

NC SURFACE GRINDING MACHINE

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Dener Makina was established in 1974 in Kayseri Old Industrial Zone. Since 2000, Dener Makine has focused on the production of CNC Sheet Metal Processing Machines and continues its production with a wide range of products including Guillotine Shears, Hydraulic Press Brakes, Ball Screw Press Brakes, Servo Electric Press Brakes, Plasma Cutting Machines and Fiber Laser Cutting Machines.

In 2016, the company made a significant investment by incorporating 155,000 m² factory buildings and 27,000 m² social facilities located on 1,300,000 m² of land owned by TAKSAN A.Ş. In the new period, Taksan Integrated Facilities started the production of CNC Metal Processing Machines such as Double Column Machining Centres, 5 Axis Simultaneous Machining Centres, Vertical Machining Centres, Lathes and Grinding Machines.

Dener Makina, CNC Sheet Metal Processing Machines and CNC Metal Processing Machines, with its wide range of machinery production, half a century of experience, qualified workforce and multinational R&D centre, is the first in the world by offering important investment products to the world industrial enterprises.



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NC GRINDING MACHINE

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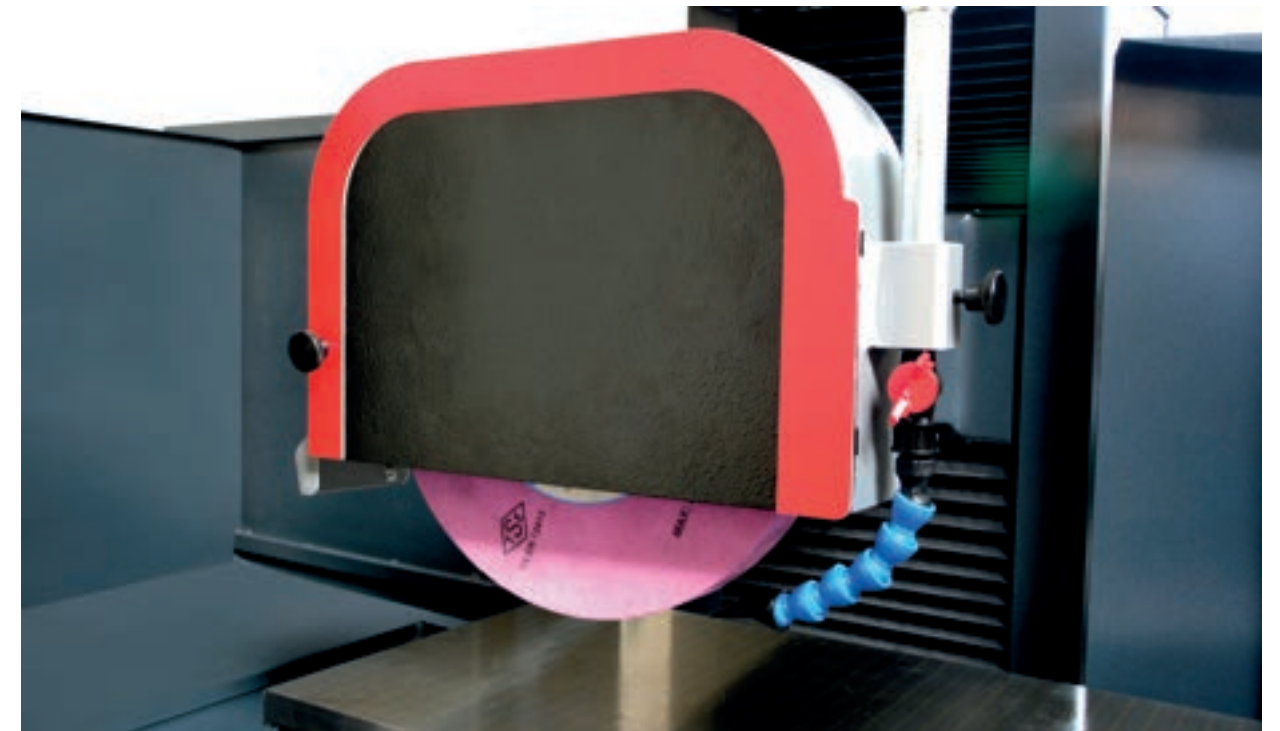


Overview



Our high precision surface grinder machine's capability to operate with any kinds of materials for longitudinal and cross directions grinding ensures maximum accuracy.

