

DWX-52Di Plus

5-Axis Dry Dental Mill

Specifications

Millable material*1		Zirconia, Wax, PMMA, Composite resin, PEEK, PEKK, Gypsum, Glass fibre reinforced resin, CoCr sinter metal, Polycarbonate
Loadable workpiece shape	Disc type	Step section: 98.5 mm (3.88 in.) (diameter), height 10 mm (0.39 in.) Body section: 95 mm (3.47 in.) (diameter), height max. 60 mm (2.36 in.)
	Pin type	Pin diameter: 6 mm (0.24 in.) *The optional pin-type material adapter ZV-52D is required.
Operating speed		XYZ: 6 to 1,800 mm/min (0.24 to 70.9 in./min.)
Spindle motor		Brushless DC motor
Spindle rotating speed		6,000 to 30,000 rpm
Rotary axis travel angle		A: ±360°, B: ±30°
Number of milling burs housed		15
Attachable milling bur		Shank diameter: 4 mm (0.16 in.), length: 40 to 55 mm (1.57 to 2.17 in.)
Compatible compressed air		0.02 to 0.2 MPa
Interface		USB
Control command sets		RML-1, NC code
Power requirements		100 to 240 VAC ± 10%, 50/60 Hz (overvoltage category II, IEC 60664-1), 2.0 A
Power consumption		Approx. 200 W
Operating noise		During operation: 70 dB (A) or less (when not cutting) During standby: 45dB (A) or less
External dimensions		Width×depth×height: 495×660×600 mm (19.5×26.0×23.6 in.)
Weight		67 kg (148 lb.)
Installation environment		Indoor use at altitudes up to 2,000 m (6561.68 feet) Temperature: 5 to 40°C, Humidity: 35 to 80 % (no condensation) Ambient pollution degree: 2 (as specified by IEC 60664-1) Short-term temporary overvoltage: 1,440 V, long-term temporary overvoltage: 490 V
Included items		Power cord, USB cable, manual, DGSHAPE Software Package CD, detection pin, automatic correction jig, hexagonal screwdrivers, spanner (for clamp), spanner (for spindle), milling bur holders, milling bur positioner, dust collection hoses, dust collection hose adapter, regulator, air hose, collet mounting jig, brush, etc.

System Requirements

Operating system (OS)	Windows 11 (64-bit version), Windows 10 (32-bit and 64-bit versions)
CPU	Minimum required CPU for the operating system
Memory	Minimum amount of required RAM for the operating system
Optical drive	CD-ROM drive
Video card and monitor	A monitor with at least 256 colours and a resolution of 1024×768 or more is recommended.

Accessories

DLC-coated milling burs	ZPB-100D	R1.0 mm (ø2 mm)	Zirconia, Wax, PMMA, PEEK, PEKK, Gypsum, CoCr sinter metal, Polycarbonate
	ZPB-50D	R0.5 mm (ø1 mm)	
	ZPB-30D	R0.3 mm (ø0.6 mm)	
Diamond-coated milling burs	ZDB-100D	R1.0 mm (ø2 mm)	Composite resin, Glass fibre reinforced resin
	ZDB-50D	R0.5 mm (ø1 mm)	
	ZDB-30D	R0.3 mm (ø0.6 mm)	
Milling burs	ZCB-100D	R1.0 mm (ø2 mm)	Zirconia, Wax, PMMA, PEEK, PEKK, Gypsum, CoCr sinter metal
	ZCB-50D	R0.5 mm (ø1 mm)	
	ZCB-40D	R0.4 mm (ø0.8 mm)	
Special three-layer-coated milling burs	ZRB-200D	R2 mm (ø4 mm)	PMMA, Polycarbonate for Denture
	ZRB-150D	R1.5 mm (ø3 mm)	
Pin-type material adapter	ZV-52D	Pin-type material adapter for replacement	
Milling bur holder	ZBH-52D	Milling bur holder for replacement	
Spindle unit	ZS-52D	Spindle unit for replacement	
Collet	ZC-52D	Collet for replacement	
Spindle belt	ZSB-180	Spindle belt for replacement	

*1 Even when made from the described materials, some workpieces cannot be milled due to specifications or physical properties.
For more information, contact your authorised Roland DG Corporation dealer.

AUTHORISED DEALER:

Exceptional Service and Support for Seamless Business Operation

DGSHAPE is dedicated to providing the industry's best customer service and support. Our excellent team of customer support staff, certified service engineers, and technicians delivers prompt, reliable responses, and online outreach to ensure your business can continue to run smoothly.



DGSHAPE BRAND PROMISE

DGSHAPE Corporation is a wholly owned subsidiary of Roland DG Corporation, established in 2017 to develop and market innovative fabrication technology worldwide. With over 30 years' experience in innovative 3D design, DGSHAPE's core mission to "make innovation, make life better" is focused on delivering digital technologies that bring ideas to life, revolutionise business processes, and shape a better future.



