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Manual and Semiauto Grinders - PLC Automatic Grinders - CNC Grinders
Double Column Grinders - Horizontal Rotary Grinders - Vertical Rotary Grinders
Custom Applications

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Precision Surface Grinding Machines

GMSi Group and Dowell High Precision Grinding Machines are committed to providing uncompromised quality and service with long standing results in abrasive machining technology.

- One year warranty
- Full service, technical support and parts
- Engineered to exceed your demands



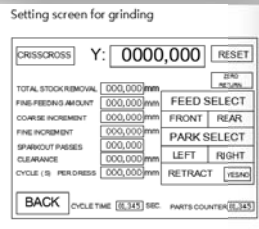
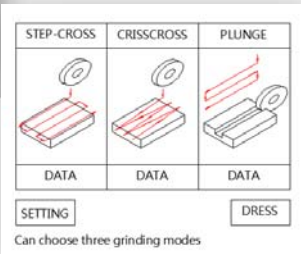
Operator Friendly Controls

Semi automatic feeds via pulse generator and hydraulic table feed. Highly reliable and economical.

- 1A Longitudinal Hydraulic Table Drive
- 2A 1A + Cross Motor Device
- 3A 2A + Rapid up/dn, Motorized



AND PLC automation in 3-Axes (X, Y, Z) AC servo motors along with MPG reach high efficiency, accuracy and repeatability

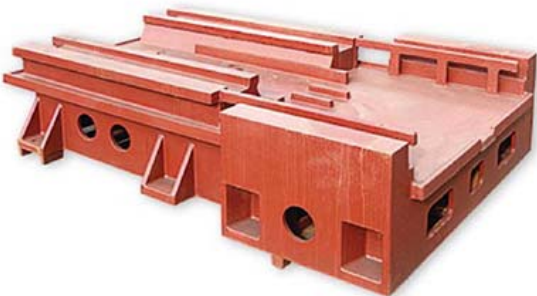


FANUC CNC control is available with simple editing program to meet grinding requirements in various work pieces. Also available with Mitsubishi, SYNTEC and our newest AND-II operating systems.



Most Rigid Construction

Machine structure is manufactured from high quality MEEHANITE class FC cast iron.



We use 3D simulation and analysis software to obtain the best layout to assure the best rigidity and strength of the cast iron.

Uncompromized Performance

Helping our customers stay ahead with reliable and innovative solutions that exceed their production requirements.



Double Column Surface Grinders

High stiffness, high accuracy, high efficiency and stability. All slideways are coated with TURCITE-B and then hand scraped for precision and longevity.

Automatic lubrication provides oil to all ways and screws.

The vertical spindle tilts +/- 45°



	DSG-4060AND	DSG-4080AND	DSG-40100AND	DSG-5080AND	DSG-50100AND
Max Grinding Capacity	1000 x 1500mm	1000 x 2000mm	1000 x 2500mm	1200 x 2000mm	1200 x 2500mm
Table to Spindle Center (Horizontal)			920mm (1120 Opt.)		
Table to Spindle Center (Vertical)			750mm (950 Opt.)		
Table Speed	2 ~ 25m /min.				
Distance Between Columns	1400mm			1600mm	
Spindle Motor (60Hz) (Horizontal)	20-hp				
Spindle Motor (60Hz) (Vertical)	7.5-hp (10 opt.)				
Grinding Wheel (Horizontal)	500 x 50 x 203mm (500 x 75 x 203mm Opt.)				
Grinding Wheel (Vertical)	300 x 38 x 127mm				
Table Guide Ways	Double V				
Table Load	2000-kg	2500-kg	3000-kg	3000-kg	3500-kg
Gross Weight	16000-kg	17500-kg	20000-kg	18500-kg	21000-kg

HR-1000AND	HR-1200AND
1000mm	1200mm
10 ~ 60 rpm	10 ~ 50 rpm
7kw	10kw
20-hp	20-hp
500 x 50 x 203mm	500 x 50 x 203mm
13500-kg	15500-kg

Accessories and Optional Equipment

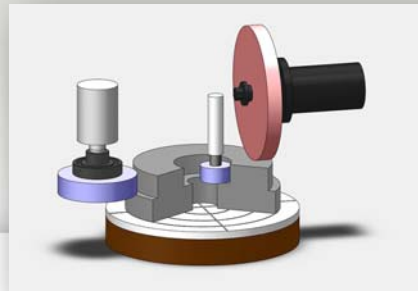
- Online Wheel Balancing System
- Electromagnetic Chucks
- Indexing rotary Tables
- Coolant Water Filtration
- Variable Speed Spindle Inverter
- Hydraulic Oil Chiller
- Roller Dressing Device
- Manual Overhead Dresser
- Oil Mist Collector and Machine Enclosure
- CNC Rotary Table
- Universal Angle Vice
- Angle Sine Dressing Device





VHR-500 CNC VHR-600 CNC

CNC rotary table grinder with multi spindle arrangement for surface, OD and ID grinding in one setup. Please contact us with your applications.



