# MAKE GRINDING EASIER



# MAKE GRINDING EASIER



Grinding

Accessories

121°39'13" N 29°52'42" E



HUSDOM originated from a Taiwan, China-based enterprise with 35 years of expertise in precision manufacturing and grinding technology.

PRODUCT CATALOG

We specialize in CNC external cylindrical grinders, internal grinders, composite grinders, and grinding automation, serving industries such as automotive, medical, optics, robotics, semiconductors, molds, and aerospace.

To align with the growing strength of mainland China's manufacturing, we established a wholly-owned subsidiary in Ningbo, Zhejiang, and have achieved breakthroughs in high-speed, high-precision, and heavy-duty grinding.

# ABOUT US

HUSDOM

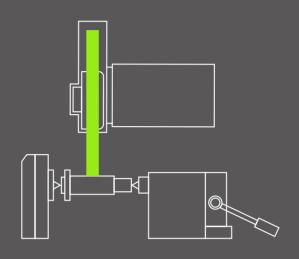
H. M. (A)

**Chen Hongliang** 

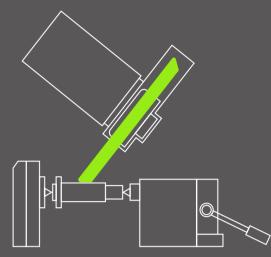
# GS&GT series



### Plunge type structure



# Plunge type with angular head structure

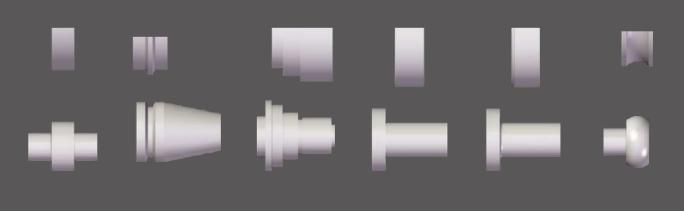


### **G** series

: meets the needs of the application scenarios of cylindrical grinding in small end surfaces with multiple complex shapes. With multiple varieties, it can achieve the replacement of varieties in small scale production, time-saving and efficient.

### **GTA** series

of cylindrical grinding and transverse grinding. With multiple varieties, it can achieve the replacement of varieties in small scale production, time-saving and efficient.



Plunge grinding Angular form grinding Multi-stage form plunge grinding Plunge + traverse grinding Plunge arc + traverse

grinding

Arc form plunge grinding

HUSDOM PRODUCT CATALOG

PRODUCT CATALOG

HUSDOM

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# **SPINDLE** Grinding wheel driver

Type of grinding wheel spindle bearings: High-precisionbearings are used in the spindle to guarantee its accuracy. Additionally, the spindle speed can be increased based on product specifications. It utilizes two lubrication methods: a circulating oil device system and a fully enclosed self-lubricating system.

## 60M/s

Spindle motor power KW/HP 7.5/10 Spindle axis size 62 Spindle bearing type Bearing type

## 100M/s

Spindle motor power 11/15 Spindle axis size 67

Spindle bearing type Bearing type

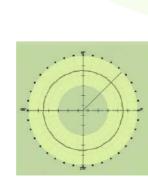


# WORKING HEAD Product driving device

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The workpiece headstock accommodates both live spindle grinding and two-center clamping grinding. The workpiece headstock utilizes rolling bearings, ensuring low maintenance costs and exceptional roundness accuracy of better than 0.001 mm during live spindle grinding. Precision fine adjustment enables cylindricity of less than 1µm in live spindle grinding.

- High roundness accuracy < 0.001 mm
- Speed range 1- 1000 rpm



# **GRINDING** WHEEL HEAD Grinding wheel mounting device

It incorporates a dynamic and static pressure system. This system ensures a continuous oil film around the spindle and bearings as the grinding wheel rotates, significantly extending the lifespan of the grinding wheel spindle.

Grinding wheels come in optional widths ranging from 20mm to 100mm





# **TAILSTOCK** Right-side clamping device

The tailstock features a generously sized sleeve that slides smoothly within its housing. Precise fine adjustments are achievable with minimal effort. Precise cylindricity adjustments can be achieved within the specified range by the fine adjustment of cylindricity during two-center clamping grinding.

