

About us

Grinding

Accessories

HUSDOM

MAKE GRINDING EASIER

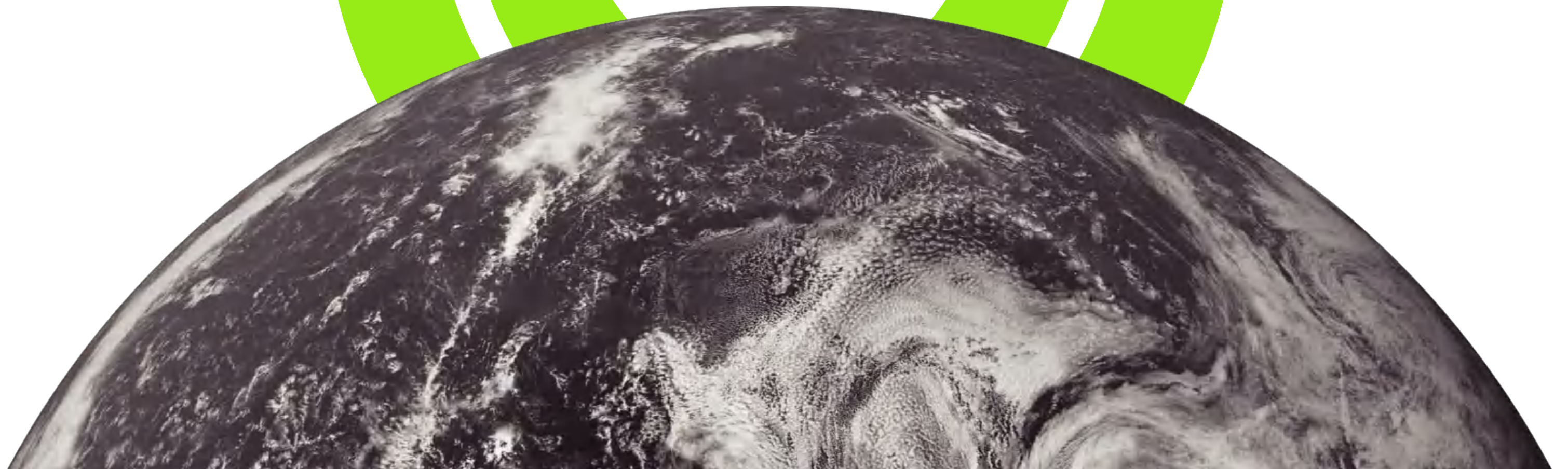


PRODUCT
CATALOG

HUSDOM Technology Co.,Ltd



MAKE GRINDING EASIER





ABOUT US

HUSDOM

"HUSDOM - Honing Expertise for 35 Years, Focused on Crafting Every Grinding Machine."

We are from Taichung City, the birthplace of precision machine tools in Taiwan, China. Benefiting from 35 years of manufacturing expertise and extensive grinding technology proficiency, HUSDOM's production of precision CNC external cylindrical grinders, single/double-axis internal cylindrical grinders, thread grinders, jig-grinders, composite grinders, grinding automation, and more has made it a reliable partner for domestic and international customers in the fields of automotive parts, medical devices, VR optics, humanoid robots, pneumatic and hydraulic tools, semiconductors, molds, aerospace, and precision machinery.

"Out of Taiwan, Towards the World."

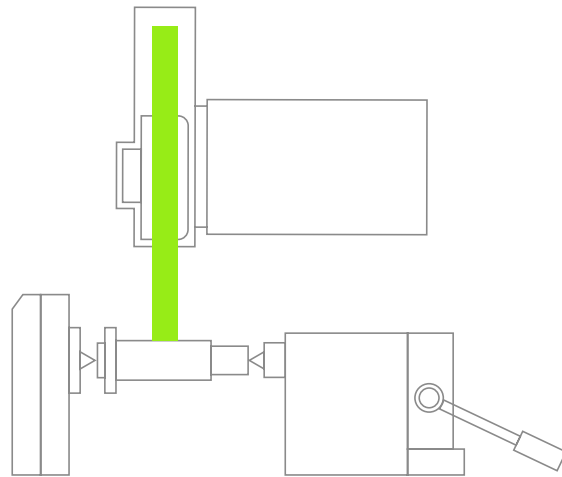
In 2020, the COVID-19 pandemic reshaped the world's ecosystem, prompting us to abandon conservatism. We chose to establish a wholly-owned assembly factory in Ningbo, Zhejiang Province, China, marking our well-prepared entry into the mainland Chinese market. Through deep collaboration with a Swiss century-old grinding technology team, our products have greatly improved in the high-speed, high-precision, heavy-duty grinding domain. Here, we still adhere to the idea of "Craftsman" for 35 years, crafting each grinding machine with ingenuity.

