision of single or small batch products processing requirements.

**Machine cutting performance:**

Surface Milling Steel 45#		Drilling Holes Steel 45#		Tapping Steel 45#	
Cutting depth 7mm		Cutter diameter Ø82		Tapping M36	
Cutter	Ø120mm*5T	Cutter	Ø88mm*2T	Cutter	M36*3P
Spindle speed	420rpm	Spindle speed	480rpm	Spindle speed	120rpm
Feed	F600	Feed	F80	Feed	F480
Width	100mm	Width	88mm	Width	36mm

YSH-1000D Horizontal Machining Frame Machine Characteristics:**Machine bed, Column**

- The CNC rotary table worm gear type, four tapered clamping positioning mechanism, super clamping force to ensure the stability of the worktable and positioning precision.
- Strong blowing system depends on the tapered positioning to blow out strong air column, clear up iron chips, and ensure the clamping stability as well as position precision of worktable by means of the airtight detection of tapered hole.
- One piece T-type base structure with rib construction for unprecedented rigidity. The reasonable fabric optimized the chip removal structure and improved the guide lubrication recovery system, and improved the overall rigidity and appearance quality of the casting.

**Spindle**

- Spindle motor equipped with high-torque wide-range motor, BBT50/190 spindle made in Taiwan.
- Labyrinth and labyrinth blow protection design.
- 6000rpm speed, ensure high-rigidity and high-accuracy.

**Optical Linear Scales**

- Optional Heidenhain, Fagor Optical Linear Scales, accuracy $\pm 5\mu m$, to ensure machine tool positioning accuracy.

**Double exchange table**

- Adopt high rigidity Nickel alloy copper turbine, durable wear resistance, high segmentation stability;
- double strong locking device, large locking surface, heavy cutting resistance;
- Three pieces of high precision clutch teeth positioning, high repeated positioning accuracy.

**ATC**

- Hydraulic arm-type ATC: Optional 40T/60T/128T

YSH Series Parameters

Model			YSH-500	YSH-800	YSH-500D	YSH-700D	YSH-800D
Subject	Specifications	Units					
Travel	X/Y/Z axis	mm	1100/800/600	1300/800/1000	1100/750/600	1300/800/900	1300/800(1200选)
	Spindle Nose to Worktable	mm	100~700	150~1150	140~740	150~1050	150~950
	Spindle Center to Column	mm	50~850	150~950	0~750	150~950	150~950
	Three-Axis Guideway		Roller Linear Guideway				
Worktable	Worktable Size (L*W)	mm	500×500	800×800	500×500	700×700*2	800×800*2
	Maximum Table Load	t	0.6	2	0.5	1.2	1.2
	Table Screw	mm					
	T-Slot	no/mm	5-18×100	7-18×125	5-18×100	7-18×125	7-18×125
	Number of Pallet	pcs	1	1	1	1	1
	Table Indexing		1° /0.001°	1° /0.001°	1° /0.001°	1° /0.001°	1° /0.001°
	Maximum Turning Diameter	mm	φ1000	φ1500	φ700	φ1100	φ1000
Spindle	Spindle Taper	type	BBT-40	BBT-50	BBT-40	BBT-50	BBT-50
	Spindle Speed	rpm	12000	8000	12000	8000	8000
	Spindle Drive Type		Belt				
Feedrate	Rapid Traverse(X/Y/Z)	m/min	36/36/36	36/36/30	36/36/36	36/36/30	36/36/30
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10	10	10
Tool Changer	Automatic Tool Changer		Chain Type (Servo Drive)				
	Type of Tool Shank	type	BT-40	BT-50	BT-40	BT-40	BT-40
	Tool Storage Capacity	tools	24	45	24	45	45
	Max. Tool Diameter (Adjacent)	mm	80	125	80	125	125
	Max. Tool Diameter (Empty)	mm	120	250	120	250	250
	Max. Tool Length	mm	300	350	300	350	350
	Max. Tool Weight	kg	8	25	8	25	25
	Tool Change Time	sec	4.9	4.2	4.9	4.2	4.2
Motor	Spindle Motor	kw	11/15.0	15/18.5	11/15.0	15/18.5	15/18.5
	Three-Axis Servo Motor	kw	3.0/3.0/3.0	3.0/3.0/3.0	3.0/3.0/3.0	3.0/3.0/3.0	3.0/3.0/3.0
Accuracy	Accuracy	mm	±0.005	±0.005	±0.005	±0.005	±0.005
	Repeatability	mm	±0.003	±0.003	±0.003	±0.003	±0.003
Power Required	Power Requirement	kva	30	30	30	35	35
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	4520*3560*3230	5830*4636*3050	4732*3904*3230	7000*5265*3120	7000*5265*3120
	Gross Weight	t	9	18.5	10	21	21.5

Standard Accessories

- ★ Arm Type Tool Changer
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Coolant Tank & Chip Tray
- ★ Daul LED Work Light
- ★ LED 3 Color Warning Light
- ★ M30 Auto Off
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Tool Breakage System
- ★ Chain Type Chip Conveyor System
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Rotary Table
- ★ Workpiece & Tool Probe

Model			YSHD-630	YSHD-1000	YSHD-1250	YSHD-630D	YSHD-1000D	YSHD-1250D
Subject	Specifications	Units						
Travel	X/Y/Z axis	mm	1100/750/950	2000(选)2500(选)1500/1600	2500/1500/1600	1100/750/950	2000(选)2500(选)1450/1600	2500/1450/1600
	Spindle Nose to Worktable	mm	130~1080	350~1950	350~1950	120~870	350~1950	350~1950
	Spindle Center to Column	mm	120~870	50~1550	350~1700	130~1080	0~1450	0~1450
	Three-Axis Guideway		Roller Linear Guideway					
Worktable	Worktable Size (L*W)	mm	630*630	1000*1000	1250*1250	630×630*2	1000×1000*2	1250×1250*2
	Maximum Table Load	t	0.8	3.0	5.0	1	3.5	3.5
	Table Screw	mm						
	T-Slot	no/mm	5-18x100	5-22x200	5-22×200	5-18×100	5-22×200	5-22×200
	Number of Pallet	pcs	1	1	1	2	2	2
	Table Indexing		1° / 0.001°	1° / 0.001°	1° / 0.001°	1° /0.001°	1° /0.001°	1° / 0.001°
	Maximum Turning Diameter	mm	φ1100(1700选配)	φ2000	φ2000	φ1100	φ2000	φ2000
Spindle	Spindle Taper	type	BBT-50	BBT-50	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle Speed	rpm	6000	6000	6000	6000	6000	6000
	Spindle Drive Type		Belt					
Feedrate	Rapid Traverse(X/Y/Z)	m/min	30/30/30	10/10/10	10/10/10	30/30/30	10/10/10	10/10/10
	Cutting Feedrate(X/Y/Z)	m/min	10	10	10	10	10	10
Tool Changer	Automatic Tool Changer		Chain Type (Servo Drive)	ARM Type (Servo Drive)	ARM Type (Servo Drive)	Chain Type (Servo Drive)	ARM Type (Servo Drive)	ARM Type (Servo Drive)
	Type of Tool Shank	type	BT-50	BT-50	BT-50	BT-50	BT-50	BT-50
	Tool Storage Capacity	tools	24	40	40	40	40	40
	Max. Tool Diameter (Adjacent)	mm	112	125	125	112	125	125
	Max. Tool Diameter (Empty)	mm	200	250	250	200	250	250
	Max. Tool Length	mm	450	600	600	450	600	600
	Max. Tool Weight	kg	18	25	25	18	25	25
	Tool Change Time	sec	4.9	14	14	4.9	14	14
Motor	Spindle Motor	kw	15/18.5	18.5/22	18.5/22	15/18.5	18.5/22	18.5/22
	Three-Axis Servo Motor	kw	3.0/3.0/3.0	6.0/6.0/6.0	6.0/6.0/6.0	3.0/3.0/3.0	6.0/6.0/6.0	6.0/6.0/6.0
Accuracy	Accuracy	mm	±0.005	±0.01	±0.01	±0.005	±0.01	±0.01
	Repeatability	mm	±0.003	±0.005	±0.005	±0.003	±0.005	±0.005
Power Required	Power Requirement	kva	30	35	40	35	40	45
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	4750*2900*2680/6830*4940*4470/6830*5140*4470	6460*3560*2680/9000*5588*4498/9000*6088*4498				
	Gross Weight	t	12	22	23	15	25	28