High Precision and High Production

Rotary table grinders in both vertical and horizontal configurations. Heavy duty class machines with large working area and enclosure, variable spindle speeds and repeatable operation control options.

Horizontal Spindle Rotary Grinders

	HR-200AND	HR-300AND	HR-400AND	HR-500AND	HR-600AND	HR-800AND
Rotary Chuck Dia.	200mm	300mm	400mm	500mm	600mm	800mm
Rotary Chuck Speed	20 ~ 250 rpm	20 ~ 250 rpm	20 ~ 250 rpm	10 ~ 150 rpm	10 ~ 150 rpm	10 ~ 60 rpm
Rotary Chuck HP	400w	750w	1.5kw	2kw	3kw	4.5kw
Spindle Motor (60Hz)	3-hp	3-hp	5-hp	5-hp	10-hp	15-hp
Grinding Wheel	180 x 13 x 31.75mm	180 x 13 x 31.75mm	355 x 38 x 127mm	355 x 38 x 127mm	355 x 38 x 127mm	405 x 50 x 127mm
Gross Weight	1450-kg	1800-kg	8000-kg	13500-kg	15500-kg	8000-kg

Vertical Spindle Rotary Grinders

	VR-500AND	VR-600AND	VR-1000AND	VR-1200AND
Rotary Chuck Dia.	500mm	600mm	1000mm	1200mm
Rotary Chuck Speed	5 ~ 50 rpm		5 ~ 20 rpm	
Max Grinding Radius	250mm	325mm	500mm	
Rotary Chuck HP	2kw	3kw	7kw	
Spindle Motor (60Hz)	15hp (opt. 20hp)		50-hp	
Spindle Speed	1750-rpm		1175-rpm	
Grinding Segment	150 x 50 x 25mm			
Gross Weight	3100-kg	5500-kg	14000-kg	



CNC Surface Grinders

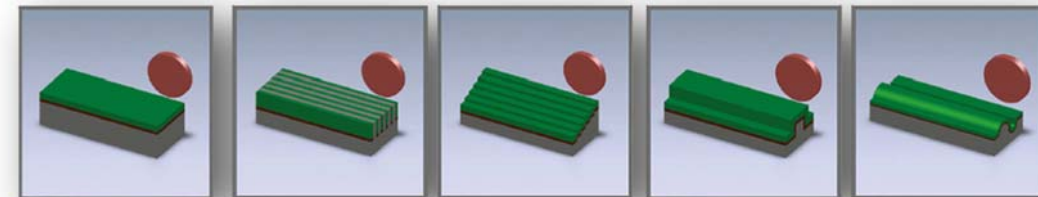
Y-axis uses a ball screw (C3) and high precision reducer with AC-servo motor drive.

Y and Z-axis use high stiffness and rigidity linear roller guideways.

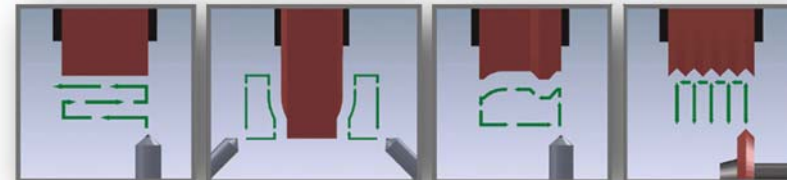
High precision spindle is supported by CP6 class angular contact bearings. A 10hp Siemens motor ensures powerful and accurate cutting.

	DSG-820 CNC	DSG-1224 CNC	DSG-1640 CNC	DSG-1660 CNC
Table Size	500 x 200mm	600 x 300mm	1000 x 400mm	1500 x 450mm
Table to Spindle Center	450mm	680mm		
Longitudinal Movement (Servo)	1 ~ 15 m/min.			
Longitudinal Movement (Hydraulic)	5 ~ 25 m/min.			
Spindle Motor (60Hz)	2-hp (3-hp, Opt)	10-hp		
Spindle Speed (60Hz)	3600-rpm	1750-rpm		
Grinding Wheel	180 x 13 x 31.75mm	355 x 38 x 127mm	405 x 50 x 127mm	
Gross Weight	2300-kg	4200-kg	5800-kg	7000-kg

Grinding Options



Dressing Options



ANDII Control System

Latest in user friendly operator control with high precision and repeatability. Simple dialogue control only requires a size input to start the grind cycle. Allows Inexperienced staff to master operation with minimal training.