Few words are needed for beauty,
No detail is spared for high quality.

MAKE GRINDING EASIER!

Chen Hongliang

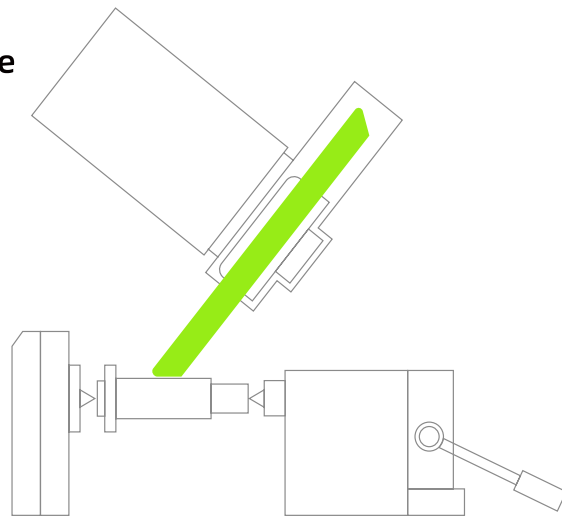
Plunge type structure



G series

It 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.

Plunge type with angular head structure

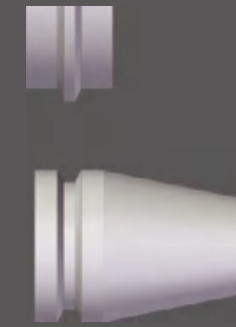


GA series

It meets the needs of the most complex application scenarios 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



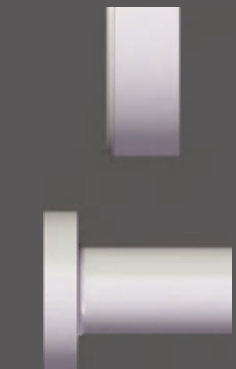
Angular form grinding



Multi-stage form plunge grinding