Standard Accessories

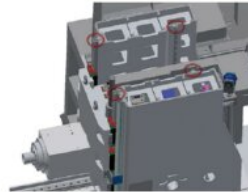
- ★ Arm Type Tool Changer
- ★ Automatic Lubricating System
- ★ Fully Enclosure Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Coolant Tank & Chip Tray
- ★ Daul LED Work Light
- ★ LED 3 Color Warning Light
- ★ M30 Auto Off
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ Tool Breakage System
- ★ Chain Type Chip Conveyor System
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Rotary Table
- ★ Workpiece & Tool Probe

YANGSEN**YSBD SERIES****YSBD-130 Horizontal Boring Machining Center Structure Characteristics:****Tool magazine structure**

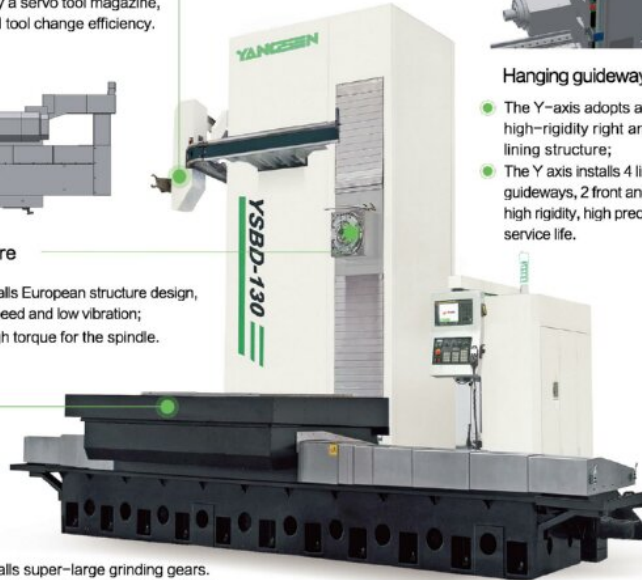
- 40 and 60 tools guideway type tool magazines, which are driven by a servo tool magazine, improve the overall tool change efficiency.

**Hanging guideway structure**

- The Y-axis adopts a box-in-box high-rigidity right and left paired lining structure;
- The Y axis installs 4 linear guide guideways, 2 front and 2 back, with high rigidity, high precision and long service life.

Spindle structure

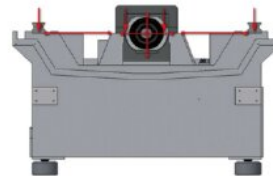
- The main shaft installs European structure design, high rigidity, high speed and low vibration;
- Low speed and high torque for the spindle.



- The worktable installs super-large grinding gears. It is combined with twin-turbo, vortex anti-backlash structure to ensure accuracy.

Transmission structure

- The X and Z axis transmission method installs direct-acting four-wheel drive. It has stable accuracy. Also, it could eliminate backlash, improve torsional rigidity and allow angle;
- The Y-axis installs direct-drive transmission and cooperates with a German reducer to improve torsional rigidity.

**Counterweight structure**

- Use servo frequency conversion hydraulic station, the counterweight of the hydraulic cylinder reduces the axial load and lengthen the life.

Casting structure design

- The linear guideway installation surface and the ballscrew center are on the same plane, which makes the ballscrew drive more stable and ensures the stability of the overall accuracy of the machine tool.

YSBD Series Parameters

Model		YSBD-110/5T	YSBD-110/6T	YSBD-110/8T	YSBD-130/8T	YSBD-130/15T	YSBD-130/20T
Subject	Specifications Units						
Travel	X-Axis (Standard)	mm	2000	2000	2500	3000	4000
	X-Axis (Optional)	mm	2500	2500	2500/3000/3500/4000	2500/3000/3500	3500/4500/5500
	Y-Axis (Standard)	mm	1800	1800	2000	2600	3200
	Y-Axis (Optional)	mm	2000	2000	/	2600	3200
	Z-Axis (Standard)	mm	1500	1500	1500	1500	2000
	Z-Axis (Optional)	mm	/	/	2000	2000	2500
	W-Axis (Standard)	mm	550	550	550	700	700
Worktable	Worktable Size -Standard (L*W)	mm	1250 × 1250/5T	1250 × 1500/5T	1400 × 1600/8T	1400 × 1600/8T	1800 × 2200/15T
	Worktable Size -Option (L*W)	mm	/	/	/	1600 × 1800/10T	2500 × 2500/20T
	Table Indexing	deg	1°/0.001°	1°/0.001°	0.001°	0.001°	0.001°
	T-Slot	mm	22H7 × 150 × 7	22H7 × 150 × 7	24H7 × 200 × 7	24H7 × 200 × 7	24H7 × 200 × 7
Spindle	Spindle Nose to Worktable	mm	65-1665	65-1665	65-2065	75-2075	75-2675
	Spindle Nose to Table Center	mm	-125-1925	-125-1925	-25-2025	-40-2160	60-2260
	Spindle Diameter	mm	ø110	ø110	ø110	ø130	ø130
	Spindle Type	/	BT50	BT50	BT50	BT50	BT50
	Spindle R.P.M.	rpm	3500	3500	3500	3000	3000
	Spindle Transmission	/	Belt				
Motor	Spindle Motor	kw	18.5/22	18.5/22	18.5/22	22 / 30	22 / 30
	Maximum Torque	Nm	973.5/1155	973.5/1155	973.5/1155	3011/4108.5	3011/4108.5
Accuracy	Indexing Accuracy	arc/sec	6° / 10°	6° / 10°	10°	10°	10°
	Indexing Repeatability	arc/sec	±2° / ±4°	±2° / ±4°	±4°	±4°	±4°
	Position Accuracy	mm	0.01	0.01	0.01	0.01	0.01
	Repeatability	mm	0.005	0.005	0.005	0.005	0.005
Drive Type	X/Y/Z- Axis	/	Direct				
	W-Axis	/	Belt				
Feedrate	X/Y/Z/W	m/min	10/10/10/6	10/10/10/6	10/10/10/6	10/10/10/5	10/10/10/5
	Cutting Feedrate	m/min	10/10/10/8	10/10/10/8	10/10/10/8	10/10/10/8	10/10/10/8
	Rapid Traverse	m/min	40	40	40	60	60
Tool Changer	Tool Storage Capacity	/	40	40	40	60	60
	Tool Selection Method	/	Servo Drive				
	Max. Tool Diameter	kg	25	25	25	25	25
	Max. Tool Weight	mm	500	500	500	500	500
	Max. Tool Length	mm	ø125/ø250	ø125/ø250	ø125/ø250	ø125/ø250	ø125/ø250
Power Required	Tool Change Time	sec	14	14	14	14	14
	Air Pressure Requirement	kg/cm²	6	6	6	6	6
	Power Requirement	kva	50	50	65	90	95
Others	External Dimensions (L*W*H)	mm	6600 × 5150 × 5250	6600 × 5150 × 5250	6800 × 6000 × 5500	6900 × 6100 × 5000	8000 × 7500 × 5600
	Gross Weight	t	30	31	34.5	41.5	45

Standard Accessories

- ★ ARM Type Tool Changer
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Coolant Tank & Chip Tray
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ M30 Auto Off
- ★ Spindle Nose Air Blow
- ★ Leveling Bolts and Pads
- ★ Rotary Table

Options

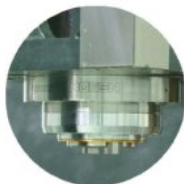
- ★ Optical Linear Scale
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Oil Mist Collector
- ★ Oil Skimmer
- ★ Workpiece & Tool Probe
- ★ Auto Parts Probe Measuring System

YANGSEN**YSMV series****YSMV Gantry Structure Characteristics:**

- Strong rigidity, high stability, excellent structure. Optimized structure design enhance cutting stability and dynamic precision for the perfect combination of high power, high torque, high efficiency and high precision processing. Suitable for large heavy processing fields: ship-building, metallurgy, petrochemical, mining machinery, electric power energy, engineering machinery.



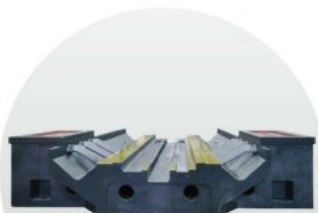
Optional 24T, 40T BT50 ATC

**BBT50 spindle**

- Adopt BBT50- $\phi 200$ high rigid spindle, 6 imported large steel ball bearings, super cutting ability

Base structure

- Chute integrated casting base, stable rigidity.
- The column equipped with convex rib reinforcement structure, the rib supporting the guideway vertically, without component force.
- Reasonable height of bed design, making the base more stable.

