

## YHM500/700/1000/1200 DOUBLE SIDE FINE GRINDING MACHINE



YUHAN CNC MACHINE TOOL CO., LTD.

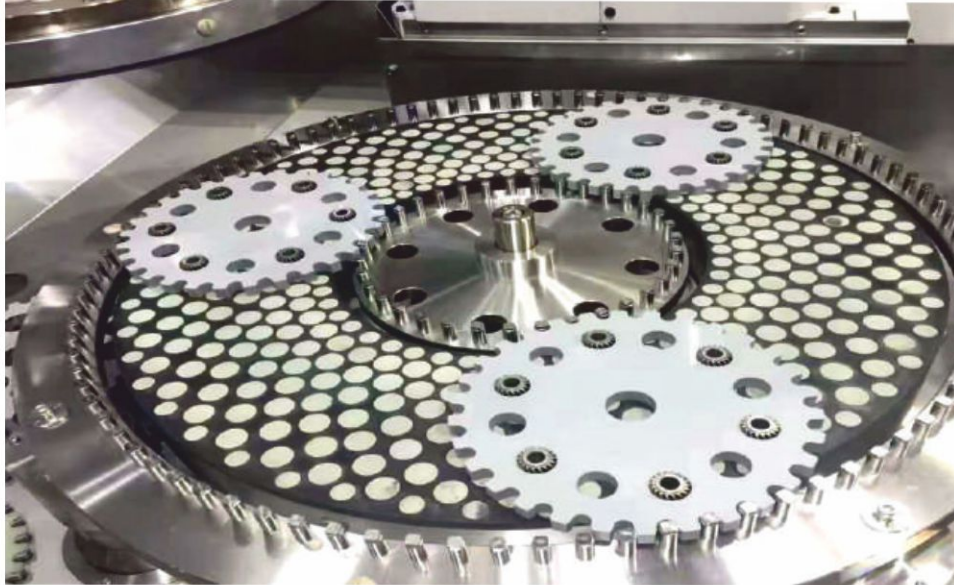
## >>> YHM500/700/1000/1200 DOUBLE SIDE FINE GRINDING MACHINE



The Upper and Lower Grinding wheel as well as planetary carriers rotate simultaneously to drive work pieces into planetary motion between the two grinding wheels. Independent Variable Drive with simple and convenient operation, Customised processing solution to improve product capacity. High Precision Grinding of Flat Surface of metallic & Non Metallic parts such as Valve Plates. Hard Alloy, Bearings, Piston Rings, Carbide Blades , Ceramic, Glass, Magnetic Materials,

ITEM/MODEL	Unit	YHM530	YHM700	YHM720	YHM1000	YHM1200
Diameter of Grinding Wheel	mm	ø530	ø700	ø720	ø1000	ø1200
No. of Carriers	nos.	5	6	6	6	6
Workpiece Range (Max.)	mm	ø150	ø200	ø200	ø300	ø400
Thickness of Workpiece (Max.)	mm	30	40	40	100	100
Speed of Upper & Lower Wheel (Max.)	rpm	105	105	105	80	85
Speed of Inner Ring (Max.)	rpm	65	75	75	65	65
Spindle Power of Upper & Lower	kw	2 x 4	2 x 5.5	2 x 5.5	2 x 9.2	2x11
Power of Inner Ring Servo Motor	kw	2	2	2	3	5
Max Pressure	kgf	600	700	700	1000	1500
Electrical Connection	-	415 Volt, 3 Phase, 50 Hz	415 Volt, 3 Phase, 50 Hz	415 Volt, 3 Phase, 50 Hz	415 Volt, 3 Phase, 50 Hz	415 Volt, 3 Phase, 50 Hz
Weight	kg	3000	4500	4500	6000	6500
Overall Dimension (L × W × H)	mm	1500 x 1700 x 2500	1800 x 1900 x 2500	1800 x 1900 x 2500	2500 x 2100 x 2700	2600 x 3000 x 2300

## >>> FOUR PLANETARY MOTION TECHNOLOGY



### ► EXTREMELY PRECISE GEOMETRIC ACCURACY AND SURFACE FINISH

Ultra High Precision can be achieved:

Flatness: <0.002 mm

Parallelism : <0.002 mm

Surface Finish : <0.2 Ra

Material Removal: 0.6~0.8 mm

### ► Dressing Wheel:

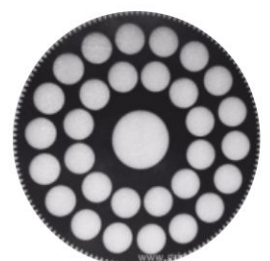
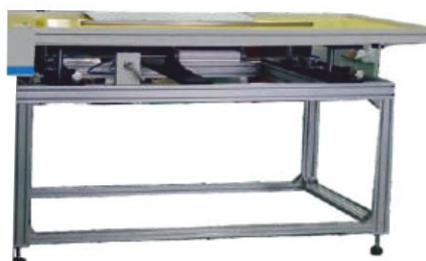
Used To achieve the accuracy requirements, When CBN or Diamond Wheel sefficiency becomes lower then same can be corrected by dressing.

### ► Loading Table:

As per the Production Capacity and Customer requirements Semi-Automatic and Automatic Loading and Unloading Device can be configured (Optional Accessories).

### ► Carrier Plate:

Can be designed as per the component shape and size Carrier plates hold the component during the planetary grinding motion.





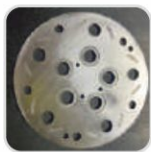
## >>> MAIN FEATURES

- ▶ High strength cast iron machine body
- ▶ Three independent variable speed for Upper disc, Lower disc and Inner ring
- ▶ Upper grinding head swing, manually or automatically
- ▶ High precision pneumatic pressure
- ▶ Digital size control system
- ▶ Inner ring drive via servo motor
- ▶ Customized processing solution
- ▶ Uniform coolant distribution thru upper disc
- ▶ Precision non contact probe
- ▶ Constant temperature cooling and filtering system
- ▶ PLC and touch screen control interface
- ▶ Strong fault diagnosis function
- ▶ Simple and convenient operation

## >>> TYPICAL MACHINING WORKPIECES



End Cover



Valve Plate



End Plate



Rotor



Cam Ring



Rotor & Stator



Piston Ring



Connecting Rod



Bearing



Carbide inserts



Washer



Valve Plate



Gear



Housing



Sapphire



Valve Plate



Hard Alloy



Ceramic Washer

# 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 systems 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.