Plunge + traverse grinding



Plunge arc + traverse grinding



Arc form plunge grinding

SPINDLE

Grinding wheel drivet

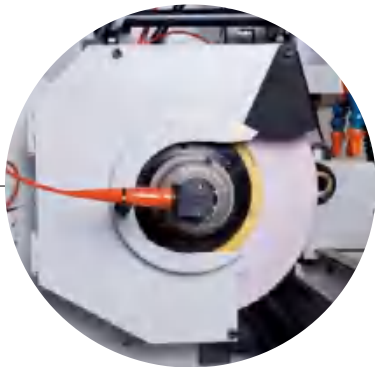
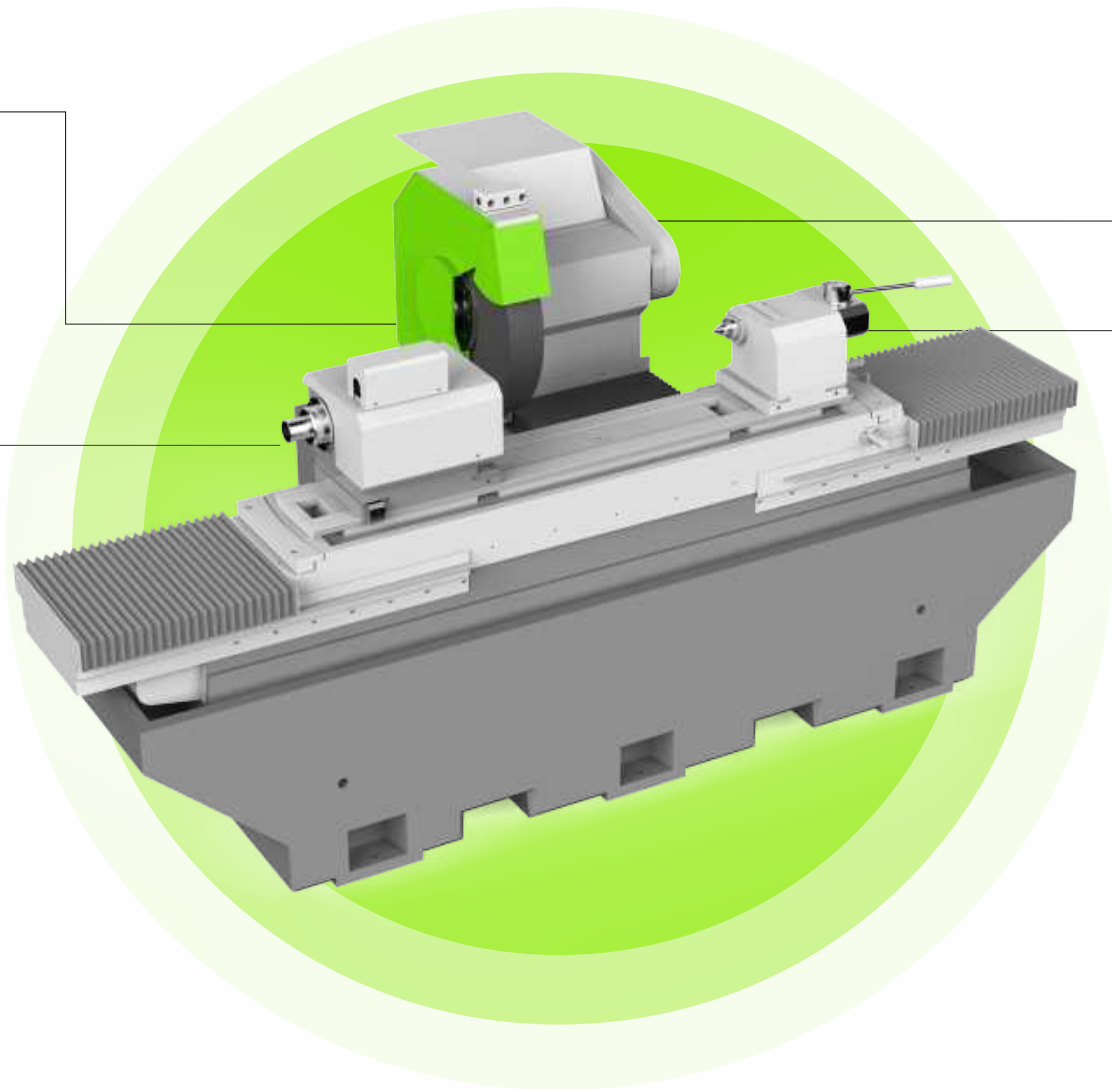
Type of grinding wheel spindle bearings: High-precisionbearings are used in the spindle to guarantee its accuracy. Additionally, the spindle speed can be increased based on product specifications. It utilizes two lubrication methods: a circulating oil device system and a fully enclosed self-lubricating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

