

SOLUTION

DPG150

DIGITAL PROFILE GRINDER



The Vision of Precision



The Engineering AMADA



INDUSTRY'S FIRST DIGITAL PROFILE GRINDER

DPG150

NEW DIGITAL MEASUREMENT IMPROVES
PART PROCESSING & PRODUCTIVITY

After 80 Years of Profile Grinding
A New Era Has Arrived. The Digital
Projector was created through the
pursuit and exploration of the
possibilities of digitization.



▲ FULL COVER WITH ROBOT

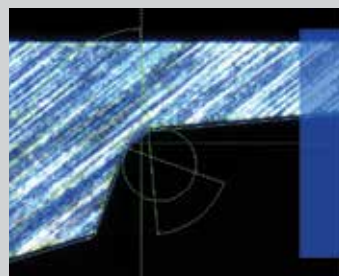


◀ CAM ON BOARD
The on board CAM and interactive software support various grinding processes. The 15" touch panel is positioned at the same height as the main motor allowing a smooth working environment.



DIGITAL PROJECTOR (patent pending)

- Displays detailed shapes indispensable for high-precision processing on a 4K monitor.
- New & improved lower view point of the monitor.
- Magnified loupe displays enlarged images up to 400x.



DX MACHINE

- Digital measurement of 1 μ m.
- Enables Ultra-Precision and High-Precision processing by any operator.
- Part tolerance errors will display through the overlapping of the CAD shape over the workpiece image.



AUTOMATION & WORK SAVING

- Automatically runs measurement & correction after grinding.
- Productivity gain by ATC/AWC Robotics will allow for continuous grinding of workpieces with multiple wheel changes to process parts.



CHARTLESS

- Zero cost making work-piece images.
- Direct CAD diagram input.

| Contact your Regional Sales Manager for more Information

| Pictures may include some optional equipment.

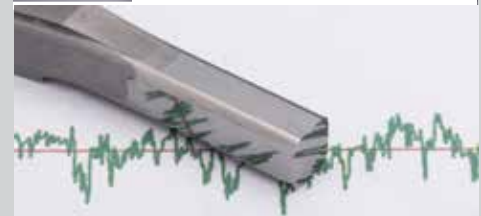
| Some safety equipment may have been removed or opened to illustrate products clearly and must be in place, and functioning, prior to operation.

STANDARD FEATURES

- DIGITAL PROJECTOR
- AUTOMATIC WORK SHAPE MEASUREMENT
- AUTOMATIC MEASUREMENT
- COMPENSATION PROCESSING
- WHEEL MEASUREMENT
- LINEAR MOTOR RECIPROCATING UNIT
- ON-MACHINE CAM



LINEAR MOTOR RECIPROCATING UNIT



OPTIONAL: AIR STATIC PRESSURE SPINDLE

List of Optional Functions & Devices

EQUIPMENT

NC Wheel Head Swiveling Function	
Air Static Pressure Spindle	
Motor-Operated Front/Side Relief Angle	
Seamless Grinding	
Cylindrical Indexer (2 types)	
Automatic R-Dressing Function	
Fine Adjustment Table	Angle: $\pm 2^\circ$
Small NC Index Device ($\varnothing 32$ Through-Hole)	With A/B/C Direction Common Bracket
Small NC Index device	No through-hole
*Small Size Cylindrical Grinding Attachment ($\varnothing 100 \times 100L$)	
*Large Size Cylindrical Grinding Attachment ($\varnothing 200 \times 200L$)	
On-board R Forming Dresser	MRD-180
Semi-Auto Balancer	Single Surface Correction Type
Dust Collection / Coolant tank (paper type)	0.4kW, Select from 60L/150L/250L

CONTROL

Add program memory capacity
**Additional program registration
Spindle speed program input (S4/S5-digit command)
Run hour and parts counter (FANUC function)
Synchro feed function
Auto corner override
Helical cutting
Coordinate rotation
Scaling
Retracing
Inch/Metric Conversion
Custom Macro
Workpiece Coordinate System (G54 ~ G59)
RS232C Connector (external connector)
Ethernet Function (external connector)

SOFTWARE

Teaching rough-grinding cycle	
Table teaching software	
***On-board R forming dress software	
Repeat Cycle Function	
Machining time calculation function	
Run hour display function	
Zero return	
****NC wheel head swiveling software	
Best fit teaching playback software	Intersection point calculation/point edit function
3-Axis Work Teaching	Table 2-axis + Added-axis Teaching

*Contact us if the specified size is not same as listed.

