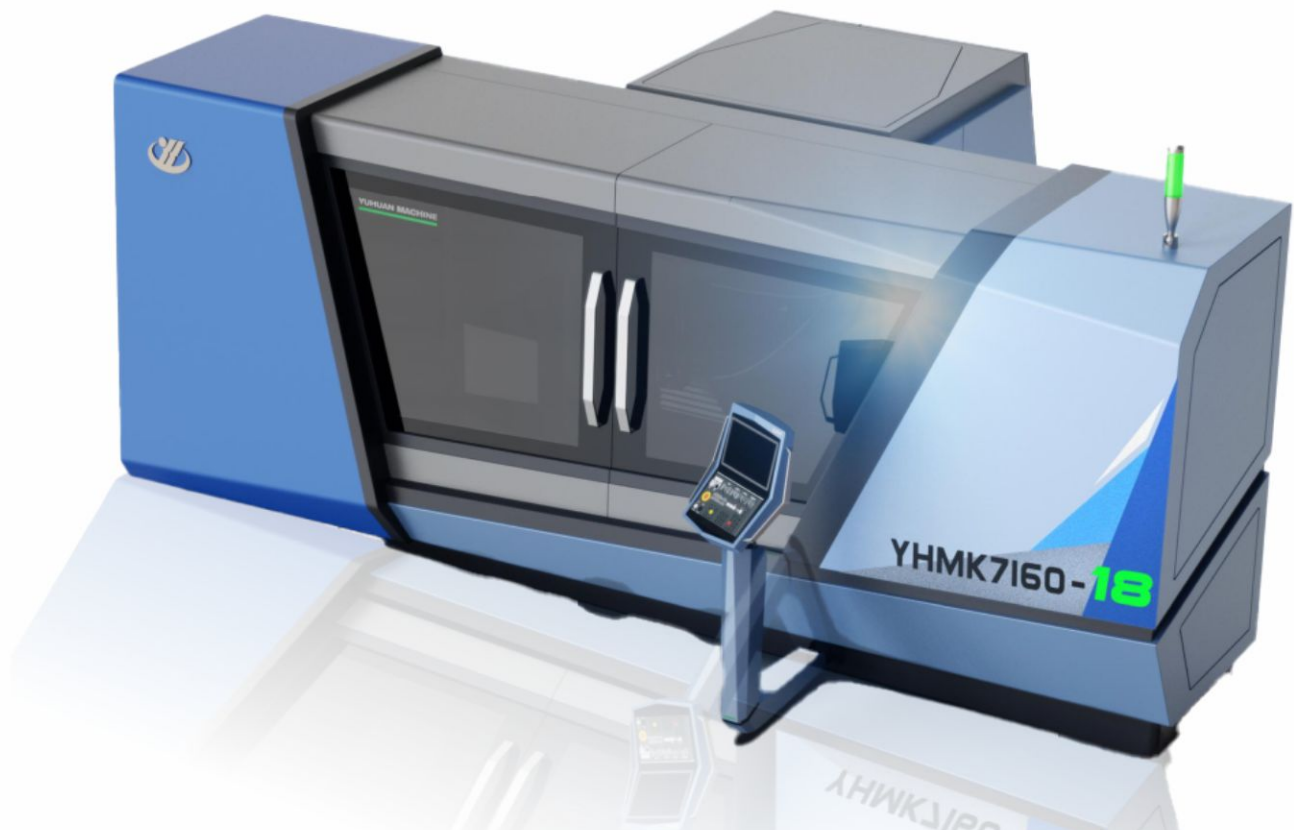


YHMK7160 PRECISION CNC HORIZONTAL AXIS RECTANGULAR TABLE SURFACE GRINDING MACHINE



YUHAN CNC MACHINE TOOL CO., LTD.