60M/s

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

100M/s

Spindle motor power	KW/HP	11/15
Spindle axis size	MM	67
Spindle bearing type	Bearing type	

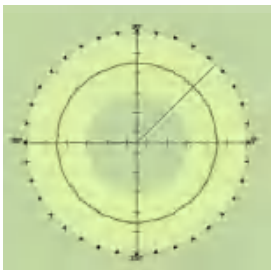


WORKING HEAD

Product driving device

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

Mineral cast bed from Switzerland

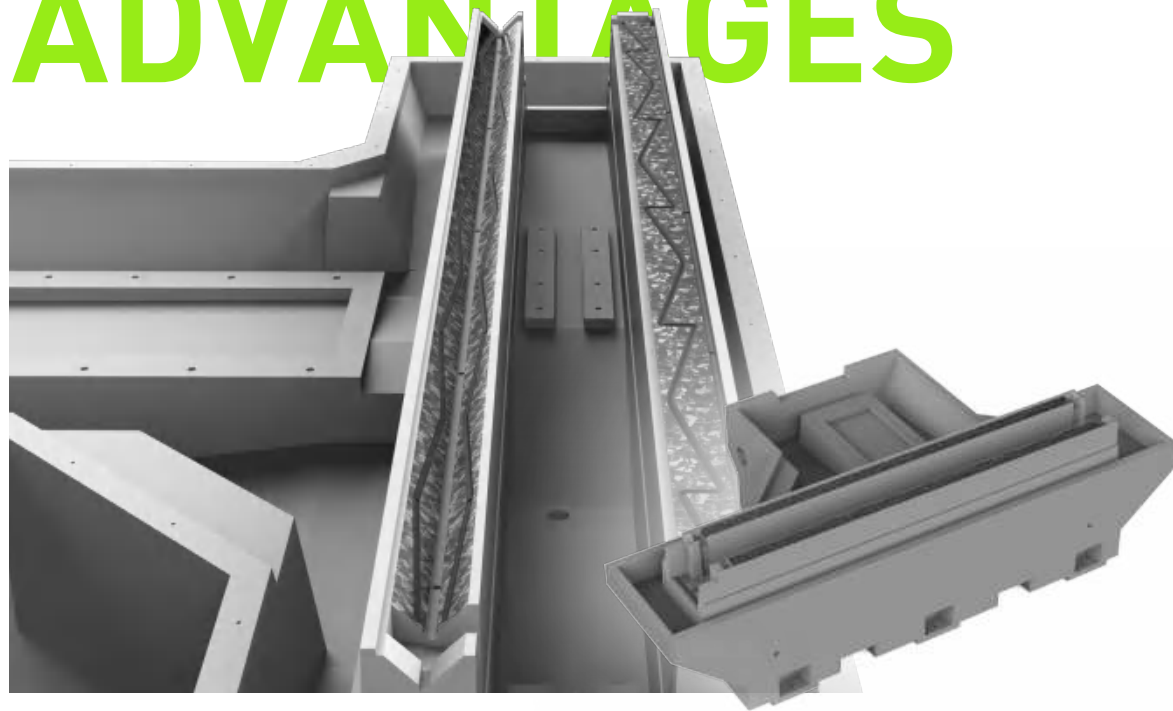


Double V-slot cast iron bed from Taiwan



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

ADVANTAGES



Material properties:

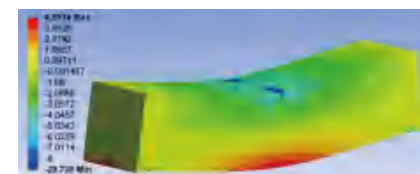
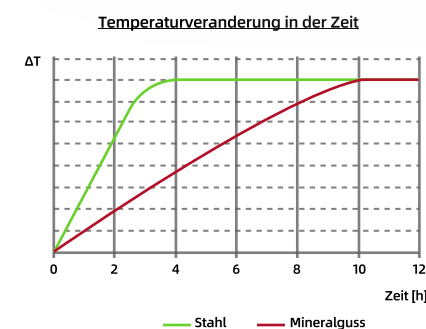
Elastic modulus	40-45 kN/mm ²
Density	2.4 kg/dm ³
Tensile strength	10-17 N/mm ²
Compressive strength	100-120 N/mm ²

Coefficient of thermal expansion /steel 12-15x10⁻⁶K⁻¹

Thermal conductivity 1-3W/mK

Heat capacity ratio ca. 1 kJ/kgK

Shrinkage ratio approx. 0.3‰



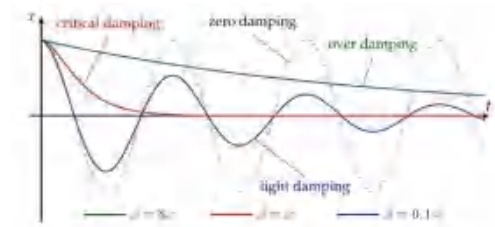
Advantages of Mineral Cast

- Very good damping characteristic
- Low heat conductivity
- Cold casting process
- Low shrinkage
- Great architectural freedom
- Integration of the most diverse mechanical components
- Environment protection

- Good shock absorption
- Excellent thermal stability
- No wear

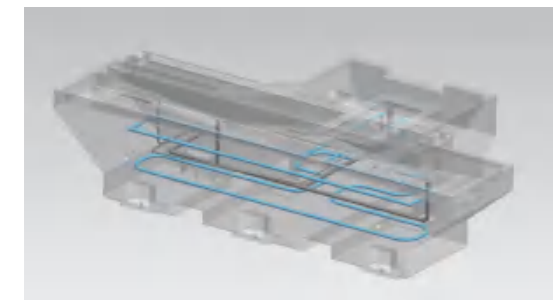
Crafted with cutting-edge industrial technologies, it delivers exceptional performance year after year.