**Additional program registration requires expansion of program memory capacity.

***An on-board R forming dresser is required.

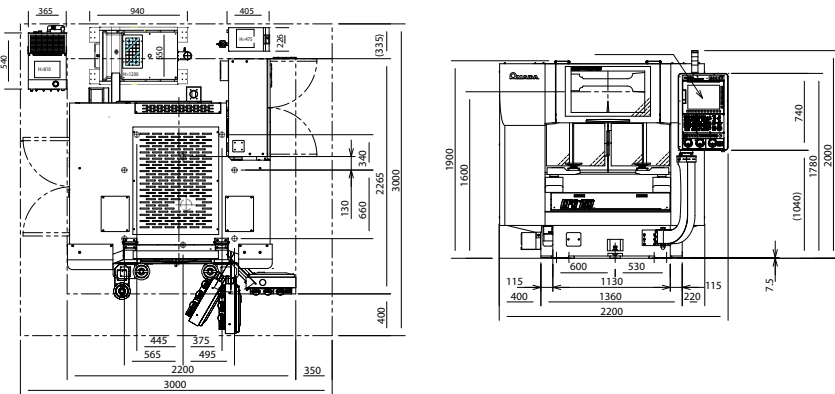
****NC wheel head swiveling function is required.

PRODUCT SPECIFICATIONS & DIMENSIONS

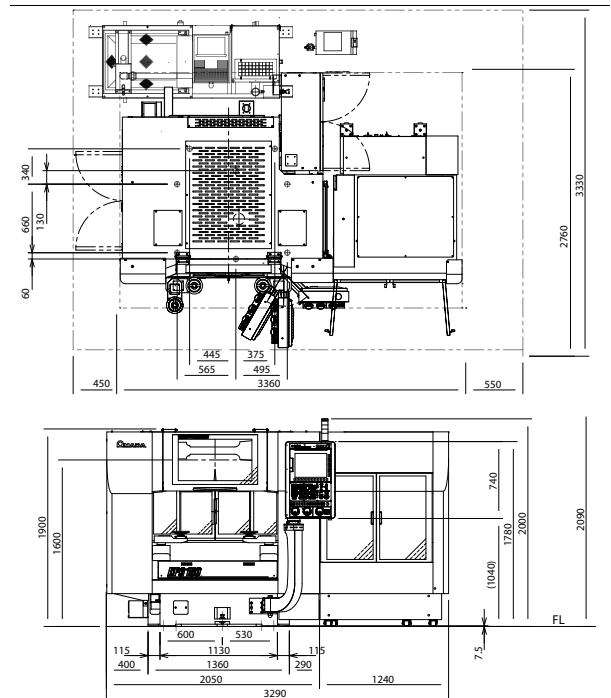
DPG150

		Full Cover	Full Cover + Robot	
Digital Projector	Screen Size (W x H)	690 x 370 mm (32 inch)		
	Magnification	Normal/High		
Illumination	LED Lighting	Bottom (Diascopic)	Digital Dimming V/W	
		Top (Episcopic)	Digital Dimming V/W	
Table	Working Surface (Sub Table)		400 x 250 mm	
	Distance from the Table Top to Focus Point (Excluding Sub Table)		60 - 185 mm	
	Travel	Traverse Feed (Z-axis)	300 mm	
		Cross Feed (V-axis)	150 mm	
		Vertical Feed (A-axis)	125 mm	
	Feed Speed	Rapid Traverse (G0)	2000 mm/min	
Grinding Feed (G01)		0.1 - 1000 mm/min		
Wheel Head	Linear Axis	Travel	Traverse Feed (X-axis)	200 mm
			Cross Feed (Y-axis)	150 mm
		Feed-rate	Rapid Traverse (G0)	1500 mm/min
			Grinding Feed (G01)	0.1 - 1000 mm/min
	Relief Angle	Angle	Radial Relief Angle	-2 thru 20 (Manual *OP: Electric)
			Axial Relief Angle	±15 (Manual *OP: Electric)
	Swiveling Angle		±15 (Manual *OP: NC Control)	
	Reciprocating Axis	Reciprocating Stroke (W-axis) / Drive System		0-155 Linear Motor)
		Reciprocation Speed		30-400 (Limited, Depending on the Height of Reciprocating Slide)
	Wheel Spindle	Wheel Size (O.D. x W x Bore)	High Speed Spec	Middle 65-100 x 4 - 6 x 22.23
Low Speed Spec			Large 120-180 x 3 - 10 x 31.75	
Spindle Speed		High Speed Spec	2000-20000 (TC-20) (*Selection)	2000-20000
		Low Speed Spec	1000-6000 (TS-6) (*Selection)	
Mass of Machine		5000 kg	5000 + 500 kg	
Noise Level		70 or Less dB		
Power Requirement		18 kVA		
Pressure/Flow Rate		0.6 or more / 500 MPa / NI/min		

FULL COVER



FULL COVER + ROBOT



- ⚠** Before using this product, please read the operator's manual carefully and follow all applicable instructions.
- When using our products, safety equipment is required depending on the operational task.
- * Specifications, appearance and equipment are subject to change without notice by reason of improvement.
 * Please use the machine model name such as DPG150, when applying for administration applications.
 * For any inquiries, please contact local Amada Machinery America, Inc. office.

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14646 Northam Street · La Mirada, CA 90638
 Phone: 847.285.4800 · Fax: 847.519.2127

www.amadamca.com