- 10" User-friendly touchscreen panel
- Vertical and cross travel driven by AC servo motor with ball-screw + MPG
- Precise chips removal for cross travelling and vertical axis with NC controlling system
- Hydraulic system controls for the longitudinal travelling
- Ultra precise, strong, direct-drive without backlash rigid shafts are positioned in multiple locations
- V guide-rails, covered with protective casing, provides finer grinding surface finish
- Hand-scraped prism box guide-rails provides the finest grinding surface finish
- On-time service with spare parts and delivery



Standard Equipments

- ✓ Vertical and Cross Feed Travel Driven by AC Servo Motor + MPG
- ✓ 10" Colour LCD Touch Screen Panel
- ✓ Remote Hand-wheel
- ✓ Semi Guarding for Table
- ✓ Grinding Wheel Flange
- ✓ Elektromagnetic Table (400×800)
- ✓ Wheel Balancing Stand
- ✓ Balancing Arbor
- ✓ Grinding Wheel (Ø350 x Ø127 x 40)
- ✓ Puller for Wheel Flange
- ✓ Table Type Wheel Dresser (With the diamond)
- ✓ Coolant Equipment
- ✓ Paper filter cooling equipment (Manual)
- ✓ Work Light & Program Light
- ✓ Front door safety switch
- ✓ Tools & Box
- ✓ Hydraulic Unit With the Oil (100 Lt)
- ✓ Chuck Controller for Elektromagnetic Table
- ✓ Lifting Screws
- ✓ Leveling Bolts & Plates
- ✓ Operator's Manual

Optional Equipments

- ✓ NC controls for vertical and cross axes
- ✓ Additional wheel flange
- ✓ Parallel wheel dresser on wheel head (with the diamond)
- ✓ Sin bar with magnetic (V-S 100M)
- ✓ Auto paper strip filter with magnetic separator coolant system
- ✓ Tool maker vice (VMV-40)
- ✓ Demagnetizer (for workpiece) (VDM-68)
- ✓ Sine bar (VS-100)
- ✓ Punch former with the sine plate (V-PB-BS)

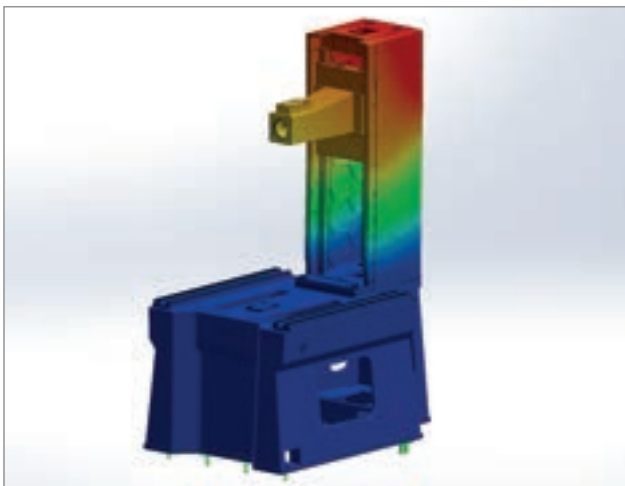
Body Structure

Stress relieved meehanite casting with annealed body structure provides working under heavy conditions, vibration damping, high precision and high resistance.



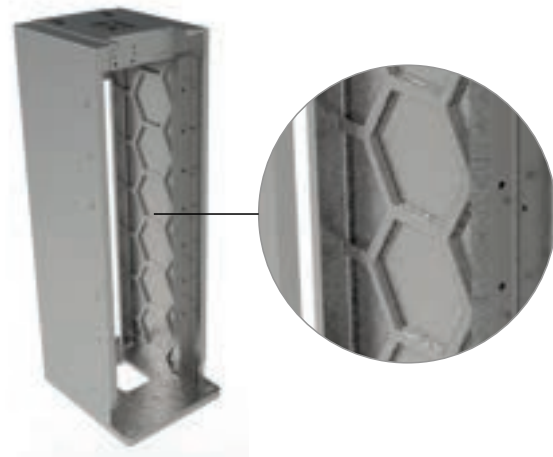
Finite Element Method

By using the finite element method, optimum body structure is obtained.



Column structure

Due to comb support at column, high resistance and vibration damping performance.