- 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

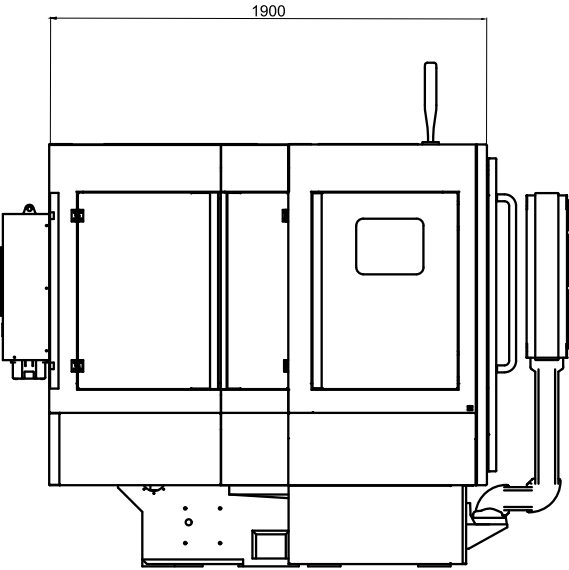
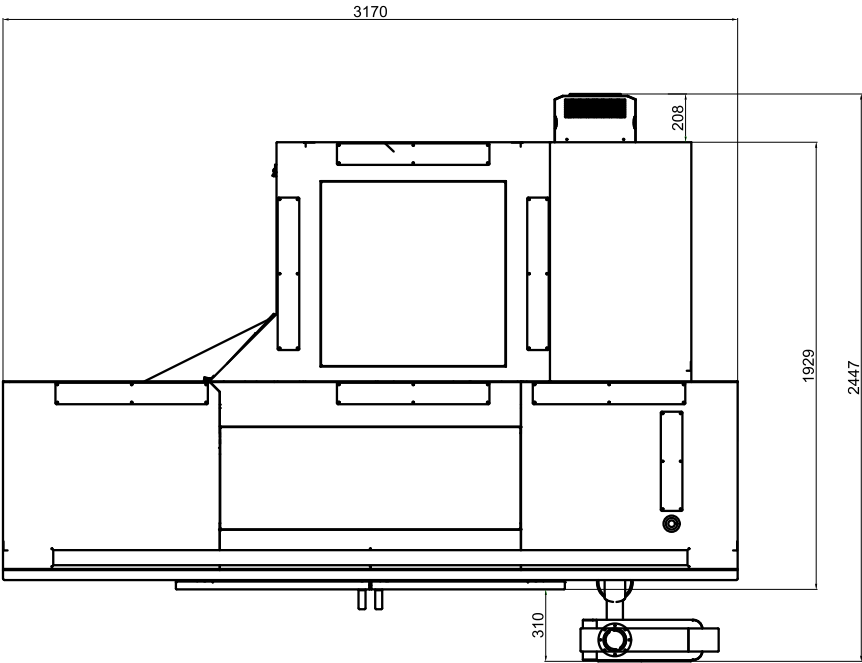
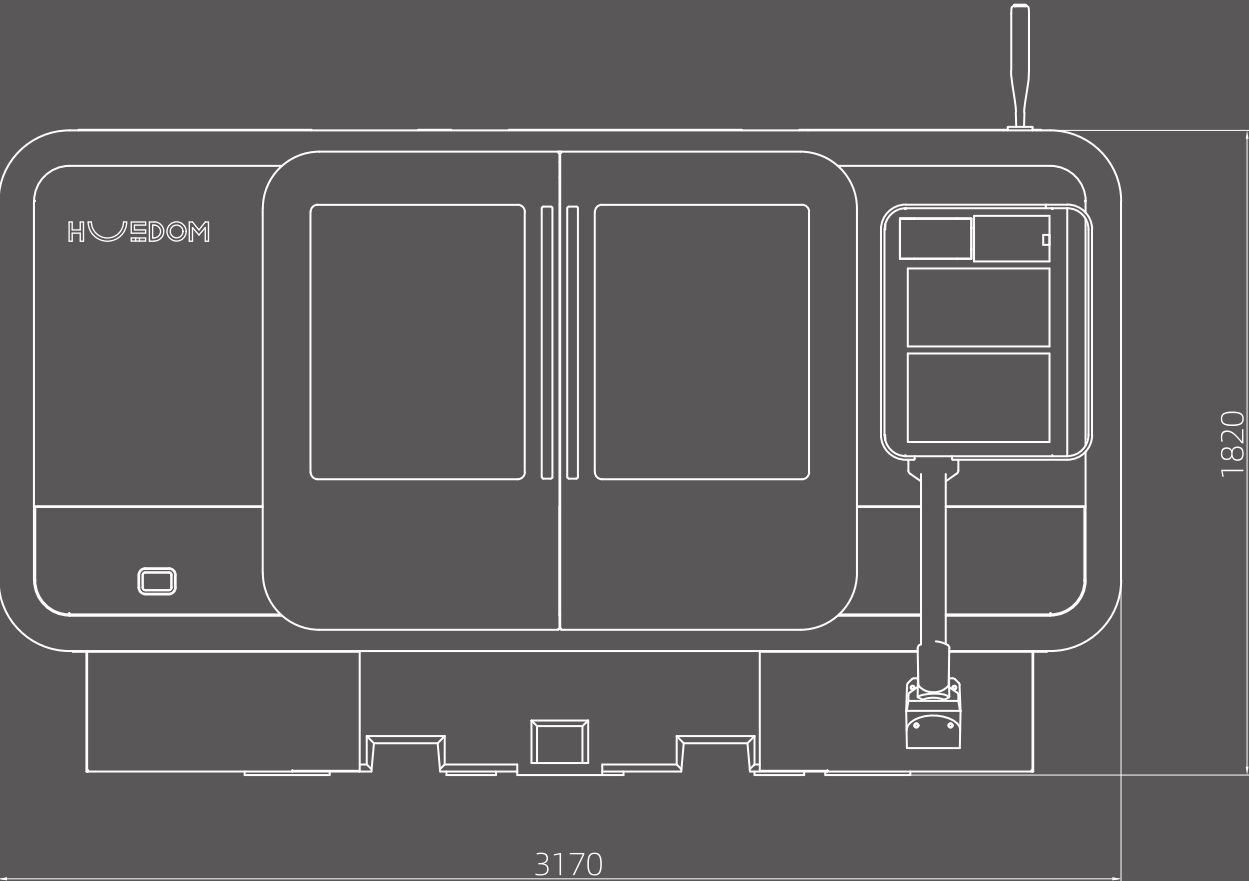


