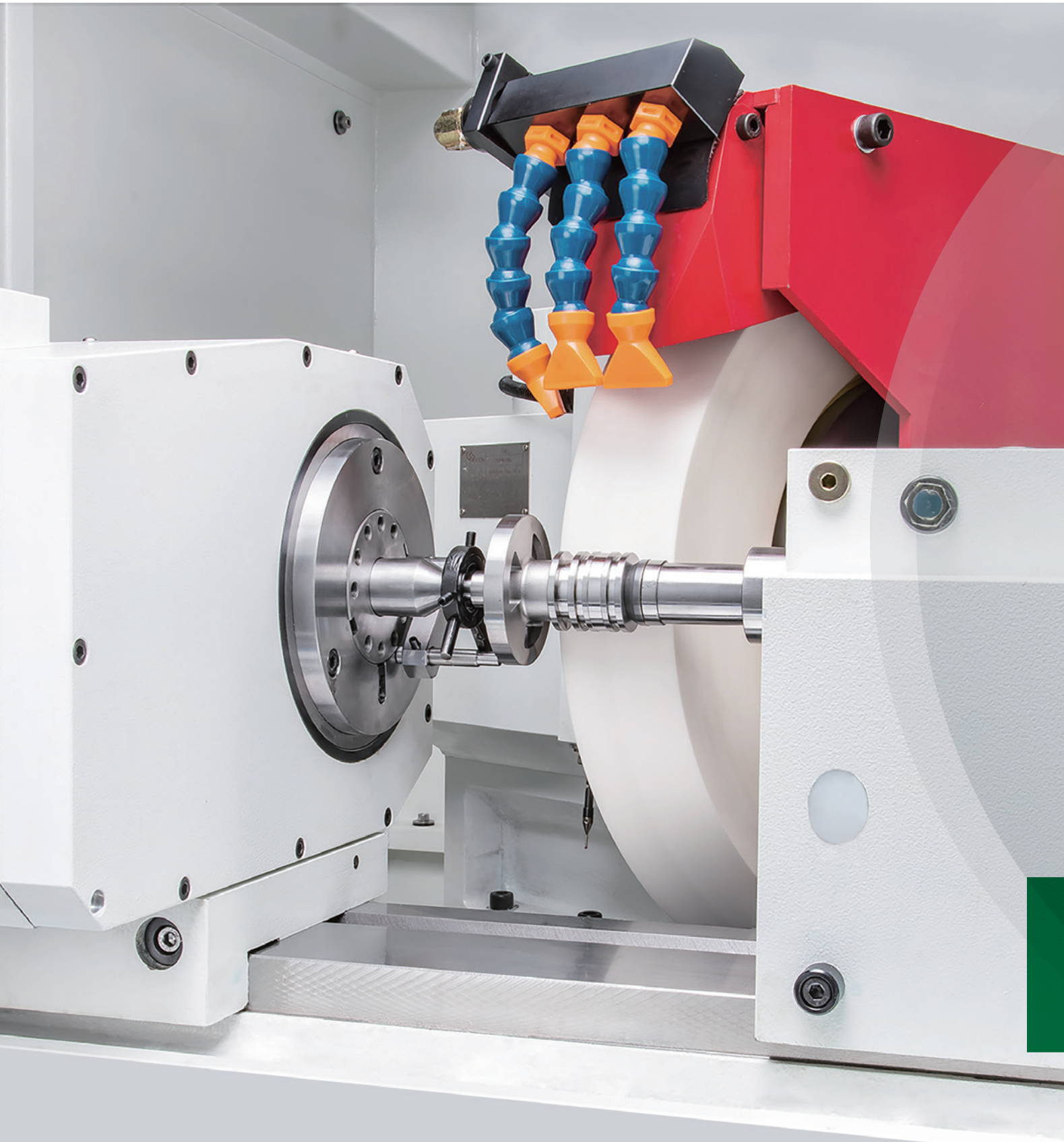




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Grinding Our Dream

Innovation on the fundamental of grinding.
Create the new chapter of grinding craft.