- The tightening pressure can be adjusted.
- The extension stroke can be freely controlled

About us Grinding Accessories PRODUCT CATALOG

## **GS SERIES Swiss Mineral cast bed**



## GT SERIES Taiwanese Double-V Structure Guide Rail iron bed



HUSDOM offers both full and half-cover models for your needs.

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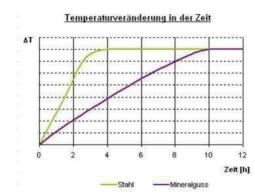


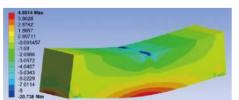
#### Material properties:

Elastic modulust	40 - 45 kN/mm <sup>2</sup>	
Density	2.4 kg/dm <sup>3</sup>	
Tensile strength	10 - 17 N/mm <sup>2</sup>	
Compressive strength	100-120 N/mm <sup>2</sup>	

Coefficient of thermal 12 - 15 x10<sup>-6</sup> K<sup>-1</sup> expansion/steel

Thermal conductivity 1 - 3 W/mK Heat capacity ratio ca. 1 kJ/kgK Shrinkage ratio approx. 0.3 %





### **Advantages of Mineral Cast**

#### Very good damping characteristic

Effectively absorbs grinding vibrations, enhancing machining stability and surface finish.

#### Cold casting process

Eco-friendly and energy-saving production without hightemperature melting, resulting in more stable material structure.

#### • Integration of the most diverse mechanical components

Supports direct casting of threaded inserts, cooling channels, and cable ducts, simplifying secondary machining processes.

### Low heat conductivity

Reduces the risk of thermal deformation, ensuring geometric accuracy during prolonged operations.

#### Low shrinkage

Effectively controls geometric errors, improving assembly consistency.

#### 

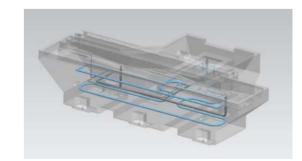
Crafted with cutting-edge industrial technologies, it delivers exceptional performance year after year.

- The mineral bed's excellent shock absorption ensures the ground workpiece's excellent surface quality. It extends the life of the grinding wheel, thus reducing non-machining downtime.
- The good thermal stability widely compensates for short temperature fluctuations. This ensures high machine stability throughout the day.
- The V-flat guide rails of the longitudinal and transverse slides are made by casting wear-resistant S200 material directly onto the machine bed guide rails. Its surface structure significantly eliminates the crawling and floating phenomena caused by the movement of traditional guide rails The guide rail system can ensure that the machine tool can achieve the highest accuracy in the entire range of motion speeds, and has a high load-bearing capacity and excellent shock absorption. The sturdy structure and maintenance-free design make the guide rail's performance stable and long-lasting.



- 1. Machine tool bed with longitudinal and transverse guide system
- 2. Comparison of shock absorption performance between cast iron and mineral bed

The optional bed temperature control function effectively improves machining accuracy issues caused by size deviations between the cold and hot workpieces



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# GS series



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Standard Parameters	Unit	GS600	GS750	GS1000
Specifications		-		
Swing diameter	mm	350	350	350
Max.grinding diameter	mm	330	330	330
Max. grinding length	mm	600	750	1000
Distancebetween centers	mm	650	800	1050
Max. weight of workpiece between centers	kg	80	120	200
Grinding wheel head				
Grinding wheel dimensions (outer dia. × inner dia. × thickness)	mm	510×(25~100)×203.2/ with 610×(25~100)×203.2 optional		
Spindle motor power	kw/HP	7.5KW (11KW optional)		
Cutting line speed of grinding wheel	m/s	60m/s (100m/s optional)		
Spindle axis size	mm	67		
Spindle bearing type		Bearing type spindle (high-speed electric spindle optional)		
Work head				
Туре		Fixed center / Live center		
Center taper	NO.	MT5		
Spindle speed	rpm	10 ~ 1000rpm		
Motor power	kw/hp	2		2.5
Tailstock	- 12			
Center taper	NO.		MT4	
Sleeve diameter	mm	58		
Spindle travel	mm		35	
X-axis grinding wheel sli	ide			
Feed travel	mm		400	
Quick feed speed	mm/min	16		
Min. feed / every scale	mm	0.001/0.10		
Feed mode of grinding wheel		Plunge/ Angular		
X-axis servo motor	kw	2.2		
Grinding wheel slide		A-V-flat structure guide rail		
Z-axis grinding wheel sli	ide			
Table travel	mm	700	850	1300
Quick feeding speed	mm/min		16	
Min. feed / every scale	mm	0.001/0.01		
Z-axis servo motor	kw	2.2		
Table slide		A-V-flat structure guide rail		
Bench rotation angle		4 degrees clockwise and 9 degrees counterclockwise		
Universal				
Grinding wheel head lubricating oil pump	HP	1/4		
Grinding fluid pump	HP	1/4		
Guide oil pump	w/HP	25		
Grinding wheel head oil tank capacity	L	30		
Grinding fluid tank capacity	L	120		
Guide oil tank capacity	L	8 (Full-time lubrication)		
Net weight	kg	5200	5500	6200
Dimensions	cm		3015 x 2200 x 1867	