High Precision Surface Grinding Machines

Professional grade surface grinding machines for all levels of production and service. Rigidity, efficiency, and accuracy are built into all models. Proprietary **MEEHANITE** casted machine base and supports, produced to precise engineered specifications, stress relieved and machined to the highest tolerance, using the most current techniques and materials.

Large high speed precision spindles are powered by a powerful continuous duty AC motor. Dynamically balanced for longevity and high production demands. Operator friendly controls measuring in metric or inch.

Upholding a continued commitment to developing and supporting the most efficient, productive and user friendly machines for your production needs

Auto Down Feed Rate	0,001 ~ 0,099mm
Jog	0,001mm
Pre-set Spark Out Time	0.9 Passes
Manual Pulse Generator (MPG)	x1, x5, x10

Specifications

Model		DSG-618		DSG-818	DSG-820	DSG-1224	DSG-1632	DSG-2040	DSG-2060	DSG-2450	DSG-2460	DSG-3060	DSG-3080	
General	Standard Mag Chuck	150 x 450mm	200 x 450mm	200 x 500mm	300 x 600mm	400 x 800mm	500 x 1000mm	500 x 1500mm	600 x 1200mm	600 x 1500mm	750 x 1500mm	750 x 2000mm		
	Max Grinding Capacity (L x W)	475 x 160mm	475 x 210mm	550 x 220mm	650 x 340mm	850 x 450mm	1050 x 500mm	1550 x 500mm	1250 x 600mm	1500 x 600mm	1500 x 750mm	2000 x 750mm		
	Table to Spindle Center	400mm	400mm	380mm	600mm (700mm Opt.)									
Longitudinal	Manual Travel	485mm		600mm	700mm	900mm								
	Hydraulic Traverse	485mm		510mm	650mm	850mm	1100mm	1600mm	1300mm	1600mm	1600mm	2100mm		
	Hydraulic Feed Rate	1 ~ 25m /min.			1 ~ 19m /min.			3 ~ 25m /min.						
	Hydraulic Motor	1hp			2hp			3hp	5hp	5hp	5hp	7.5hp	7.5hp	
Cross Movement	Cross Feed (Manual / Auto)	180 / 180mm	210 / 210mm	230 / 230mm	340 / 310mm	450 / 420mm	575 / 550mm	575 / 550mm	675 / 650mm	675 / 650mm	800 / 800mm	800 / 800mm		
	Hand Feed / Revolution	5mm			5mm								AND: 0.1mm / MPG	
	Hand Feed / Graduation	0,02mm			0,02mm								AND: 0.001mm / MPG	
	Continuous Cross Feed (60Hz)	650 mm /min.			1100mm /min.			1000mm /min.					1000mm /min.	
	Incremental Cross Feed	0,5 ~ 10mm /min.			1 ~ 20mm /min.								1 ~ 20mm /min.	
	Cross Feed Motor	25w	25w	40w	80w	80w	1/4hp (Siemens)					500w (AC Servo)		
Down Feed	Rapid Feed (Slow Feed)	230 (29)mm /min.			230 (29)mm /min.			500mm /min.					500mm /min.	
	Hand Feed / Revolution	1mm	AND: 0,1mm /MPG	1mm	AND: 0,1mm /MPG	AND: 0,1mm /MPG							AND: 0,1mm /MPG	
	Hand Feed / Graduation	0,005mm	AND: 0,001mm /MPG	0,005mm	AND: 0,001mm /MPG	AND: 0,001mm /MPG							AND: 0,001mm /MPG	
Spindle	Grinding Wheel	180 x 13 x 31.75mm			355 x 38 x 127mm			355 x 38 x 127mm		406 x 50 x 127mm			510 x 50 x 203mm	
	Spindle Speed (60Hz)	3600 rpm			1750 rpm			1750 rpm		1750 rpm			1750 rpm	
	Spindle Drive Motor	1.5hp	1.5hp	2hp	5hp (7.5hp Opt.)		7.5hp (10hp Opt.)		10hp			15hp	15hp (20hp Opt.)	