**Triangular step design**

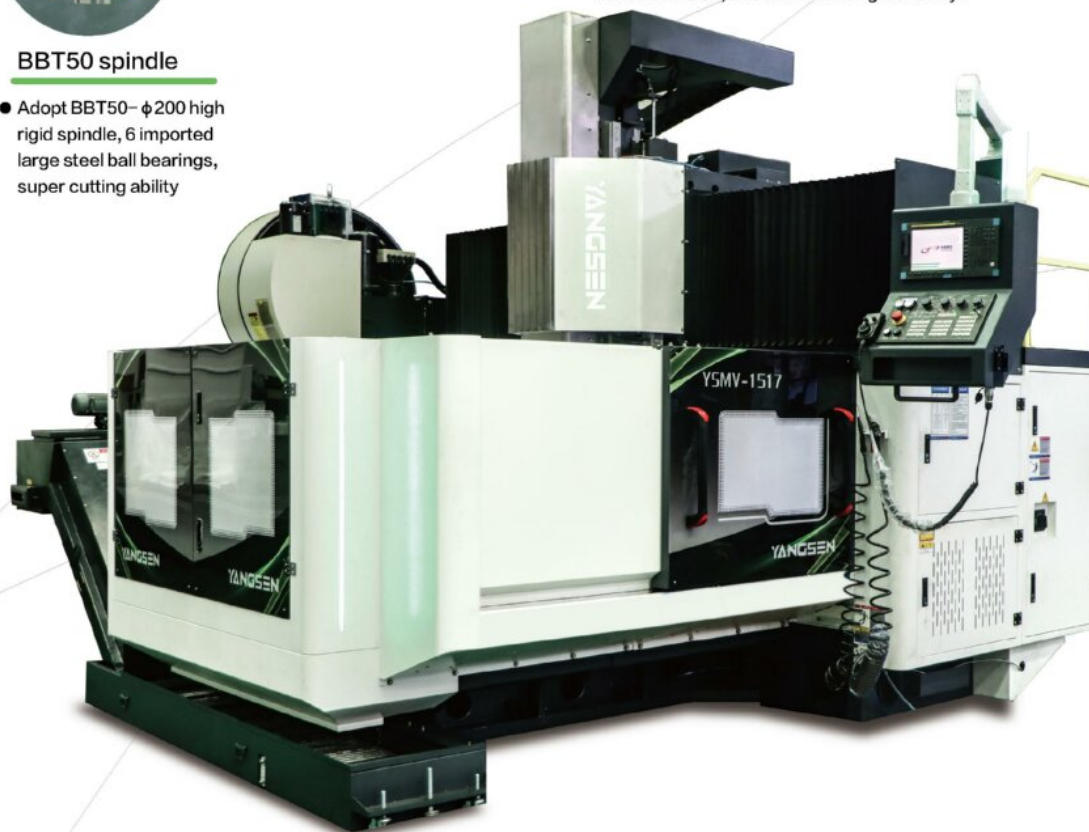
- Increase the span of the Y-axis guideway, reduce the machining vibration, make the moving center of gravity closer to the transmission axis.

**Ram four-guideway symmetrical design**

- The symmetrical distribution design of the four-guideway, excellent rigidity for high-speed and high-precision cutting.
- DDS BBT50 spindle, the small size of the headstock section to reduce the interference.
- The inclined plate on the top dissipates heat to reduce heat extension, ensure machining accuracy.

**The integrated of the symmetrical column and beam**

- The integrated design of the column and beam.
- Improve the rigidity of the machine when roughing, can also process thin workpieces.



YANGSEN**YSMV series****YSMV Gantry Structure Characteristics:**

- Strong rigidity, high stability, excellent structure. Optimized structure design enhance cutting stability and dynamic precision for the perfect combination of high power, high torque, high efficiency and high precision processing. Suitable for large heavy processing fields: ship-building, metallurgy, petrochemical, mining machinery, electric power energy, engineering machinery.

Vertical and horizontal ATC**Auto milling head**

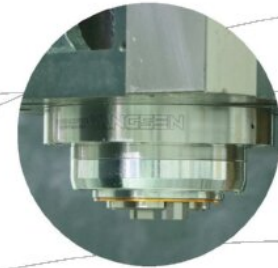
- The Gleason spiral transmission bevel gear.
- Smooth transmission, high precision, long service life.
- The internal drive quenched parts of the milling head.
- The small fit clearance between teeth.

**BBT50 spindle**

- Adopt BBT50- $\phi 200$ high rigid spindle, 6 imported large steel ball bearings, super cutting ability

Five-axis simultaneously dual-direction head

- A/C axis torque motor + motorized spindle
- A/C axis torque motor structure.
- A/C axis hydraulic clamping for high-speed cutting.

**Italy BF gear box**

- High performance, low noise.
- Available to expand the range of constant motor power, easy to install.
- Available to be used with multiple series of motors.
- Available to adapt to high tensile strength, compact appearance.



YANGSEN

YSM SERIES

YSM Gantry Structure Characteristics:

- Strong rigidity, high stability, excellent structure. Optimized structure design enhance cutting stability and dynamic precision for the perfect combination of high power, high torque, high efficiency and high precision processing. Suitable for large heavy processing fields: ship-building, metallurgy, petrochemical, mining machinery, electric power energy, engineering machinery.

Vertical and horizontal ATC



Auto milling head

- The Gleason spiral transmission bevel gear.
- Smooth transmission, high precision, long service life.
- The internal drive quenched parts of the milling head.
- The small fit clearance between teeth.

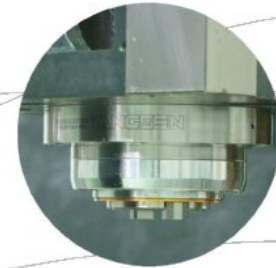


BBT50 spindle

- Adopt BBT50- $\phi 200$ high rigid spindle, 6 imported large steel ball bearings, super cutting ability

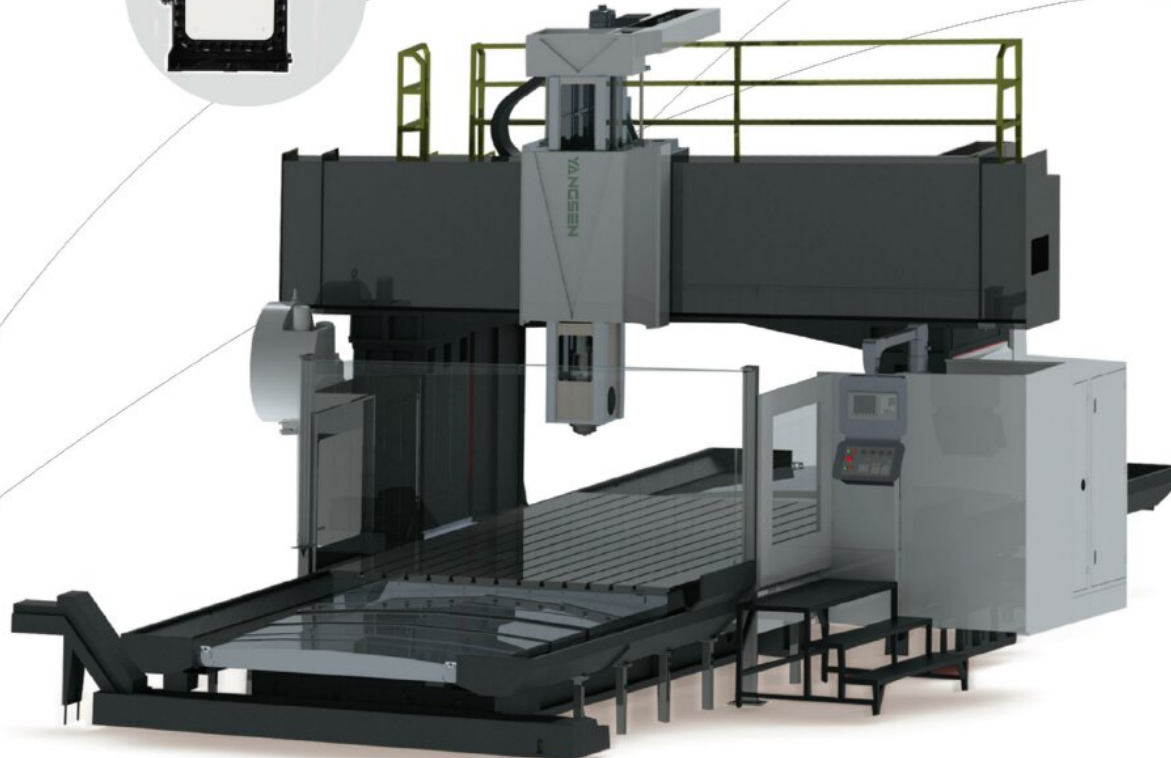
Five-axis simultaneously dual-direction head

- A/C axis torque motor + motorized spindle
- A/C axis torque motor structure.
- A/C axis hydraulic clamping for high-speed cutting.



