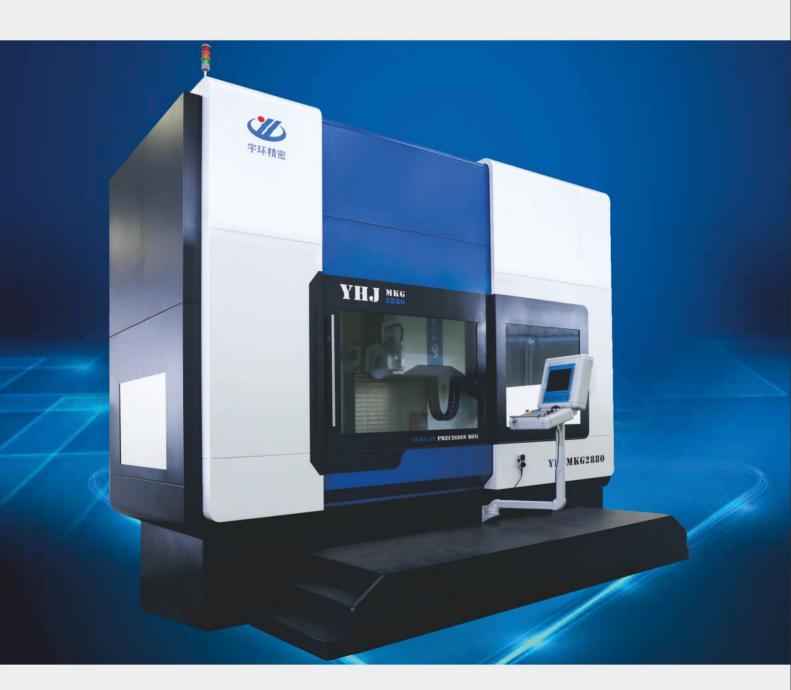


# YHJMKG 2880 HIGH PRECISION CNC VERTICAL UNIVERSAL GRINDING MACHINE



YUHAN CNC MACHINE TOOL CO., LTD.

### YHJMKG 2880 HIGH PRECISION CNC VERTICAL UNIVERSAL GRINDING MACHINE



It is suitable for processing parts with high precision and high surface quality requirements in equipment, military, energy, aerospace and other manufacturing industries. It aims to process the ID, OD, conical surface, end surface and special-shaped surface contour of disc, ring and sleeve parts.

The processing precision grade can reach IT3 ~ IT2, and the surface roughness ≤ Ra 0.2.

## YHJMKG2880 TECHNICAL PARAMETERS

| ITEMS   | PARAMETER   | ITEMS  | PARAMETER                    |
|---|---|--|------------------------------|
| Worktable dimensions  | ф800 mm   | Worktable runout   | Radial/ end face≤<br>0.001mm |
| Maximum grinding height   | 650 mm  | B-axis rotation angle  | 0~285°                       |
| Maximum load of worktable   | 1500 Kg   | X-axis movement speed (continuously variable speed)                      | 0.010~10m/min                |
| Workstable speed (stepless)   | 0.01-100 rpm                                      | Z-axis movement speed (continuously variable speed)                      | 0.010~8 m/min                |
| Maximum speed of main spindle<br>& Interface (internal and<br>external grinding head) | 8000rpm/HSK63-C                                   | X and Z axis positioning<br>accuracy & repeated<br>positioning accur acy | ±0.003mm/±0.002mm            |
| Maximum speed of main spindle<br>& Interface (surface grinding<br>head)               | 4500rpm/N56<br>( 18000 rpm optional<br>accessory) | Spindle runout   | Radial/ end face≤<br>0.001mm |

#### TECHNICAL CHARACTERISTICS

High-power & precision electric spindles



- ► High precision: grinding spindle runout ≤ 1 μm, spindle vibration ≤ 0.15mm/s;
- ► High configuration: synchronous direct-drive motor + online dynamic balance;
- High speed: high linear speed + high stiffness performance;
- High interchange ability: standard modular design of the spindle.

High-precision exchange rotary station



- ► High positioning accuracy: direct-drive torque motor + high-precision grating;
- ► High bearing capacity: high torque gas brake system for auxiliary brake positioning;
- High applicability: grinding head automatic indexing, arbitrary angle positioning processing;
- Personalized customization: self-made highprecision exchange turntable to achieve more; composite processing functions

Direct-drive high-precision static pressure rotary station



- ► High rotation accuracy: the roundness and fiatness of the workpiece are better;
- High positioning accuracy: direct-drive torque motor + high-precision grating;
- Hydrostatic bearing patented technology: never wear, machine precision long-term maintenance.
- ➤ Hydrostatic guide rail



- Non-contact, non-abrasive, suitable for reciprocating motion, guideway Characteristics and accuracy, can be maintained for a long time;
- Excellent shock absorption characteristics, improve the quality of the processing surface;
- The patent technology of closed hydrostatic pressure ensures the high rigidity of the machine.

#### HIGH PRECISION CNC VERTICAL UNIVERSAL GRINDING MACHINE SERIES

| SR. | MODEL       | WORKSTATION DIAMETER(mm) | MAX. ROTATION DIAMETER(mm) | MAX. WORKPIECE<br>HEIGHT (mm) | MAX. WORKPIECE<br>WEIGHT (kg) |
|-----|-------------|--------------------------|----------------------------|-------------------------------|-------------------------------|
| 1   | YHJMKG2835  | Ф350                     | Ф500                       | 400                           | 800                           |
| 2   | YHJMKG2860  | Ф600                     | Ф750                       | 500                           | 1000                          |
| 3   | YHJMKG2880  | Ф800                     | Ф1000                      | 650                           | 1500                          |
| 4   | YHJMKG28100 | Ф1000                    | Ф1200                      | 650                           | 2000                          |
| 5   | YHJMKG28125 | Ф1250                    | Ф1500                      | 650                           | 3000                          |
| 6   | YHJMKG28160 | Ф1600                    | Ф1850                      | 850                           | 5000                          |
| 7   | YHJMKG28200 | Ф2000                    | Ф2300                      | 1050                          | 5000                          |

#### VERTICAL UNIVERSAL GRINDING MACHINE

It is designed for precision grinding of precision disc, ring, sleeve, slewing bearing and other parts The grinding of ID, OD, end face, step surface, conical surace, bearing raceway, non-circular surface and other elements of the workpiece can be realized by one-time clamping. The preciseform dressing of the grinding wheel is controlled by CNC linkage system and the rich functions such as online dynamic balance, AE system and online measurement can be configured to improve the processing quality, efficiency and safety guarantee.

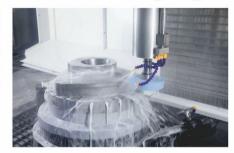
Internal bore grinding



End face grinding



Special-shaped surface grinding



Taper grinding



Automatic dressing



Online measurement

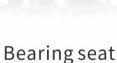


TYPICAL WORKPIECE





Turbine disk





Triangular rotor



Aviation bearing

Shell-type

#### **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 tomore 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**