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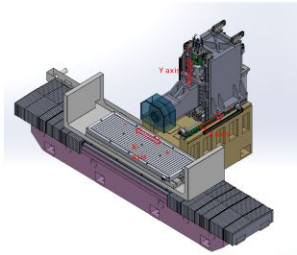
This Machine is a precision surface grinding machine that uses the periphery or end face of the grinding wheel to grind the workpiece. It is widely used in hydraulic parts, automobiles.

ITEM		UNIT	YHMK 7160×18
Working Capacity	Working Table(Width×Length)	mm	600×1800
	Maximum Longitudinal Travel	mm	2000
	Maximum Cross feed Travel	mm	600
	Maximum Spindel Vertical Travel	mm	550
	Max Distance : Table to Spindle Center	mm	700
	Max ProcessingHeight (including suction chuck)	mm	500
	Max. Loading capacity of table (include suctionchuck)	kg	2000
Grinding Wheel	Size of Grinding Wheel	mm	400*20-75*127
	Spindle speed	rpm	500-1450
Longitudinal Travel	Workbench speed	m/min	0-20
Crossfeed Travel	Crossfeed Travel fast forward speed	mm/min	0-1200
Spindel Vertical Travel	Spindel Vertical Travel fast forward speed	mm/min	0-1200
Motor	Spindle motor	KW	15
	Longitudinal Travel servo motor	KW	1.2
	Vertical Travel servo motor	KW	1.7
Net Weight of Machine (Approx.)		kg	11000
Gross Weight of Machine (Approx.)		kg	12000
Working Accuracy		mm	0.002/300

Specifications of other models available upon request.

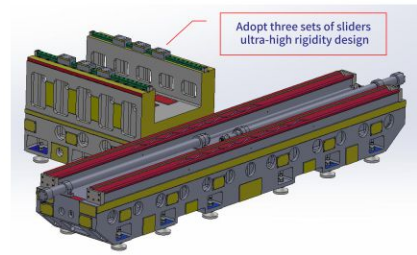
STRUCTURE INTRODUCTION

► Surface grinder axis system



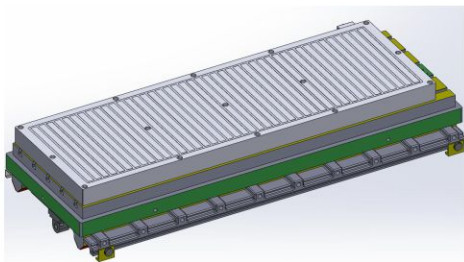
- Using a moving column structure, the left and right columns of the workbench, the front and rear grinding heads move up and down independently.

► Machine tool structure - bed parts



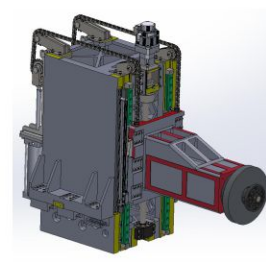
- All important supporting parts such as the bed, worktable, column and spindle box are made of HT300 high-grade cast iron.

► Machine tool structure - workbench



- Double V rail with plastic-coated hard rail design to ensure better straightness.
- Electron-magnetic table. No power is supplied during work to avoid the impact of the heat generated by the permanent magnet on the accuracy of the workbench.

► Machine tool components-Column parts



- The adoption of a moving column design suitable for processing large workpieces greatly increases the load capacity of the machine tool. Even when the table moves the whole way, the workpiece does not hang, so stable processing can be achieved.