G/GA 35 SERIES



Standard Parameters	Unit	G/GA 35-60	G/GA 35-75	G/GA 35-100
Specifications				
Swing diameter	mm	350	350	350
Max. grinding diameter	mm	330	330	330
Max. grinding length	mm	600	750	1000
Distance between 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)		
Working head				
Type		Fixed center / Live center		
Center taper	NO.	MT5		
Spindle speed	rpm	10 ~ 1000rpm		
Motor powert	kw/hp	2	2.5	
Tailstock				
Center taper	NO.	MT4		
Sleeve diameter	mm	58		
Spindle travel	mm	35		
X-axis grinding wheel slide				
Feed travel	mm	400		
Quick feed speed	m/min	16		
Min. feed / every scale	mm	0.001/0.01/0.10		
Feed mode of grinding wheel		Plunge/ Angular		
X-axis servo motor	kw	2.2		
Grinding wheel slidet		A-V-flat structure guide rail		
Z-axis grinding wheel slide				
Table travel	mm	700	850	1300
Quick feed speed	m/min	16		
Min. feed / every scale	mm	0.001/0.01/0.10		
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	As the dimensional drawing		

G/GA35



CUSTOM
SIZE

ADV- ANTAGES



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

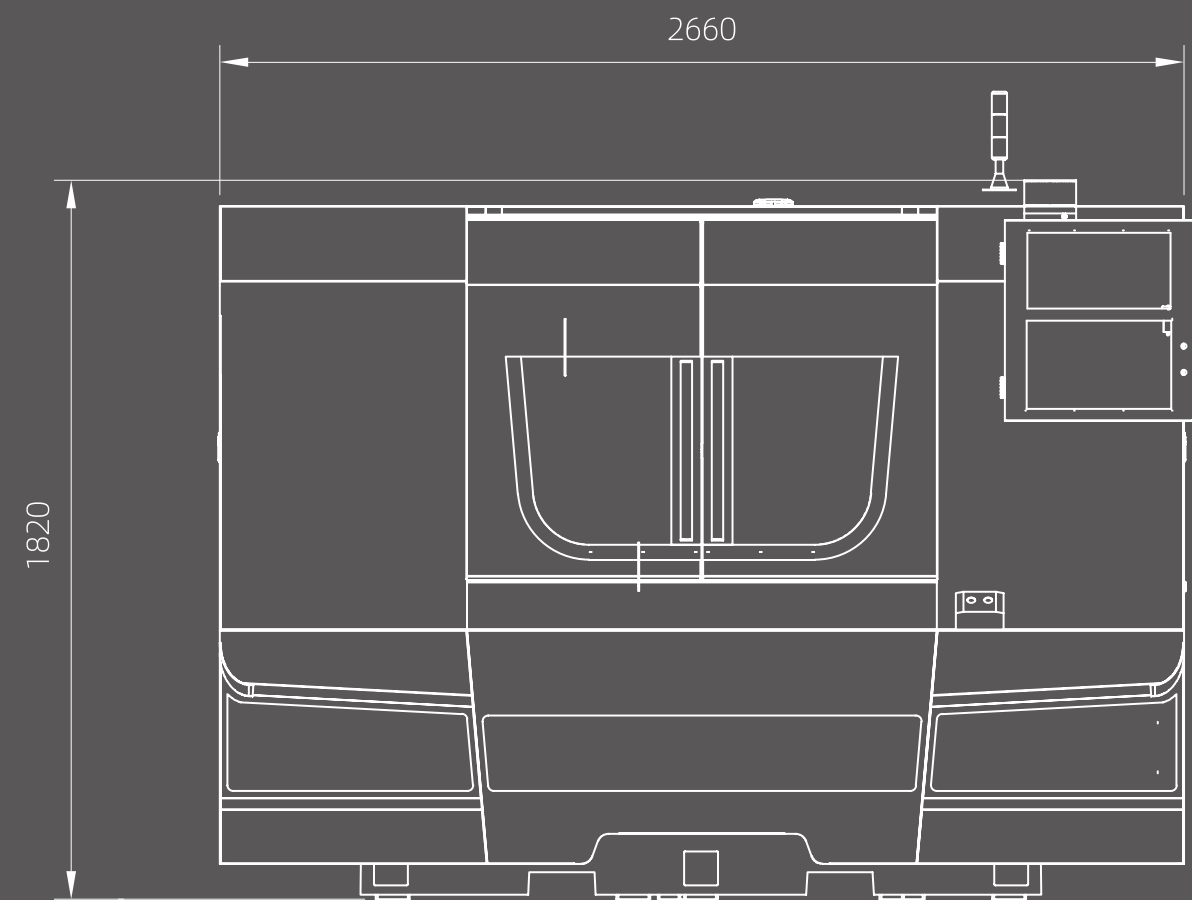
With a high-rigidity double V-shaped structure design, the guide equipped with wear plate and full-time lubrication can improve the wear resistance, reduce wear of the double guides, improve the service life, and obtain highly stable motion during the axial movement.