Italy BF gear box

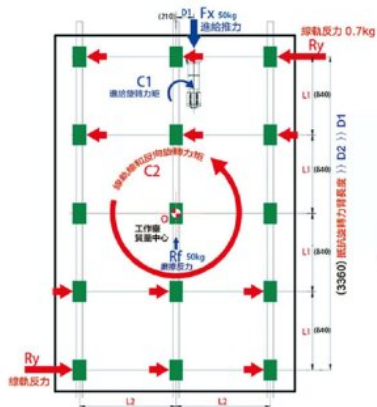
- High performance, low noise.
- Available to expand the range of constant motor power, easy to install.
- Available to be used with multiple series of motors.
- Available to adapt to high tensile strength, compact appearance.



YANGSEN**YSM SERIES**

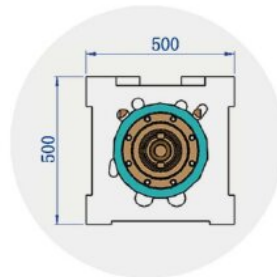
● Gantry moving nut structure

The X-axis is driven by a moving nut, and three-point support is used in the middle to maintain the rotation accuracy of the ballscrew rod. At the same time, the load capacity is large, and the cutting vibration resistance is good. It can improve the dynamic characteristics of the machine tool and increase the accuracy, stability, and service life of the machine tool.



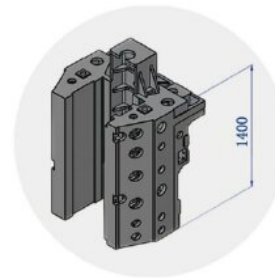
● Base structure

- ★ Compared with the double-guideway design, the rigidity is 50% higher;
- ★ Compared with the four-guideways design, it is more symmetrical and evenly distributed, reducing the power loss caused by the resistance of the multi-guideway slider;
- ★ 3m wide worktable, 2.1m base linear guideway. It is best ratio span of 0.7.



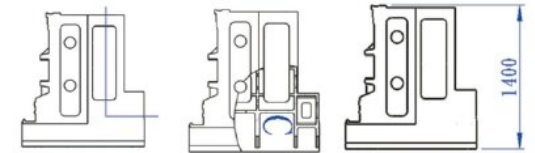
● Square ram

- ★ Bigger dimension 500*500, the original size is 460*460. It is a more heavy-duty design;
- ★ The built-in direct connection design reduces the power transmission consumption from the spindle motor to the spindle.



● Slide features

Large-size and heavy-duty design ensures that the upper part of the ram is firmly hugged by the three elongated sliders, and the lower part is supported by the four standard sliders.



● Nitrogen counterweight

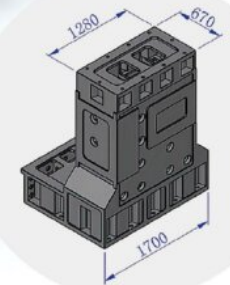
Reduce the load of the motor and the bearing force of the ballscrew, increase the life of the ballscrew and the motor, the acceleration of the Z axis to ensure the processing accuracy.

● Beam structure

- ★ Stepped L-shaped design improves rigidity;
- ★ The concave C-shaped structure has better bending resistance;
- ★ Large section design;
- ★ Finite element analysis.

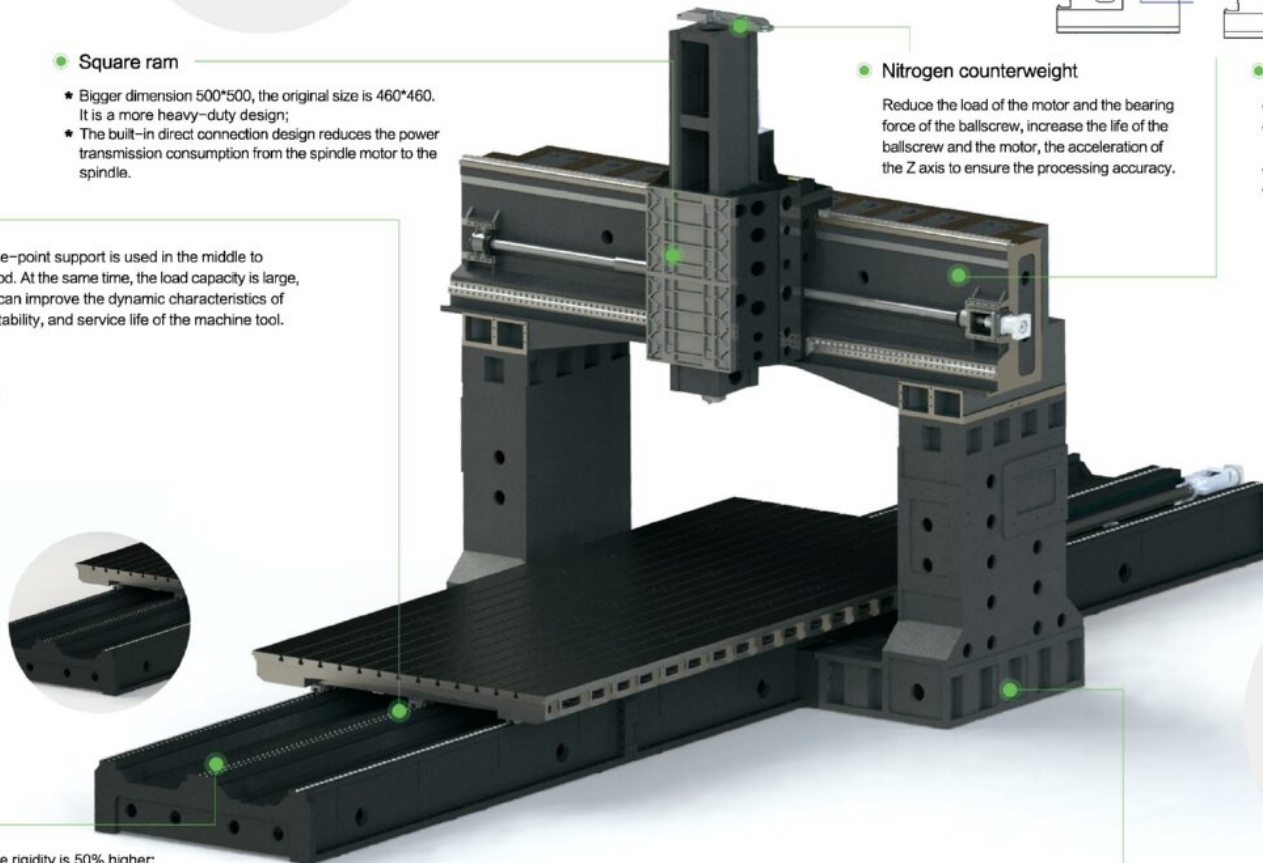


● Ballscrew support frame system



● Column structure

The 1.28m ultra-wide design of the column reduces the overall cutting vibration and makes the machine tool stable.





YSM Series Parameters

Model			YSM-1517	YSM-2013	YSM-2217	YSM-2518	YSM-2817
Subject	Specifications	Units					
Travel	X-Axis	mm	1500	2000	2200	2500	2800
	Y-Axis	mm	1700	1300	1700	2000	1700
	Z-Axis	mm	800	800	800	960	800
	Spindle Nose to Worktable	mm	90-890	190-990	90-890	140-1100	90-890
	Three-Axis Guideway	——	X/Y Heavy Load Roller Linear Guideway Z-Axis Box Way T- shape ram				
	Door Width	——	1700	1300	1700	1800	1700
Worktable	Worktable Size(L*W)	mm	1500*1400	2000*1000	2200*1400	2500*1600	2700*1400
	Maximum Table Load	t	2	3	6	10	7
	T-Slot	no/mm	7-22*220	7-22*150	7-22*200	9-22*180	7-22*200
Spindle	Spindle Type	type	BT-50	BT-50	BT-50	BT-50	BT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000	6000
	Spindle Drive Type	——	Belt				
Feedrate	Rapid Traverse (X/Y/Z)	m/min	12/12/12	12/12/12	12/12/12	12/12/12	12/12/12
	Cutting Feedrate (X/Y/Z)	m/min	10	10	10	10	10
Tool Changer	ATC	——	24T(Option: 40/60)				
Motor	Spindle Motor	Nm	143-259	143-259	143-259	143-259	143-259
	Three-Axis Servo Motor	Nm	36/36/36	36/36/36	36/36/36	36/36/36	36/36/36
Accuracy	Accuracy	mm	0.012/0.012/0.012	0.012/0.012/0.012	0.012/0.012/0.012	0.015/0.012/0.012	0.015/0.012/0.012
	Repeatability	mm	0.008/0.008/0.008	0.008/0.008/0.008	0.008/0.008/0.008	0.010/0.010/0.008	0.010/0.010/0.008
Power Required	Power Requirement	kva	40	40	40	40	40
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	4092*4677*3941	6436*4402*4250	6212*4677*3941	7232*4845*4472	7212*5139*3977
	Gross Weight	t	16	18.5	18	25	20