ACCURACY STANDARD

SERIAL NUMBER	INDEX	ORDINARY LEVEL	PRECISION GRADE	HIGH PRECISION LEVEL	YUHUAN CNC
1	Workbench flatness a. X direction; b. Z direction.	a) 0.01/1000 0.005/any 300 b) 0.006/600	a) 0.008/1000 0.004/any 300 b) 0.005/600	a) 0.006 /1000 0.003/any 300 b) 0.004/600	a) 0.005/1000 0.01/2000 0.003/any 300 b) 0.003/600
2	Work surface facing a. Parallelism of worktable movement (X direction); b. Parallelism of the grinding head's forward and backward movement (Z direction).	a) 0.012/1000 0.005/any 300 b) 0.006/600	a) 0.008/1000 0.005/any 300 b) 0.005/600	a) 0.006/1000 0.005/any 300 b) 0.004/600	a) 0.005/1000 0.003/any 300 b) 0.003/600
3	Straightness of table longitudinal movement (X-axis) in a vertical plane;	0.01/1000 0.006/any 300	0.008/1000 0.005/any 300	0.006/1000 0.004/any 300	0.005/1000 0.003/any 300
4	Spindle taper runout	0.005	0.003	0.002	0.001
5	Working accuracy: After grinding the test block, measure the entire thickness of the standard test block (etc.high)	5-point inspection on the entire countertop 0.01/1000 0.005/300	5-point inspection on the entire countertop 0.008/1000 0.003/300	5-point detection on the whole table 0.006/1000 0.002/300	13 points detection on the whole table 0.006/1000 0.002/300

OPERATIONAL ADVANTAGES

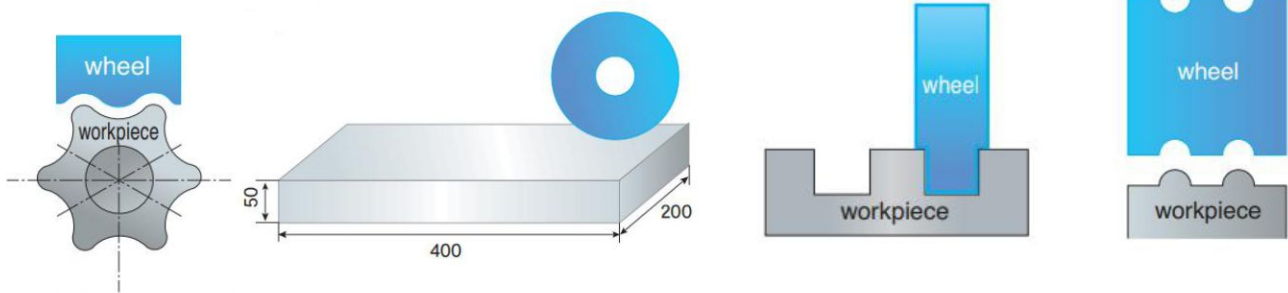
1.Handwheel for precise vertical micro-feed, driven by AC servo motor with minimum depth of cut of $0.1\mu\text{m}$.

2.Can be equipped with dresser and automatic compensation function, suitable for various materials, with automatic compensation for wheel dressing and automatic display of position on control panel.

3.Adaptable to various customer requirements, with automatic processing cycles and manual adjustment of processing conditions. Utilizes proprietary software system for easy setup of fully automatic cycles, digital confirmation of grinding conditions, and manual intervention capability.

4.High-precision positioning of vertical and horizontal axes, suitable for complex-shaped workpieces. 2-axis control enables precision grinding.

PROCESSING TYPE



TYPICAL MACHINING WORKPIECES



Hydraulic pump rotor
outline surface



Vane pump rotor
groove



High pressure oil pump
three-sided cam



Rack And Pinion



Guide Rail

COMPANY INTRODUCTION

YUHUAN CNC Machine Tool Co. Ltd., a National Key Equipment Manufacturing Enterprise, and state certified Specialized Innovative“ Little Giant” Enterprise, is specialized in the research and development, production, sales and services of CNC grinding machine, lapping and polishing machine and intelligent equipments, providing comprehensive solutions of precision grinding, polishing and intelligent manufacturing technology for the customers.