GO-350 CNC Universal Composite Grinding Machine

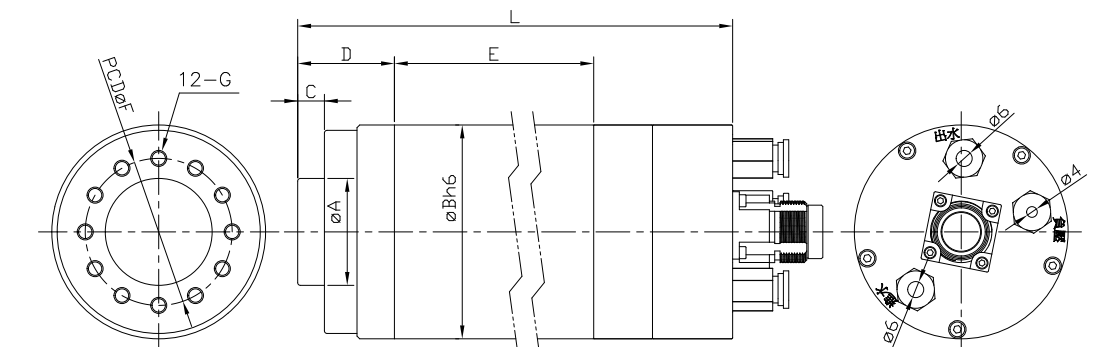
Machine Specification

Type	Unit	
Distance between Center	mm	1000 / 650 / 400
Grinding Length	mm	1000 / 650 / 400
Center Height	mm	175
Maximum Workpiece Weight	kg	150 / 80
Cross Slide: X-axis		
Maximum Travel	mm	275 / 250
Speed	mm/min	0.001~10000
Longitudinal Slide: Z-axis		
Maximum Travel	mm	1150 / 880 / 620
Speed	mm/min	0.001~10000
Wheelhead Assembly		Fixed Wheelhead Turret Wheelhead
Rotation Range		0° / 15° / 30° -10°~240°
Direct Drive Power	kw	Up to 11
Grinding Wheel Specification	mm	500 * 60 * 203
Grinding Wheel Linear Speed	m/s	60
Diameter of Internal Grinding Spindle Hole	mm	120
Driving Power	kw	15
Spindle Rotation Speed	rpm	8,000~30,000
Workhead		
Speed Range	rpm	1~1000
Drive Power (Fanuc)	kw	1.8 / 1.2
Grinding Roundness Accuracy	mm	< 0.0008
Assembly Taper		MT4 / MT5
Tailstock		
Matching Taper Hole		MT3 / MT4
Sleeve Travel	mm	35 (1.37")
Sleeve Diameter	mm	50
Grinding Taper Precision Fine Adjustment	µm	±20

Built-in Spindle Specification

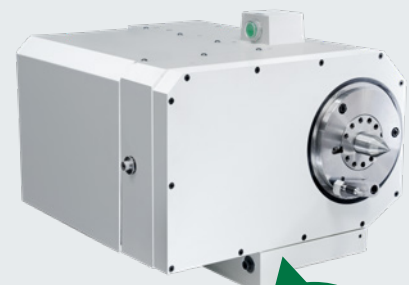
Type	Taper	Installation Tpye	Max. Rotate Speed (rpm)	Voltage (v)	Current (A)	Power (kW)
TO140	1.5	Horizontal	3200	220	28	7.5
TO150	1.5	Horizontal	3200	220	53	11

Type	Lubricant	rpm	øA (mm)	øB (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	L (mm)	Voltage (v)	S1 Current (A)	S1 Power (kW)	S1 Torque (Nm)
CF80	Grease	16000	40	80	10	36.5	177	55	M6xP1	265.5	220	4 / 3.6	1	1



GO-350 CNC Universal Composite Grinding Machine

Discover the unparalleled precision and efficiency of the GO-350 CNC Universal Composite Grinder. Equipped with a 1°1 tooth turret B-axis function, this grinder is tailored to adapt to the specific requirements of each workpiece. Its unique wheelhead configuration allows it to perform external, internal, and surface grinding in a single setup, making it a highly cost-effective universal grinding solution.



Machine Feature

- Turret wheelhead G1(OD), G2(OD), G3(ID), for complex workpiece, simplify processing program, once and for all, improve the utility of equipment.
- Power Transmission : precision ballscrew with servo motor drive and HEIDENHAIN linear encoder, improve axial motion's positioning accuracy.
- Workhead : Use FANUC servo motor, high torque and high stability.
- Grinding wheel: use built-in spindle which is high rigidity and high torque. Also, can according to customer needs to choose the degree of wheelhead under the range of -10°C ~ 240°C.

Workhead Assembly

Driven by servo motors and equipped with C-axis functionality, the workhead allows for thread grinding and the most intricate non-circular profile grinding techniques. It incorporates a vacuum function for chip removal, reducing sensor interference, spindle clogging, and rust formation.

Left-side workhead configuration includes a multi-directional wheel dresser for shaping various types of grinding wheels. The optional diamond roller dresser is ideal for dressing CBN and diamond wheels.

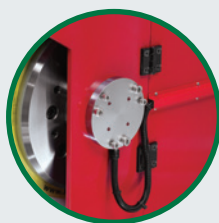
System and Software

The Fanuc 0i-TF control system, equipped with our in-house developed interactive software, is intuitive and easy to operate. Its user-friendly interface, along with built-in safety protocols and error alerts, significantly increases productivity.



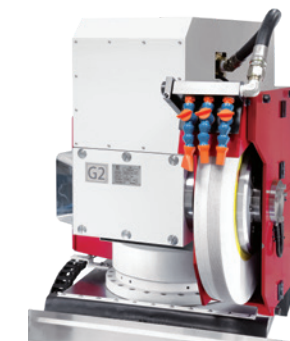
Wheelhead Assembly

The wheelhead accommodates up to two external grinding spindles and one internal grinding spindle. The external grinding spindle uses a 500mm diameter and 60mm width wheel, capable of operating at speeds of up to 60m/s. The internal 120mm diameter grinding spindle operates at speeds ranging from 8,000 to 30,000 RPM, providing high-frequency grinding.



Built-in Audio Features

- Eliminate idle travel, reducing grinding cycle time.
- Monitor the grinding process to ensure consistent wheel performance.
- Control grinding pressure to maintain workpiece dimension stability.
- Collision prevention features guarantee safety during unstable operations, extending spindle and wheel lifespan.



B Axis Function

The turret-style wheelhead, ensuring robust torque and exceptional stability. The right-side external wheelhead allows for 0°/15°/30° adjustments within a rotation range of -10° to 240°, secured by a 1°1-tooth gear clutch.

The optional DD direct-drive torque motor ensure zero backlash, high-speed, high precision, and excellent rigidity.



End Measurement

In-house hydraulic device to achieve high-precision positioning. The Marposh T18 probe is used to measure the end face length difference to ensure the consistency of the grinding section difference. The optional Marposh T25 comes with high-efficiency multi-directional trigger probe and high repeatability is ideal for very compact measurements.



Tailstock

Featuring an MT4 center assembly with a 50mm sleeve diameter and a 35mm stroke, the tailstock includes a cylindrical fine-tuning mechanism (adjustable range of ±0.02mm) that can be operated hydraulically or manually. The air-floating function facilitates easy adjustments on the slideway.



Base

The innovative V-guideway design features a unique three-point support system that enhances base rigidity, ensuring exceptional machine stability.