G/GA SERIES

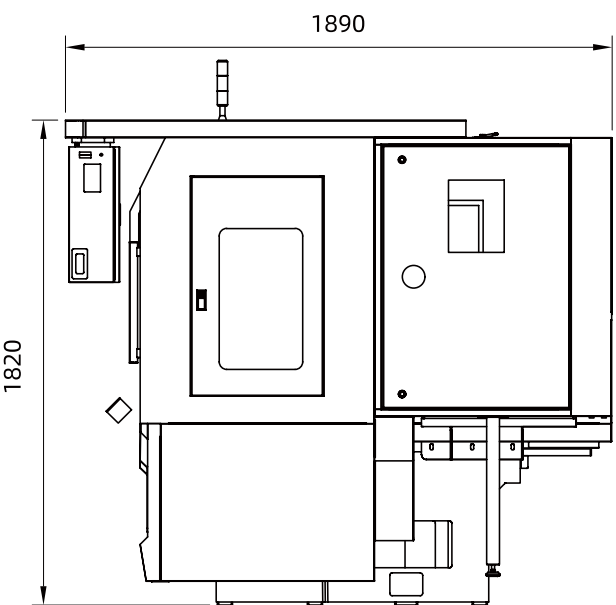
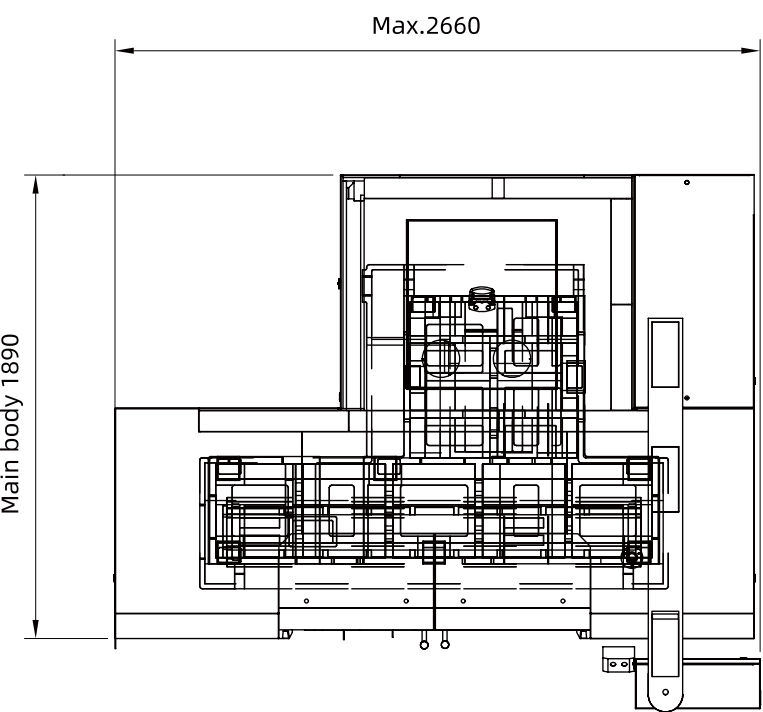