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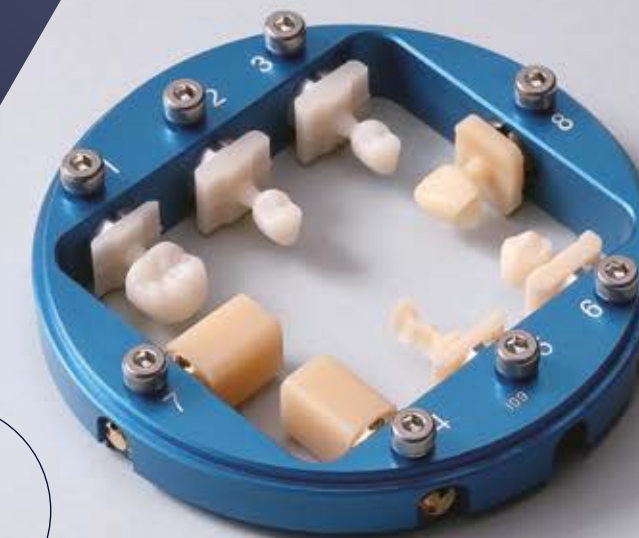
An Affordable, Efficient, and Precise Dry Milling Solution

PREMIUM QUALITY WITHOUT THE PREMIUM PRICE

An Affordable, Efficient, and Precise Dry Milling Solution

In 2011, DGSHAPE disrupted the market with the launch of the DWX-50. Now, we are doing it again with our most affordable mill yet.

Cost-effective without compromising on quality, the DWX-52Di Plus's 5-axis milling technology is a precise and efficient dental restoration solution, allowing users to produce a wide range of restorations, including crowns, copings, bridges, inlays, onlays, veneers, abutments, implant bars, and screw-retained crowns. Its upgraded user-replaceable spindle and C-type clamp are also compatible with disc- and pin-type materials, enhancing the machine's efficiency and versatility.



Mill Up To
8
Pin Blocks
Simultaneously

C-type Clamp Compatible with Pin-type Blocks

The optional pin-type material adapter enables milling of up to eight pin-type blocks simultaneously.

Advanced and Versatile Milling with an Enhanced Spindle

The DWX-52Di Plus's robust system with its re-engineered spindle enables stable and fast milling of a wide variety of materials, including zirconia, PMMA, wax, composite resin, PEEK, PEKK, gypsum, glass fibre reinforced resin, and CoCr sinter metal, etc.



The user-replaceable spindle reduces downtime and cost, offering a lower total cost of ownership and a quicker return on investment.

Gripping Force
1.8
Times



- Zirconia
- PMMA
- Wax
- Composite resin
- PEEK
- PEKK
- Gypsum
- Glass fibre reinforced resin
- CoCr sinter metal

Better Anterior Esthetics with 90-degree Milling

The C-type clamp system enhances functionality with a 90-degree milling range, allowing for improved restoration esthetics.*

*Designed with flexibility in mind, our milling solutions adapt to regional preferences while maintaining exceptional overall performance. Contact your local representative for details.

90-Degree
Milling



User- and Eco-Friendly Operations

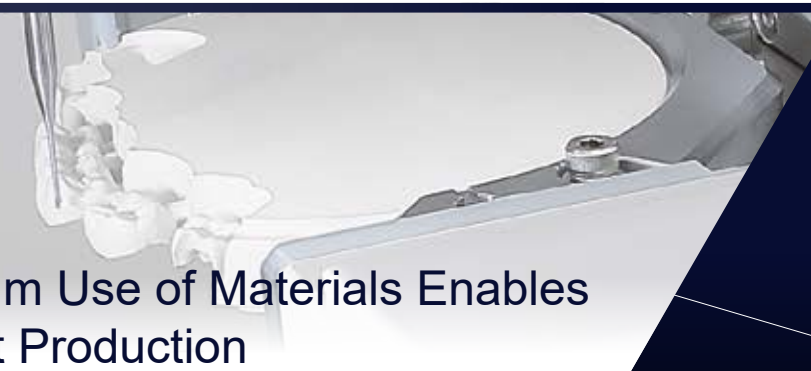
VPanel for DWX seamlessly provides maintenance oversight and output performance control. The Intelligent Tool Control automatically swaps out tools when they have reached their user-defined lifespan.



The DWX-52Di Plus is an energy-efficient, environmentally friendly dental mill that minimises power consumption while delivering top performance.

Maximum Use of Materials Enables Efficient Production

The C-type clamp allows users to mill up to the rim of disc materials, enabling maximum yield of one material and enhanced efficiency.



Stay Tuned-In to Tune-Up with DGSHAPE CLOUD

DGSHAPE offers remote monitoring for all DWX devices through its management software, available in DGSHAPE CLOUD. You can monitor machine status anytime, anywhere, while accessing valuable data, maintenance support, and actionable insights for optimal operations.