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# GT SERIES

# **Hand scraping**

The scraping process is done with our hands with dedication. Scraping can increase the area of oil film coverage, and improve the service life in combination with the full-time lubrication system.

# High-rigidity double V-slot structure design

With a high-rigidity double V-shaped structure design, the guide equipped with wear plate and full-time lubrication can improve the wear resistance, reduce wear of the double guides, improve the service life, and obtain highly stable motion during the axial movement.

About us Grinding Accessories

# GT series



HUSDOM PRODUCT CATALOG

Standard Parameters	Unit	GT/GTA400	GT600		
Specifications					
Swing diameter	mm	280	280		
Max.grinding diameter	mm	250	250		
Max. grinding length	mm	400	600		
Distancebetween centers	mm	400	600		
Max. weight of workpiece between centers	kg	60	60		
Grinding wheel head					
Grinding wheel dimensions (outer dia. × inner dia. × thickness)	mm	455×(32~75)×152.4/ with 510×(32~75)×152.4 optional			
Spindle motor power	kw/HP	5.5/7.5(Opt	ional 10)		
Cutting line speed of	m/s	Bearing bush35m/s Dynami			
grindiñg wheel Spindle axis size	mm	62 Bearing busins bynamin	·		
Spindle bearing type	111111	Dynamic pressure bearing bush sp			
Work head		Dynamic pressure bearing businsp	mate (Optional bearing spiriale)		
Туре		Dood contor/ Ma	ovable center		
Center taper	NO.		Dead center/ Movable center		
Spindle speed		MT4 10 ~ 1000rpm			
Motor power	rpm kw/hp	1.5	2		
Tailstock	κνν/Πρ	1.5	2		
Center taper	NO.	M	T/1		
Sleeve diameter					
Spindle travel	mm	5			
X-axis grinding wheel sli	mm	3	2		
Feed travel	mm	27			
Quick feed speed	M/min	320			
Min. feed / every scale	mm	10			
Feed mode of grinding wheel	111111	0.001/0.01/0.10			
X-axis servo motor	kw	Plunge / Angular			
Grinding wheel slide	NVV	1.5			
Z-axis grinding wheel sli	de	Double V structure guide rail			
Table travel	mm	550	750		
Ouick feeding speed	M/min				
Min. feed / every scale	mm	0.001/0.01/0.10			
Z-axis servo motor	kw				
Table slide	NVV	1.5			
Table slide		A-V-flat structure guide rail			
Bench rotation angle		4 degrees of clockwise rotation 9 degrees of counterclockwise rotation			
Universal					
Grinding wheel head lubricating oil pump	HP	1/4			
Grinding fluid pump	HP	1/4			
Guide oil pump	w/HP	25			
Grinding wheel head oil tank capacity	L	30			
Grinding fluid tank capacity	L	120			
Guide oil tank capacity	L	8 (With full-time lubrication)			
Net weight	kg	3000			
Dimensions	cm	2660 x 1890 x 1820			

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# **Automatic outer diameter measuring device**

It precisely measures the inner and outer diameters of the workpiece on the production line, preventing excessive cutting, ensuring machining dimensions and surface accuracy, and shortening machining time. The repeatability can reach <0.002mm, which helps to further improve process reliability and production quality.