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Levelling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System

Model			YSM-1518	YSM-2218	YSM-3018	YSM-3022
Subject	Specifications	Units				
Travel	X-Axis	mm	1500	2200	3000	3000
	Y-Axis	mm	1700	1800	1800	2200
	Z-Axis	mm	800	800	800	1000
	Spindle Nose to Worktable	mm	180-1180	110-1180	180-1180	180-1180
	Three-Axis Guideway	——	X/Y Heavy Load Roller Linear Guideway Z-Axis Box Way T- shape ram			
	Door Width	——	1800	1800	1800	2200
Worktable	Worktable Size(L*W)	mm	1500 × 1400	2200 × 1400	2700 × 1400	2700 × 1400
	Maximum Table Load	t	2	6	7	7
	T-Slot	no/mm	7-22*200	7-22*200	7-22*200	7-22*200
Spindle	Spindle Type	type	BT-50	BT-50	BT-50	BT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type	——	Belt			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	12/12/12	12/12/12	12/12/12	12/12/12
	Cutting Feedrate (X/Y/Z)	m/min	10	10	10	10
Tool Changer	ATC	——	24T(Option: 40/60)			
Motor	Spindle Motor	Nm	143-259	143-259	143-259	143-259
	Three-Axis Servo Motor	Nm	36/36/36	36/36/36	36/36/36	36/36/36
Accuracy	Accuracy	mm	0.012/0.012/0.012	0.012/0.012/0.012	0.012/0.012/0.012	0.015/0.012/0.012
	Repeatability	mm	0.008/0.008/0.008	0.008/0.008/0.008	0.010/0.010/0.008	0.010/0.010/0.008
Power Required	Power Requirement	kva	40	40	40	40
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	4092*4677*3941	6212*4677*3941	7212*5139*3977	7212*5139*3977
	Gross Weight	t	16	18	20	20

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Levelling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System

YSMV Series Parameters

Model			YSMV-1517	YSMV-2217	YSMV-2817	YSMV-3018
Subject	Specifications	Units				
Travel	X-Axis	mm	1500	2200	2800	3000
	Y-Axis	mm	1700	1700	1700	1700
	Z-Axis	mm	800	800	800	800
	Spindle Nose to Worktable	mm	80-890	80-890	80-890	80-890
	Three-Axis Guideway		XYZ Heavy Load Roller Linear Guideway			
	Door Width		1700	1700	1700	1700
Worktable	Worktable Size(L*W)	mm	1500 × 1400	2200 × 1400	2800 × 1400	2800 × 1400
	Maximum Table Load	t	2	6	7	8
	T-Slot	no/mm	7-22*200	7-22*200	7-22*200	7-22*200
Spindle	Spindle Type	type	BT-50	BT-50	BT-50	BT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type		DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	12/12/12	12/12/12	12/12/12	12/12/12
	Cutting Feedrate (X/Y/Z)	m/min	10	10	10	10
Tool Changer	ATC		24T(Option: 40/60)			
Motor	Spindle Motor	Nm	143-259	143-259	143-259	143-259
	Three-Axis Servo Motor	Nm	36/36/36	36/36/36	36/36/36	36/36/36
Accuracy	Accuracy	mm	0.012/0.012/0.012	0.012/0.012/0.012	0.012/0.012/0.012	0.012/0.012/0.012
	Repeatability	mm	0.008/0.008/0.008	0.008/0.008/0.008	0.008/0.008/0.008	0.008/0.008/0.008
Power Required	Power Requirement	kva	40	40	40	40
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	4092*4677*3941	6212*4677*3941	7212*5139*3977	7412*5139*3977
	Gross Weight	t	16	18	20	22

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System

Model			YSMV-3021	YSMV-5021	YSMV-7021
Subject	Specifications	Units			
Travel	X-Axis	mm	3000	5000	7000
	Y-Axis	mm	2100	2100	2100
	Z-Axis	mm	1000	1000	1000
	Spindle Nose to Worktable	mm	200-1200	200-1200	200-1200
	Three-Axis Guideway		XYZ Heavy Load Roller Linear Guideway		
	Door Width		2100	2100	2100
Worktable	Worktable Size(L*W)	mm	3000 × 1800	5000 × 1800	6400 × 1800
	Maximum Table Load	t	10	18	25
	T-Slot	no/mm	9-28*200	9-28*200	11-28*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000
	Spindle Drive Type		DDS		
Feedrate	Rapid Traverse (X/Y/Z)	m/min	12/12/12	10/12/12	8/12/12
	Cutting Feedrate (X/Y/Z)	m/min	8	8	8
Tool Changer	ATC		24T(Option: 40/60)		
Motor	Spindle Motor	Nm	143-259	143-259	140-283
	Three-Axis Servo Motor	Nm	36/36/36	36/36/36	38/30/30
Accuracy	Accuracy	mm	0.03/0.02/0.015	0.03/0.02/0.015	0.045/0.02/0.015
	Repeatability	mm	0.018/0.015/0.01	0.018/0.015/0.01	0.035/0.015/0.01
Power Required	Power Requirement	kva	40	40	50
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	9000*5318*5350	10750*5318*5350	17000*5318*5350
	Gross Weight	t	28	35	56

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System

YSMV Series Parameters

Model			YSMV-3027	YSMV-4027	YSMV-7027	YSMV-9027
Subject	Specifications	Units				
Travel	X-Axis	mm	3000	4000	7000	9000
	Y-Axis	mm	2700	2700	2700	2700
	Z-Axis	mm	1300	1300	1300	1300
	Spindle Nose to Worktable	mm	150-1450	150-1450	150-1450	150-1450
	Three-Axis Guideway	——	XYZ Heavy Load Roller Linear Guideway			
	Door Width	——	2700	2700	2700	2700
Worktable	Worktable Size(L*W)	mm	3000×2200	4000×2200	6400×2200	8800×2200
	Maximum Table Load	t	12	18	25	35
	T-Slot	no/mm	11-28*200	11-28*200	11-28*200	11-28*200
Spindle	Spindle Type	type	BT-50	BT-50	BT-50	BT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type	——	DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	12/12/12	12/12/12	8/12/12	6/12/12
	Cutting Feedrate (X/Y/Z)	m/min	10	10	10	10
Tool Changer	-ATC	——	24T(Option: 40/60)			
Motor	Spindle Motor	Nm	143-259	143-259	140-283	140-283
	Three-Axis Servo Motor	Nm	36/36/36	36/36/36	38/30/30	38/30/30
Accuracy	Accuracy	mm	0.012/0.012/0.012	0.012/0.012/0.012	0.012/0.012/0.012	0.012/0.012/0.012
	Repeatability	mm	0.008/0.008/0.008	0.008/0.008/0.008	0.008/0.008/0.008	0.008/0.008/0.008
Power Required	Power Requirement	kva	40	40	40	40
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	8657*6004*5287	10808*6304*5531	17000*6004*5287	21800*6004*5287
	Gross Weight	t	36	43	61	73

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System

Model			YSMV-5030	YSMV-7030	YSMV-9030	YSMV-10030
Subject	Specifications	Units				
Travel	X-Axis	mm	5000	7000	9000	10000
	Y-Axis	mm	3000	3000	3000	3000
	Z-Axis	mm	1300	1300	1300	1300
	Spindle Nose to Worktable	mm	150-1450	150-1450	150-1450	150-1450
	Three-Axis Guideway	——	XYZ Heavy Load Roller Linear Guideway			
	Door Width	——	3000	3000	3000	3000
Worktable	Worktable Size(L*W)	mm	4600×2600	6400×2600	8800×2600	10000×2600
	Maximum Table Load	t	22	25	35	40
	T-Slot	no/mm	11-28*200	11-28*200	11-28*200	11-28*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type	——	DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	10/12/12	8/12/12	6/12/12	6/12/12
	Cutting Feedrate (X/Y/Z)	m/min	8	8	8	8
Tool Changer	-ATC	——	24T(Option: 40/60)			
Motor	Spindle Motor	Nm	143-259	140-283	140-283	140-283
	Three-Axis Servo Motor	Nm	36/36/36	38/30/30	38/30/30	38/30/30
Accuracy	Accuracy	mm	0.03/0.02/0.015	0.03/0.02/0.015	0.055/0.02/0.015	0.045/0.02/0.015
	Repeatability	mm	0.018/0.015/0.01	0.022/0.015/0.01	0.045/0.015/0.01	0.035/0.015/0.01
Power Required	Power Requirement	kva	40	50	50	50
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	12168*6304*5531	17000*6304*5531	21800*6304*5531	23800*6304*5531
	Gross Weight	t	50	63	75	85