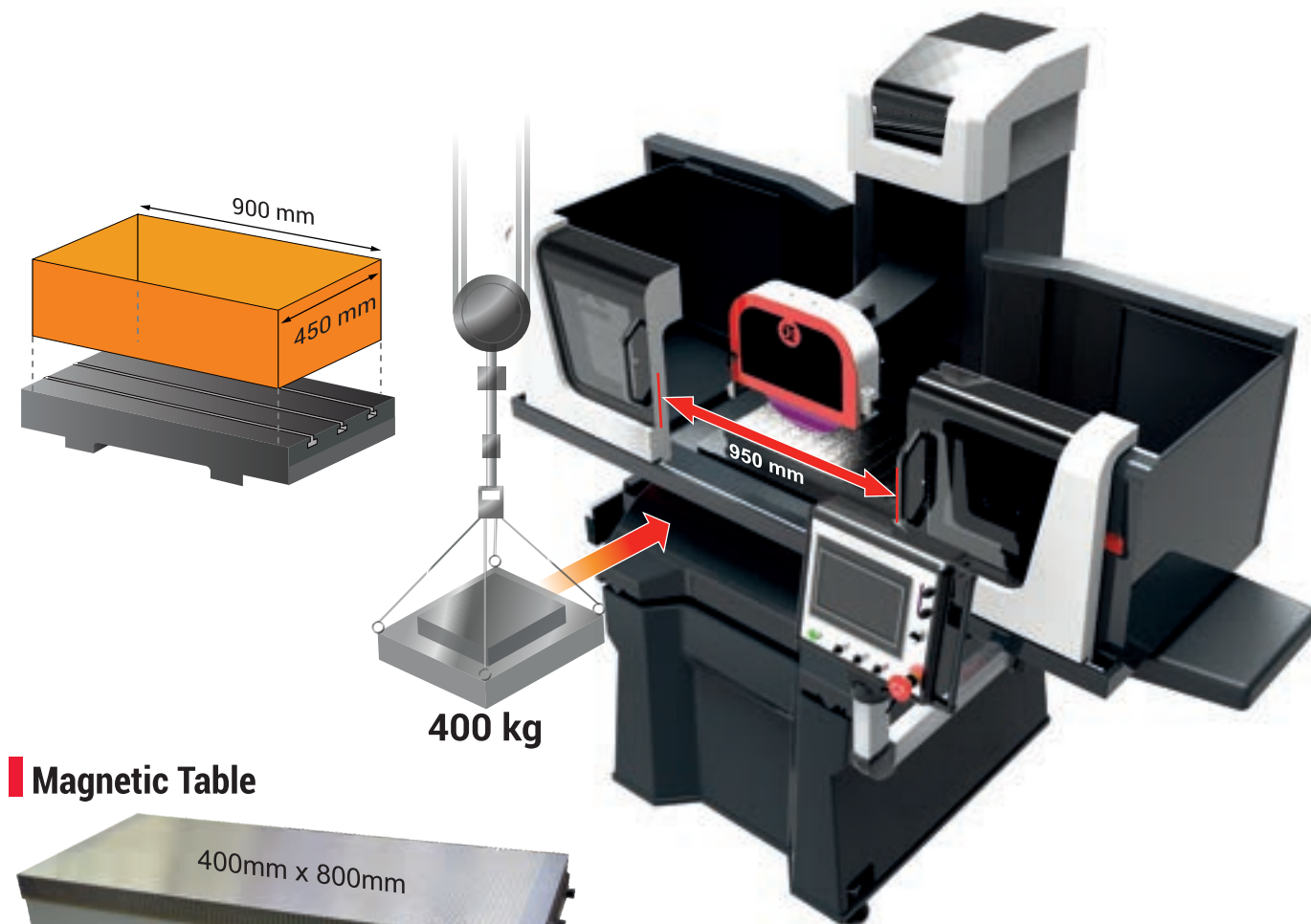


Linear Guide Way System

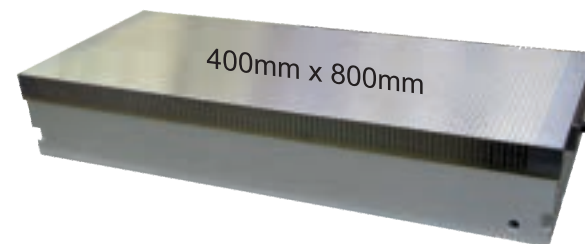
Meehanite casting and hand scrapped due to Turcide-B protective casing box-prism rail system precise linear way, positioning and without vibration running.



Operating Field and Table Measurement



Magnetic Table



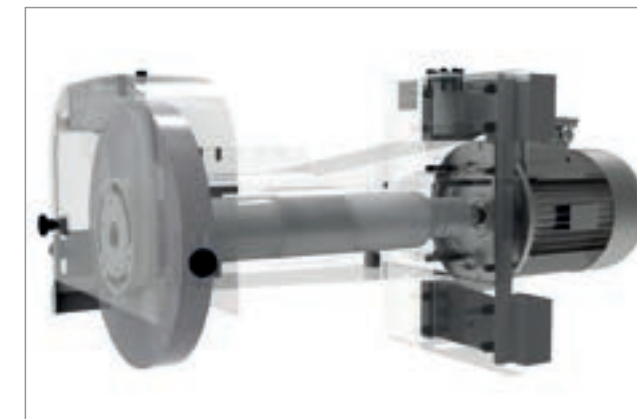
Column Axis

Hardened and protected casing rails with Turcide-B rigid linear way due to high precision, front loading, grinded ball-screw precise positioning and repeatability.