Standard Parameters	Unit	G/GA 304	G/GA 306	G/GA 308
Specifications				
Swing diameter	mm	280	280	300
Max.grinding diameter	mm	250	250	270
Max. grinding length	mm	400	600	800
Distancebetween centers	mm	400	600	800
Max. weight of workpiece between centers	kg	60	60	80
Grinding wheel head				
Grinding wheel 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(Optional 10)		
Cutting line speed of grinding wheel	m/s	Bearing bush35m/s Dynamic and static pressure 60m/s		
Spindle axis size	mm	62		
Spindle bearing type		Dynamic pressure bearing bush spindle (Optional bearing spindle)		
Work head				
Type		Dead center/ Movable center		
Center taper	NO.	MT4		
Spindle speed	rpm	10 ~ 1000rpm		
Motor power	kw/hp	1.5	2	
Tailstock				
Center taper	NO.	MT4		
Sleeve diameter	mm	54	58	
Spindle travel	mm	32		
X-axis grinding wheel slide				
Feed travel	mm	320		
Quick feed speed	M/min	10	10	
Min. feed / every scale	mm	0.001/0.01/0.10		
Feed mode of grinding wheel		Plunge / Angular		
X-axis servo motor	kw	1.5		
Grinding wheel slide		Double V structure guide rail		
Z-axis grinding wheel slide				
Table travel	mm	550	750	1000
Quick feeding speed	M/min	10		10
Min. feed / every scale	mm	0.001/0.01/0.10		
Z-axis servo motor	kw	1.5	2.2	
Table slide		A-V-flat structure guide rail		
Bench rotation angle		4 degrees of clockwise rotation 9 degrees of counterclockwise rotation		4 degrees of clockwise rotation 8 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	3200	3600
Dimensions	cm	As the dimensional drawing		

G/GA



CUSTOM
SIZE





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 $<0.002\text{mm}$, which helps to further improve process reliability and production quality.



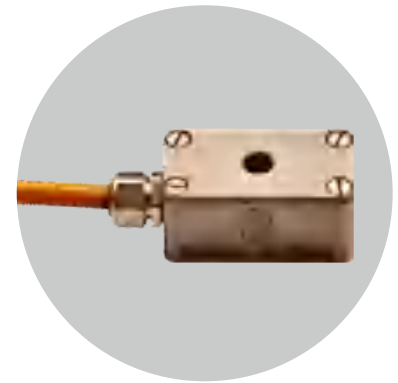
Automatic end face measuring device

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 $\leq 0.01\text{mm}$



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

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

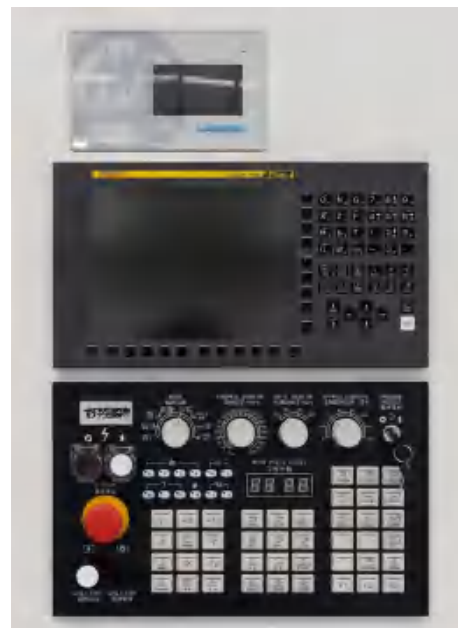
Machine tool control and operating systems

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.

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



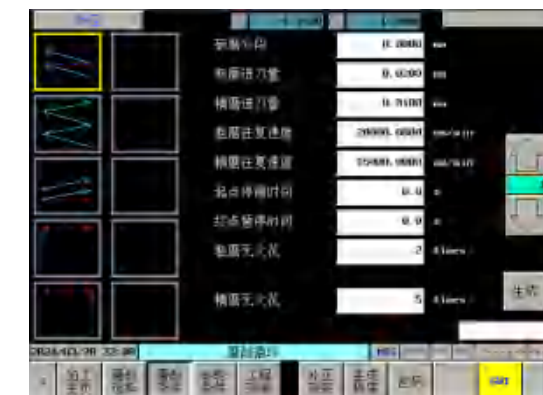
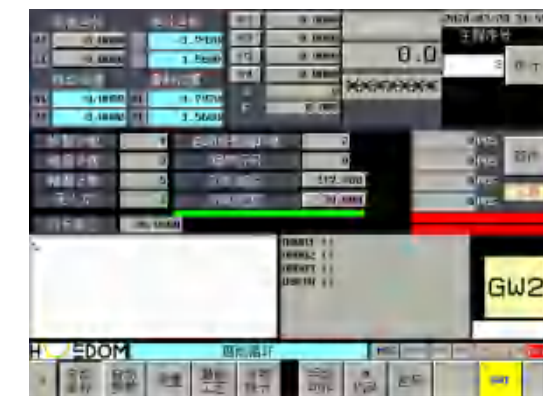
About us

Grinding

Accessories

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.



HUSDOM

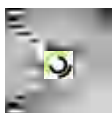
PRODUCT CATALOG

GRINDING EXAMPLE





MAKE GRINDING EASIER



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