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Leveling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System

YSMV Series Parameters

Model			YSMV-5035	YSMV-7035	YSMV-9035	YSMV-10035
Subject	Specifications	Units				
Travel	X-Axis	mm	5000	7000	9000	10000
	Y-Axis	mm	3500	3500	3500	3500
	Z-Axis	mm	1300	1300	1300	1300
	Spindle Nose to Worktable	mm	150-1450	150-1450	150-1450	150-1450
	Three-Axis Guideway		XYZ Heavy Load Roller Linear Guideway			
	Door Width		3500	3500	3500	3500
Worktable	Worktable Size(L*W)	mm	4600 × 3000	6400 × 3000	8800 × 3000	10000 × 3000
	Maximum Table Load	t	22	25	35	40
	T-Slot	no/mm	11-28*200	11-28*200	11-28*200	11-28*200
Spindle	Spindle Type	type	BT-50	BT-50	BT-50	BT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type		DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	10/12/12	8/12/12	8/12/12	8/12/12
	Cutting Feedrate (X/Y/Z)	m/min	8	8	8	8
Tool Changer	ATC		24T(Option: 40/60)			
Motor	Spindle Motor	Nm	143-259	140-283	140-283	140-283
	Three-Axis Servo Motor	Nm	36/36/36	38/30/30	38/30/30	38/30/30
Accuracy	Accuracy	mm	0.03/0.02/0.015	0.03/0.02/0.015	0.055/0.02/0.015	0.055/0.02/0.015
	Repeatability	mm	0.018/0.015/0.01	0.022/0.015/0.01	0.045/0.015/0.01	0.045/0.015/0.01
Power Required	Power Requirement	kva	40	40	40	40
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	12428 × 6986 × 5500	16688 × 6986 × 5500	20965 × 6986 × 5500	26300 × 6986 × 5500
	Gross Weight	t	56	68	78	87

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Levelling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System
- ★ 90° Auto Milling Head with AHC

Model			YSMV-5041	YSMV-7041	YSMV-9041	YSMV-10041
Subject	Specifications	Units				
Travel	X-Axis	mm	5000	7000	9000	10000
	Y-Axis	mm	4100	4100	4100	4100
	Z-Axis	mm	1300	1300	1300	1300
	Spindle Nose to Worktable	mm	150-1450	150-1450	150-1450	150-1450
	Three-Axis Guideway		XYZ Heavy Load Roller Linear Guideway			
	Door Width		4100	4100	4100	4100
Worktable	Worktable Size(L*W)	mm	4600 × 3000	6400 × 3000	8800 × 3000	10000 × 3000
	Maximum Table Load	t	22	25	35	40
	T-Slot	no/mm	11-28*200	11-28*200	11-28*200	11-28*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type		DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	10/12/12	8/12/12	8/12/12	8/12/12
	Cutting Feedrate (X/Y/Z)	m/min	8	8	8	8
Tool Changer	ATC		24T(Option: 40/60)			
Motor	Spindle Motor	Nm	143-259	140-283	140-283	140-283
	Three-Axis Servo Motor	Nm	36/36/36	38/30/30	38/30/30	38/30/30
Accuracy	Accuracy	mm	0.03/0.02/0.015	0.03/0.02/0.015	0.055/0.02/0.015	0.055/0.02/0.015
	Repeatability	mm	0.018/0.015/0.01	0.022/0.015/0.01	0.045/0.015/0.01	0.045/0.015/0.01
Power Required	Power Requirement	kva	40	50	50	50
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	11740 × 7135 × 5800	16850 × 7135 × 5800	23700 × 7135 × 5800	26300 × 7135 × 5800
	Gross Weight	t	68	78	85	96

Standard Accessories

- ★ Rigid Tapping
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Dual LED Work Light
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Spindle Nose Air Blow
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off
- ★ Levelling Bolts and Pads

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 40T ATC
- ★ Tool Breakage System
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ 90° Manual Milling Head
- ★ Air Conditioner
- ★ Auto Parts Probe Measuring System
- ★ 90° Auto Milling Head with AHC

YSM28/32 Square Ram Series Parameters

Model			YSM-3028	YSM-5028	YSM-7028
Subject	Specifications	Units			
Travel	X-Axis	mm	3000	5000	7000
	Y-Axis	mm	2800	2800	2800
	Z-Axis	mm	1250 (Optional 1500)		
	Spindle Nose to Worktable	mm	350-1350	350-1350	350-1350
	Three-Axis Guideway	———	X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram		
	Door Width	———	2800	2800	2800
	Type of Ram	———	Square Ram (500x500)		
Worktable	Worktable Size(L*W)	mm	3400*2200	4600*2200	6400*2200
	Maximum Table Load	t	10	14	20
	T-Slot	no/mm	11-28*200	11-28*200	11-28*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000
	Spindle Drive Type	———	DDS		
Feedrate	Rapid Traverse (X/Y/Z)	m/min	10/10/10	10/10/10	8/10/10
	Cutting Feedrate (X/Y/Z)	m/min	8	8	6
Tool Changer	ATC	———	24T(Option: 40/60)		
Motor	Spindle Motor	Nm	140-286	140-286	140-286
	Three-Axis Servo Motor	Nm	36/36/36	38/36/36	38/36/36
Accuracy	Accuracy	mm	0.03/0.025/0.015	0.03/0.025/0.015	0.045/0.025/0.015
	Repeatability	mm	0.02/0.02/0.01	0.025/0.02/0.01	0.03/0.02/0.01
Power Required	Power Requirement	kva	45	55	55
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	8800*6050*5820(6320)	11600*6050*5820(6320)	15600*6050*5820(6320)
	Gross Weight	t	45	51	63

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart

- ★ Geared Box
- ★ Levelling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System

Model			YSM-5032	YSM-7032	YSM-9032
Subject	Specifications	Units			
Travel	X-Axis	mm	5000	7000	9000
	Y-Axis	mm	3200	3200	3200
	Z-Axis	mm	1250 (Optional 1500)		
	Spindle Nose to Worktable	mm	350-1350	350-1350	350-1350
	Three-Axis Guideway	———	X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram		
	Door Width	———	3200	3200	3200
	Type of Ram	———	Square Ram (500x500)		
Worktable	Worktable Size(L*W)	mm	4600*2600	6400*2600	8800*2600
	Maximum Table Load	t	20	25	30
	T-Slot	no/mm	13-28*200	13-28*200	13-28*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000
	Spindle Drive Type	———	DDS		
Feedrate	Rapid Traverse (X/Y/Z)	m/min	10/10/10	6/10/10	6/10/10
	Cutting Feedrate (X/Y/Z)	m/min	8	6	6
Tool Changer	ATC	———	24T(Option: 40/60)		
Motor	Spindle Motor	Nm	140-286	140-286	140-286
	Three-Axis Servo Motor	Nm	38/36/36	38/36/36	38/36/36
Accuracy	Accuracy	mm	0.035/0.025/0.015	0.045/0.025/0.015	0.045/0.025/0.015
	Repeatability	mm	0.025/0.02/0.01	0.03/0.02/0.01	0.03/0.02/0.01
Power Required	Power Requirement	kva	55	55	60
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	11600*6450*5820(6320)	15600*6450*5820(6320)	19600*6450*5820(6320)
	Gross Weight	t	56	66	76

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ Geared Box
- ★ Levelling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System

YSM38/42 Square Ram Series Parameters

Model			YSM-5038	YSM-7038	YSM-9038
Subject	Specifications	Units			
Travel	X-Axis	mm	5000	7000	9000
	Y-Axis	mm	3800	3800	3800
	Z-Axis	mm	1250 (Optional 1500)		
	Spindle Nose to Worktable	mm	350~1600	350~1600	350~1600
	Three-Axis Guideway		X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram		
	Door Width		3800	3800	3800
	Type of Ram		Square Ram (500x500)		
Worktable	Worktable Size(L*W)	mm	4600*3000	6400*3000	8800*3000
	Maximum Table Load	t	20	30	35
	T-Slot	no/mm	15-28*200	15-28*200	15-28*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000
	Spindle Drive Type		DDS		
Feedrate	Rapid Traverse (X/Y/Z)	m/min	8/10/10	6/10/10	6/10/10
	Cutting Feedrate (X/Y/Z)	m/min	8	6	6
Tool Changer	ATC		24T(Option: 40/60)		
Motor	Spindle Motor	Nm	140~286	140~286	140~286
	Three-Axis Servo Motor	Nm	38/36/36	38/36/36	38/36/36
Accuracy	Accuracy	mm	0.03/0.025/0.015	0.045/0.03/0.015	0.05/0.03/0.015
	Repeatability	mm	0.025/0.02/0.01	0.03/0.02/0.01	0.035/0.02/0.01
Power Required	Power Requirement	kva	55	60	60
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	11600*7000*6320	15600*7000*6320	19600*7000*6320
	Gross Weight	t	66	77	91