Direct-Drive Spindle

Due to direct drive motor connection, pre-loaded and precise roller type bearing supported with spindle provides excellent surface and precise grinding.



Control Unit

User Friendly interface with latest technology and ergonomic design.



Coolant Tank (Optional)

100 lt. capacity, self-filtered and functional tank design provides optimum cooling and easy maintenance.



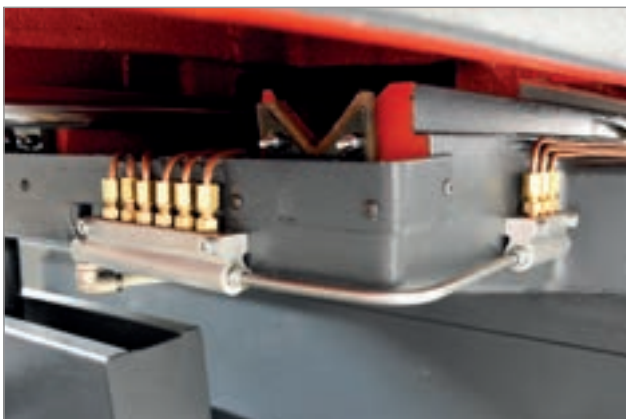
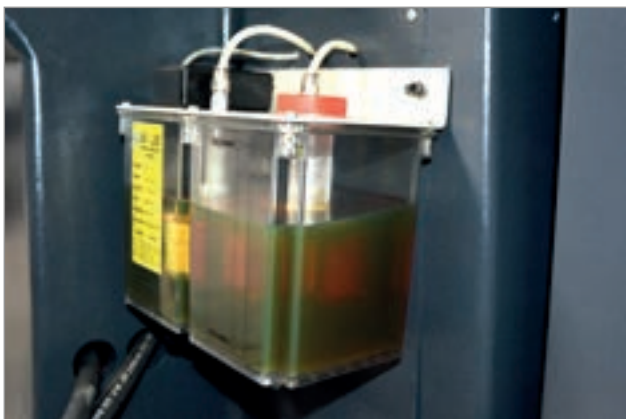
Hydraulic Unit

Due to controlled with hydraulic unit of table axis movement, even if hard conditions, fast and stable working capability.