YUHUAN’s technical team has dedicated in precision grinding and polishing for nearly 30 years. Through continuous independent innovation and technology accumulation, the company now has the industry leading independent R & D capabilities and core technology advantages. The products are exported to more than 10 countries, including Korea, Japan, Russia, Thailand, Vietnam, India, winning the market’s recognition and preference over international rivals . The company has constituted 3 scientific research and innovation platforms, i.e., Hunan CNC Precision Grinder Engineering Research Center, Hunan Enterprise Technology Center, high-efficiency precision machining equipment for difficult-to-process materials and Hunan Engineering Research Center, and has won multiple national awards, including the CCMT“ Chun Yan Award”, and China Machinery Industry Science and Technology Award.

YUHUAN CNC will always adhere to its enterprise spirit of“ Responsibility first, innovation for the future, everlasting pursue for development, and take pride in dedication”, and set our goal and mission to become cutting edge manufacturer, and revitalize national industry, always be aggressively innovative and forging ahead, to build the company’s foremost reputation as an professional provider of precision grinding and intelligent manufacturing technology solutions, committing to become the pioneer of the industry.



COMPANY HISTORY

The overall technology level of the YHJMKG2880 high-precision CNC vertical grinding center independently developed by the company is internationally advanced, among which the plane throttling adaptive technology used in hydrostatic pressure is internationally leading.

YHMM300 high precision CNC vertical double side grinding machine, along with other 10 new products passed the appraisal and acceptance successfully, with overall technology level reaching domestic leading and internationally advanced.

Hunan Yuhuan Precision Manufacturing Co., Ltd., a holding subsidiary, was established.

The company's four major Management system s of quality, environment, occupational safety and health and energy management have passed third party certification, The company was granted the Hunan Province Enterprise Management Modern innovation Achievement Award; The company set up India office, accelerating its overseas development.

The Hunan Engineering Research Center of High-efficiency and Precision Machining Equipment for Difficult-to-Machine Materials jointly established by the company and Hunan University was approved by the Hunan Development and Reform Commission; The new plant for Yuhuan Intelligent Equipment was completed and put into use.

The company was officially listed on the small and medium sized board of the Shenzhen Stock Exchange, stock abbreviation: Yuhuan Shukong, stock code: 002903; The company built the first digital workshop assembly line of CNC precision grinding machine in China.

Its subsidiary Yuhuan Intelligent Equipment Co., Ltd passed the national high-tech enterprise certification; YH2M81693D magnetic flow polishing machine was launched in the market, with its technologies appraised internationally advanced; YH2M81693D magnetic flow polishing machine was enlisted the 10 landmark achievements of manufacturing technology innovations of Hunan.

The academician expert workstation was officially awarded and established; The first provincial engineering technology research center for CNC precision grinding machines in China was established in the company; YHM77110 was launched in the market, with its grinding and polishing precision at nanometer level, and the technologies of high pressure stable loading, and polishing disc temperature control internationally advanced.

Awarded China Top 10 Best Quality Enterprises of Machine Tool Industry; Being rated as Hunan Top 10 Best Quality and Efficiency Enterprises in Machinery and Equipment Industry.

The company completed its share holding reform, changing its name into Yuhuan CNC Machine Tool Co., Ltd, and was enlisted as key enterprise to be listed in Hunan and Changsha; Awarded the 2012 China Top 10 Cutting-Edge Enterprises in Machine Tool Industry.

Undertaking Key Project of Science and Technology SME Innovation Fund; Awarded the 2010 Excellent Enterprise of China Machinery Industry; Elected Hunan Top 100 Strategic Emerging Industry Enterprises.

Awarded Hunan High-Tech Enterprise, Provincial Enterprise Technology Center.licensing.

The company was relocated to the capital of Hunan Province, Changsha; Hunan Yuhuan Technology Machinery Co., Ltd. was formally established in Liuyang Manufacturing Industrial Base; The scientific research base for PhD students was established..

Founder of the company, Mr.XuShixiong founded Yuanjiang Electric Machinery Co.,Ltd, symbolizing the prelude of the great cause of Yuhuan.