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart

- ★ Geared Box
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System

Model			YSM-5042	YSM-7042	YSM-9042
Subject	Specifications	Units			
Travel	X-Axis	mm	5000	7000	9000
	Y-Axis	mm	4200	4200	4200
	Z-Axis	mm	1250 (Optional 1500)		
	Spindle Nose to Worktable	mm	350~1600	350~1600	350~1600
	Three-Axis Guideway		X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram		
	Door Width		4200	4200	4200
	Type of Ram		Square Ram (500x500)		
Worktable	Worktable Size(L*W)	mm	4600*3000	6400*3000	8800*3000
	Maximum Table Load	t	20	30	35
	T-Slot	no/mm	15-28*200	15-28*200	15-28*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000
	Spindle Drive Type		DDS		
Feedrate	Rapid Traverse (X/Y/Z)	m/min	8/10/10	6/10/10	6/10/10
	Cutting Feedrate (X/Y/Z)	m/min	8	6	6
Tool Changer	ATC		24T(Option: 40/60)		
Motor	Spindle Motor	Nm	140~286	140~286	140~286
	Three-Axis Servo Motor	Nm	38/36/36	38/36/36	38/36/36
Accuracy	Accuracy	mm	0.03/0.025/0.015	0.045/0.03/0.015	0.05/0.03/0.015
	Repeatability	mm	0.025/0.02/0.01	0.03/0.02/0.01	0.035/0.02/0.01
Power Required	Power Requirement	kva	60	60	60
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	11600*8000*6320	15600*8000*6320	19600*8000*6320
	Gross Weight	t	70	82	95

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart

- ★ Geared Box
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System

YANGSEN**YSMD SERIES**

● Square Ram and Sliding Seat Structure

- ★ Dimension: 500x500, Heavy-Duty Design;
- ★ Direct-Driven Design;
- ★ Large-Size and Heavy-Duty design ensures that the ram is firmly connected;
- ★ Three extended sliders at the top and four standard sliders at the bottom.



● Gear Transmission

High Precision, Heavy Load, High Speed,
Low Noise, Longer Service Life.



● Dual Motor with Anti-Backlash Transmission Structure

High Precision, Heavy Load, High Speed, Low Noise, Longer Service Life.



● Vertical / Horizontal Automatic Tool Magazine



● Italy BF Gear Box

High performance speed, low noise. It could expand motor constant power range. It is easy to install. The machine can be used in conjunction with multiple series of motors. It can adapt to high-strength tension, small size.



● Extended Angle Milling Head



● Two-Way Spindle Angle Milling Head



● Automatic Hydraulic Angle Milling Head

YSMD42 Moving Column Series Parameters

Model			YSMD-6042	YSMD-8042	YSMD-10042	YSMD-12042
Subject	Specifications	Units				
Travel	X-Axis	mm	6000	8000	10000	12000
	Y-Axis	mm	4200	4200	4200	4200
	Z-Axis	mm	1500	1500	1500	1500
	Spindle Nose to Worktable	mm	350-1850	350-1850	350-1850	350-1850
	Three-Axis Guideway		X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram			
	Door Width		4200	4200	4200	4200
	Type of Ram		Square Ram (500x500)			
Worktable	Worktable Size(L*W)	mm	6000*3500	8000*3500	10000*3500	12000*3500
	Maximum Table Load	t	50	50	50	50
	T-Slot	no/mm	36*200	36*200	36*200	36*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type		DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	6/8/8	6/8/8	6/8/8	6/8/8
	Cutting Feedrate (X/Y/Z)	m/min	6	6	6	6
Tool Changer	ATC		24T(Option: 40/60)			
Motor	Spindle Motor	KW	17-42	17-42	17-42	17-42
	Three-Axis Servo Motor	KW	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2
Accuracy	Accuracy	mm	0.04/0.035/0.02	0.04/0.035/0.02	0.055/0.035/0.02	0.06/0.035/0.02
	Repeatability	mm	0.03/0.025/0.015	0.035/0.025/0.015	0.04/0.025/0.015	0.045/0.025/0.015
Power Required	Power Requirement	kva	60	60	60	60
	Air Pressure Requirement	kg/cm ²	6^8	6^8	6^8	6^8
Others	External Dimensions (L*W*H)	mm	15200 × 7730 × 5800	17200 × 7730 × 5800	19200 × 7730 × 5800	21200 × 7730 × 5800
	Gross Weight	t	95	105	115	125

Standard Accessories

- ★ Spindle Coolant System
- ★ Rigid Tapping
- ★ Dual LED Work Light
- ★ Geared Box
- ★ Automatic Lubricating System
- ★ Heat Exchange for Electric Cabinet
- ★ LED 3 Color Warning Light
- ★ Levelling Bolts and Pads
- ★ Semi-Enclosed Guard
- ★ Dual-Screw Type Chip Conveyor
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ Workpieces Probe
- ★ Oil Mist System
- ★ Manual/Semi-Auto 90° Milling Head
- ★ CTS
- ★ Chip Conveyor System
- ★ Oil Skimmer
- ★ Auto Parts Probe Measuring System
- ★ 20T/40T/60T ATC
- ★ Rotary Table

Model			YSMD-14042	YSMD-16042	YSMD-18042	YSMD-21042
Subject	Specifications	Units				
Travel	X-Axis	mm	14000	16000	18000	21000
	Y-Axis	mm	4200	4200	4200	4200
	Z-Axis	mm	1500	1500	1500	1500
	Spindle Nose to Worktable	mm	350-1850	350-1850	350-1850	350-1850
	Three-Axis Guideway		X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram			
	Door Width		4200	4200	4200	4200
	Type of Ram		Square Ram (500x500)			
Worktable	Worktable Size(L*W)	mm	14000*3500	16000*3500	18000*3500	21000*3500
	Maximum Table Load	t	50	50	50	50
	T-Slot	no/mm	36*200	36*200	36*200	36*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type		DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	6/8/8	6/8/8	6/8/8	6/8/8
	Cutting Feedrate (X/Y/Z)	m/min	6	6	6	6
Tool Changer	ATC		24T(Option: 40/60)			
Motor	Spindle Motor	KW	17-42	17-42	17-42	17-42
	Three-Axis Servo Motor	KW	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2
Accuracy	Accuracy	mm	0.07/0.035/0.02	0.08/0.035/0.02	0.09/0.035/0.02	0.10/0.035/0.02
	Repeatability	mm	0.055/0.025/0.015	0.065/0.025/0.015	0.075/0.025/0.015	0.085/0.025/0.015
Power Required	Power Requirement	kva	60	60	60	60
	Air Pressure Requirement	kg/cm ²	6^8	6^8	6^8	6^8
Others	External Dimensions (L*W*H)	mm	23200 × 7730 × 5800	25200 × 7730 × 5800	27200 × 7730 × 5800	29200 × 7730 × 5800
	Gross Weight	t	135	145	155	170

Standard Accessories

- ★ Spindle Coolant System
- ★ Rigid Tapping
- ★ Dual LED Work Light
- ★ Geared Box
- ★ Automatic Lubricating System
- ★ Heat Exchange for Electric Cabinet
- ★ LED 3 Color Warning Light
- ★ Levelling Bolts and Pads
- ★ Semi-Enclosed Guard
- ★ Dual-Screw Type Chip Conveyor
- ★ Chain Type Chip Conveyor and Cart
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ Workpieces Probe
- ★ Oil Mist System
- ★ Manual/Semi-Auto 90° Milling Head
- ★ CTS
- ★ Chip Conveyor System
- ★ Oil Skimmer
- ★ Auto Parts Probe Measuring System
- ★ 20T/40T/60T ATC
- ★ Rotary Table