Automatic Lubrication System

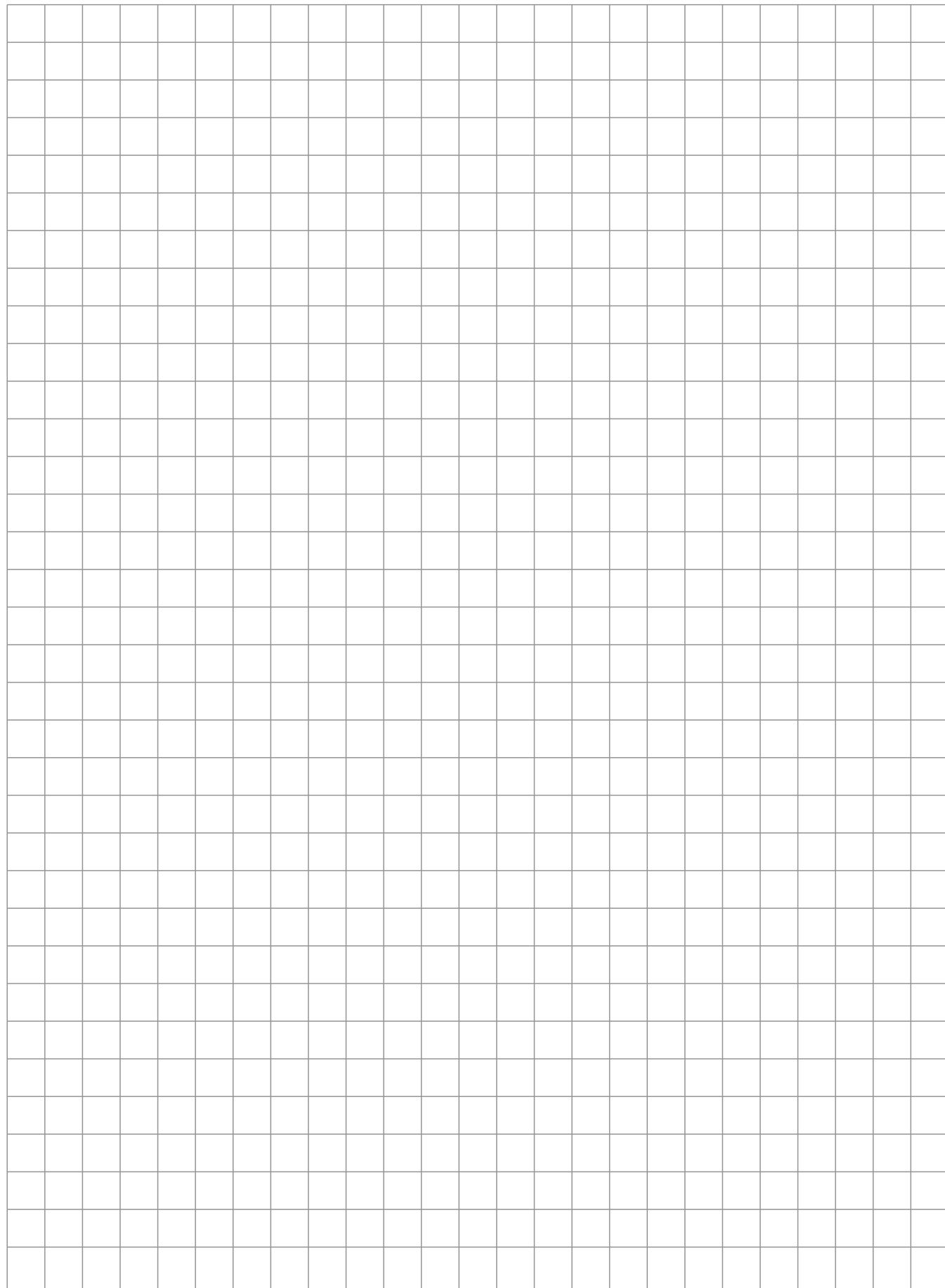
By using two different pumps to table axis and all other axes, effective lubrication provides longevity of the equipment.



			TGH-B 450 (M)	
Work Table	Table Size		mm	450x900
	Max. Grinding Length (Longitudinal)		mm	900
	Max. Grinding Width (Crosswise)		mm	450
	Max. Distance From Center of Spindle to Table		mm	550
	Min. Distance From Center of Spindle to Table		mm	75
	Table Guideway			V&Flat Way
	T-Slot Number/Size			1/14H7
	Max. Safety Table Load		kg	400
Ball Screws	Ball Screw for Vertical Feed		mm	C3 25
	Ball Screw for Cross Feed		mm	C6 25
Traverses Axis	Rapid Power (up/down)		mm/min	6000
	Rapid Power Cross Feed		mm/min	6000
	Min. Feeding Setting		mm	0,001
	Table speed Approx	Longitudinal	m/min	5~25
	Automatic Feed	Cross	mm	0,05~20
		Vertical	mm	0,001
	Motors	AC-Spindle Motor Power		kW
AC-Spindle Motor Speed		rpm	1450	
Servo-Motor Power for Vertical Feed		kW	0,7	
Servo-Motor Speed for Vertical Feed		rpm	3000	
Servo-Motor Torque for Vertical Feed		N-m	2,4	
Servo-Motor Power for Cross Feed		kW	0,7	
Servo-Motor Speed for Cross Feed		rpm	3000	
Servo-Motor Torque for Cross Feed		N-m	2,4	
AC-Motor for Longitudinal Axis		kW	4	
AC-Motor Speed for Longitudinal Axis		rpm	1440	
AC-Lubrication Pump Motor Power		kW	0,048	
Grinding Wheel	Frequency Inverter Type			FR-F840
	Speed		rpm	100-1450
	Max. Speed		rpm	1450
	Dimensions (OD/ID/W)		mm	Ø350xØ127x40
Power Source	Electric Power Supply (rated capacity)		kVA	22,3
Machine Dimensions	Length		mm	3280
	Width		mm	2750
	Height		mm	2151
	Weight		kg	3700
Coolant Capacity Motor&Pressure&Volume	Coolant Pump		kW-(bar)	0,2-(0,4)
	Coolant Tank Capacity		liter	100
Hydraulic Capacity Motor&Pressure&Volume	Hydraulic Pump		kW-(bar)	4-(40)
	Hydraulic Tank Capacity		liter	100
Control	NC System			Mitsubishi-FX5U
	Screen		10" Colour LCD Touch Screen	

* The values in the table may change in case of a machine update.

NOTES

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