# **Automatic end** face measuring device



It captures the axial position of the workpiece in the Z-axis direction, preventing excessive cutting, ensuring machining dimensions and surface accuracy, and shortening machining time. The repeatability can reach ≤ 0.01mm



# **Automatic grinding** wheel balancing and correction

The optimally balanced grinding wheel is a necessary condition for obtaining good grinding results. The imbalance data is displayed through the dynamic balancing system, and the position of the flange balance block is adjusted according to the data to achieve grinding wheel balance.



Audio sensor **XACCRETECH** 





An audio anti-collision sensing system is incorporated. It is specifically designed for simple and cost-effective applications.

# **FANUC**

# FANUC's System

Secondary development based on FANUC's system for convenient operation

Automatic program generation based on input parameters, reducing programming requirements for personnel

Reduces equipment adjustment time, enhances efficiency, and promotes ease of use

# Machine tool control and operating systems

The product has a Fanuc Oi-TF system and 10.4" color display, boasting exceptional reliability and seamless integration with drive components

The control cabinet is installed on the bed with bolts. Electrical equipment complies with relevant safety standards and all control devices are designed to be convenient and ergonomic. The handheld control unit is very important and allows easy control of the grinding process.

A special feature - electronic cut-in detection equipment - can reduce machine tool setting time and significantly improve grinding efficiency.

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- PCU handheld control terminal
- Ergonomic control panel
- Latest software technology
- Self-developed modular programming software





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### **Programming**

- Icon-based programming: The operator simply arranges individual grinding function icons to perform programming
- Free programming of the grinding and dressing processes allows for an even more optimized grinding process.
- Used for profile grinding of complex workpieces and profile grinding wheels; input can be made directly on the graphics and the program will be automatically generated.





PRODUCT CATALOG



# **INGENIOUS GRINDING FIRST-CLASS TECHNOLOGY**

Perfect manifestation of precision and quality



Mechanical Engineering



Automotive Solutions



Aerospace Solutions





Connectors/Fluid Systems Optics/Micromechanics











































































# **Certificates / Patents**















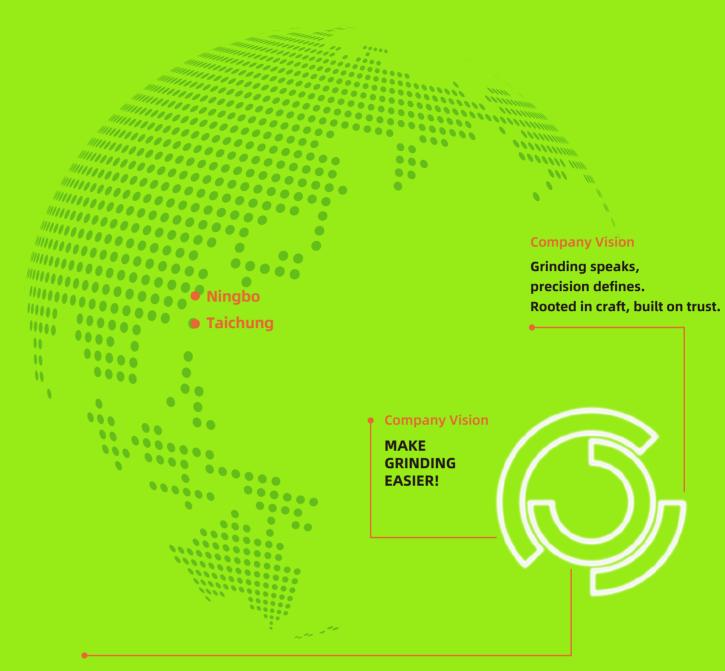












### Six Core Values

### H — Honesty

Integrity and quality earn lasting trust.

### U — User-Centric

Understand needs, deliver tailored solutions.

### S — Smart Innovation

Drive grinding innovation and digitalization.

### D — Dedication

30+ years of precision expertise.

### O — Openness

Global vision, shared success with partners.

### M — Manufacturing Excellence

World-class craftsmanship ensures reliability.