YSMD46 Moving Column Series Parameters

Model			YMSD-6046	YMSD-8046	YMSD-10046	YMSD-12046
Subject	Specifications	Units				
Travel	X-Axis	mm	6000	8000	10000	12000
	Y-Axis	mm	4600	4600	4600	4600
	Z-Axis	mm	1500	1500	1500	1500
	Spindle Nose to Worktable	mm	350-1850	350-1850	350-1850	350-1850
	Three-Axis Guideway	——	X/Geared Transmission , Y/ Heavy Load Roller Linear Guideway, Z-Axis Square Ram			
	Door Width	——	4600	4600	4600	4600
	Type of Ram	——	Square Ram (500x500)			
Worktable	Worktable Size(L*W)	mm	6000*3500	8000*3500	10000*3500	12000*3500
	Maximum Table Load	t	50	50	50	50
	T-Slot	no/mm	36*200	36*200	36*200	36*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type	——	DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	6/8/8	6/8/8	6/8/8	6/8/8
	Cutting Feedrate (X/Y/Z)	m/min	6	6	6	6
Tool Changer	ATC	——	24T(Option: 40/60)			
Motor	Spindle Motor	KW	17-42	17-42	17-42	17-42
	Three-Axis Servo Motor	KW	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2
Accuracy	Accuracy	mm	0.04/0.035/0.02	0.04/0.035/0.02	0.055/0.035/0.02	0.06/0.035/0.02
	Repeatability	mm	0.035/0.025/0.015	0.035/0.025/0.015	0.04/0.025/0.015	0.045/0.025/0.015
Power Required	Power Requirement	kva	60	60	60	60
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	15200×8130×5800	17200×8130×5800	19200×8130×5800	21200×8130×5800
	Gross Weight	t	98	108	118	128

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart

- ★ Geared Box
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System

Model			YMSD-14046	YMSD-16046	YMSD-18046	YMSD-21046
Subject	Specifications	Units				
Travel	X-Axis	mm	14000	16000	18000	21000
	Y-Axis	mm	4600	4600	4600	4600
	Z-Axis	mm	1500	1500	1500	1500
	Spindle Nose to Worktable	mm	350-1850	350-1850	350-1850	350-1850
	Three-Axis Guideway	——	X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram			
	Door Width	——	4600	4600	4600	4600
	Type of Ram	——	Square Ram (500x500)			
Worktable	Worktable Size(L*W)	mm	14000*3500	16000*3500	18000*3500	21000*3500
	Maximum Table Load	t	50	50	50	50
	T-Slot	no/mm	36*200	36*200	36*200	36*200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000
	Spindle Drive Type	——	DDS			
Feedrate	Rapid Traverse (X/Y/Z)	m/min	6/8/8	6/8/8	6/8/8	6/8/8
	Cutting Feedrate (X/Y/Z)	m/min	6	6	6	6
Tool Changer	ATC	——	24T(Option: 40/60)			
Motor	Spindle Motor	KW	17-42	17-42	17-42	17-42
	Three-Axis Servo Motor	KW	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2
Accuracy	Accuracy	mm	0.07/0.035/0.02	0.08/0.035/0.02	0.09/0.035/0.02	0.10/0.035/0.02
	Repeatability	mm	0.055/0.025/0.015	0.065/0.025/0.015	0.075/0.025/0.015	0.085/0.025/0.015
Power Required	Power Requirement	kva	60	60	60	60
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	23200×8130×5800	25200×8130×5800	27200×8130×5800	29200×8130×5800
	Gross Weight	t	138	148	158	173

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ Geared Box
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System

YSMD55 Moving Column Series Parameters

Model			YSMD-10055	YSMD-12055	YSMD-14055	YSMD-16055	YSMD-18055	YSMD-21055
Subject	Specifications	Units						
Travel	X-Axis	mm	10000	12000	14000	16000	18000	21000
	Y-Axis	mm	5500	5500	5500	5500	5500	5500
	Z-Axis	mm	1500	1500	1500	1500	1500	1500
	Spindle Nose to Worktable	mm	350-1850	350-1850	350-1850	350-1850	350-1850	350-1850
	Three-Axis Guideway		X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram					
	Door Width		5500	5500	5500	5500	5500	5500
	Type of Ram		Square Ram (500x500)					
Worktable	Worktable Size(L*W)	mm	3500 × 10000	3500 × 12000	3500 × 14000	3500 × 14000	3500 × 14000	3500 × 14000
	Maximum Table Load	t	50	50	50	50	50	50
	T-Slot	no/mm	36 × 200	36 × 200	36 × 200	36 × 200	36 × 200	36 × 200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000	6000	6000
	Spindle Drive Type		DDS					
Feedrate	Rapid Traverse (X/Y/Z)	m/min	6/8/8	6/8/8	6/8/8	6/8/8	6/8/8	6/8/8
	Cutting Feedrate (X/Y/Z)	m/min	6	6	6	6	6	6
Tool Changer	ATC		24T(Option: 40/60)					
Motor	Spindle Motor	KW	17-42	17-42	17-42	17-42	17-42	17-42
	Three-Axis Servo Motor	KW	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2
Accuracy	Accuracy	mm	0.055/0.035/0.02	0.06/0.035/0.02	0.07/0.035/0.02	0.08/0.035/0.02	0.09/0.035/0.02	0.10/0.035/0.02
	Repeatability	mm	0.04/0.025/0.015	0.045/0.025/0.015	0.055/0.025/0.01	0.065/0.025/0.015	0.075/0.025/0.015	0.085/0.025/0.015
Power Required	Power Requirement	kva	60	60	60	60	60	60
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	19200 × 9030 × 5800	21200 × 9030 × 5800	27200 × 9030 × 5800	29200 × 9030 × 5800	31200 × 9030 × 5800	34200 × 5860 × 5800
	Gross Weight	t	128	138	148	158	168	183

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System

YSMD62 Moving Column Series Parameters

Model			YSMD-10062	YSMD-12062	YSMD-14062	YSMD-16062	YSMD-18062	YSMD-21062
Subject	Specifications	Units						
Travel	X-Axis	mm	10000	12000	14000	16000	18000	21000
	Y-Axis	mm	6200	6200	6200	6200	6200	6200
	Z-Axis	mm	1500	1500	1500	1500	1500	1500
	Spindle Nose to Worktable	mm	350-1850	350-1850	350-1850	350-1850	350-1850	350-1850
	Three-Axis Guideway		X/Y Heavy Load Roller Linear Guideway Z-Axis Square Ram					
	Door Width		6200	6200	6200	6200	6200	6200
	Type of Ram		Square Ram (500x500)					
Worktable	Worktable Size(L*W)	mm	3500 × 10000	3500 × 12000	3500 × 14000	3500 × 14000	3500 × 14000	3500 × 14000
	Maximum Table Load	t	50	50	50	50	50	50
	T-Slot	no/mm	36 × 200	36 × 200	36 × 200	36 × 200	36 × 200	36 × 200
Spindle	Spindle Type	type	BBT-50	BBT-50	BBT-50	BBT-50	BBT-50	BBT-50
	Spindle R.P.M.	rpm	6000	6000	6000	6000	6000	6000
	Spindle Drive Type		DDS					
Feedrate	Rapid Traverse (X/Y/Z)	m/min	6/8/8	6/8/8	6/8/8	6/8/8	6/8/8	6/8/8
	Cutting Feedrate (X/Y/Z)	m/min	6	6	6	6	6	6
Tool Changer	ATC		24T(Option: 40/60)					
Motor	Spindle Motor	KW	17-42	17-42	17-42	17-42	17-42	17-42
	Three-Axis Servo Motor	KW	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2	5.2/5.2/5.2
Accuracy	Accuracy	mm	0.055/0.035/0.02	0.06/0.035/0.02	0.07/0.035/0.02	0.08/0.035/0.02	0.09/0.035/0.02	0.10/0.035/0.02
	Repeatability	mm	0.04/0.025/0.015	0.045/0.025/0.015	0.055/0.025/0.01	0.065/0.025/0.015	0.075/0.025/0.015	0.085/0.025/0.015
Power Required	Power Requirement	kva	60	60	60	60	60	60
	Air Pressure Requirement	kg/cm ²	6*8	6*8	6*8	6*8	6*8	6*8
Others	External Dimensions (L*W*H)	mm	19000 × 9730 × 5800	21200 × 9730 × 5800	23200 × 9730 × 5800	25200 × 9730 × 5800	27200 × 9730 × 5800	29200 × 9730 × 5800
	Gross Weight	t	138	148	158	168	188	193

Standard Accessories

- ★ Spindle Coolant System
- ★ Automatic Lubricating System
- ★ Semi-Enclosed Guard
- ★ Rigid Tapping
- ★ Heat Exchange for Electric Cabinet
- ★ Dual-Screw Type Chip Conveyor
- ★ Dual LED Work Light
- ★ LED 3 Color Warning Light
- ★ Chain Type Chip Conveyor and Cart
- ★ Geared Box
- ★ Leveling Bolts and Pads
- ★ M30 Auto Off

Options

- ★ Optical Linear Scale
- ★ CTS
- ★ 20T/40T/60T ATC
- ★ Workpieces Probe
- ★ Chip Conveyor System
- ★ Rotary Table
- ★ Oil Mist System
- ★ Oil Skimmer
- ★ Manual/Semi-Auto 90° Milling Head
- ★ Auto Parts Probe Measuring System