



5-Axis Dental Mill

**DWX-52D**



Specifications		
Millable material	Zirconia, Wax, PMMA, Composite resin, PEEK, Gypsum, Glass fiber reinforced resin, CoCr sinter metal	
Loadable workpiece shape	Disc-type (with step)	Step section: 98.5 mm (3.88 in.) (diameter), height 10 mm (0.39 in.) Body section: 95 mm (3.74 in.) (diameter), height max. 60 mm (2.36 in.)
	Pin-type	Pin diameter: 6 mm (0.24 in.)
Operating speed	XYZ axis: 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	
Control command set	RML-1, NC code	
Interface	USB	
Power requirements	AC 100 V to 240 V ±10 %, 50/60 Hz (overvoltage category II, IEC60664-1), 2.0 A	
Power consumption	Approx. 200 W	
Operating noise	During operation: 70 dB (A) or less (when not cutting), During standby: 45 dB (A) or less	
External dimensions	Width × Depth × Height: 495 × 660 × 600 mm (19.5 × 26.0 × 23.6 in.)	
Weight	67 kg (147.7 lbs.)	
Installation environment	Indoor use, Altitude: Up to 2,000 m (6,562 ft.), Temperature: 5 to 40 °C (41 to 104 °F), 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, Manuals, DGS SHAPE Software Package CD, Detection pin, Automatic correction jig, Material Adapters, Material Adapter Rack, Pin-type material adapter, Hexagonal driver, Spanner (for clamp), Spanner (for spindle), Milling bur holders, Milling bur positioner, Cleaning tool, Option adapter ID labels, Dust collection hoses, Dust collection hose adapter, Regulator, Cleaning brush,etc	

System requirements for USB connection	
Operating system	Windows® 10, 8.1, 7 (32-bit or 64-bit) or an upgradedcomputer originally preinstalled with Windows 7 or later
USB cable	Use the included USB cable

Options				
Item	Model	Description		
Milling burs	ZDB-100D	R1.0 mm	Diamond	Composite resin, Glass fiber reinforced resin
	ZDB-50D	R0.5 mm		
	ZDB-30D	R0.3 mm		
	ZCB-100D	R1.0 mm	Non coating	Zirconia, Wax, PMMA, PEEK, Gypsum, CoCr sinter metal
	ZCB-50D	R0.5 mm		
	ZCB-40D	R0.4 mm		
	ZRB-100D	R1.0 mm	Milling bur for CA-MK1 (for DWX-52DCi/DWX-52DC/DWX-52D)	
Pin-type material adapter	ZV-52D	Pin-type material jig for replacement (for DWX-52DCi/DWX-52DC/DWX-52D)		
Material adapter	ZMA-52DC	Material adaptor for replacement (for DWX-52DCi/DWX-52DC/DWX-52D)		
Cleaning tool	ZCT-4D	Cleaning tool for replacement (for DWX-52DCi/DWX-52DC/DWX-52D)		
Milling bur holder	ZBH-4D	Milling bur holder for replacement (for DWX-52DCi/DWX-52DC/DWX-52D/51D/50/4)		
Spindle unit	ZS-4D	Spindle unit for replacement (for DWX-52DCi/DWX-52DC/DWX-52D/51D/4)		
Collet	ZC-4D	Collet for replacement (for DWX-52DCi/DWX-52DC/DWX-52D/51D/50/4)		
Spindle belt	ZSB-170	Spindle belt for replacement (for DWX-52DCi/DWX-52DC/DWX-52D/51D)		
Material adapters rack	ZR-52D	Material adapters rack for replacement (for DWX-52DCi/DWX-52DC/DWX-52D)		
Time reduction kit	CA-MK1	Time reduction kit for casted model (for DWX-52DCi/DWX-52DC/DWX-52D)		
	CA-DK1	Time reduction kit for casted denture base (for DWX-52DCi/DWX-52DC/DWX-52D)		
Options for Time reduction kit	CA-52DC	Material adapter of time reduction kit for replacement (for DWX-52DCi/DWX-52DC/DWX-52D)		
	CA-DK1-FX	Fixture for CA-DK1 for replacement (for DWX-52DCi/DWX-52DC/DWX-52D)		

The DGS SHAPE Promise

DGS SHAPE is the name of the new business that inherited 30 years of innovative 3D technologies of Roland DG from which it was spun off. The DGS SHAPE core mission – “make innovation, make life better” – is focused on delivering digital technologies that bring ideas to life, revolutionize business processes, and shape a better future. Our objective is to fuse human creativity with digital workflows to provide exceptional value across multiple endeavors, from individual craftsmanship to manufacturing, healthcare and beyond.

DGS SHAPE reserves the right to make changes in specifications, materials or accessories without notice. Actual device output may vary. For optimum output quality, periodic maintenance to critical components may be required. Please contact your DGS SHAPE dealer for details. No guarantee or warranty is implied other than that expressly stated. DGS SHAPE shall not be liable for any incidental or consequential damages, whether foreseeable or not, caused by defects in such products. All trademarks are the property of their respective owners. Three-dimensional data files may be protected under copyright. Reproduction or use of copyrighted material is governed by local, national, and international laws. Customers are responsible for observing all applicable laws and are liable for any infringement. DGS SHAPE Corporation has licensed the MMP technology from the TPL Group.



AUTHORIZED DEALER:

Printed in Japan. RDG-416110799 17 DEC C-3 D-S

www.dgshape.com



5-Axis Dental Mill

**DWX-52D**

by  Roland



# Precision Performer and Efficiency Expert

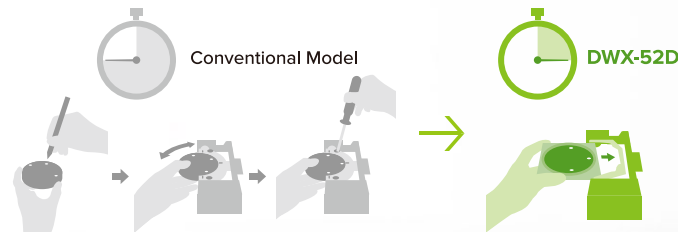
## Introducing the New DWX-52D 5-Axis Dental Mill for Maximum Efficiency and Production

When designing the next generation of the industry's best-selling dental mill, it was important to keep everything users love. Then make it even better. Capable of producing a wide range of restorations, including crowns, copings, bridges, inlays and onlays, veneers, abutments, implant bars, screw-retained crowns, digital dentures, models, surgical guides and bite splints, the DWX-52D 5-axis dental mill offers a highly reliable, precise, easy-to-use and affordable solution. New features include upgraded disc handling, increased material capabilities, improved tool management and other enhanced capabilities to make your lab more efficient and productive.

## DWX-52D

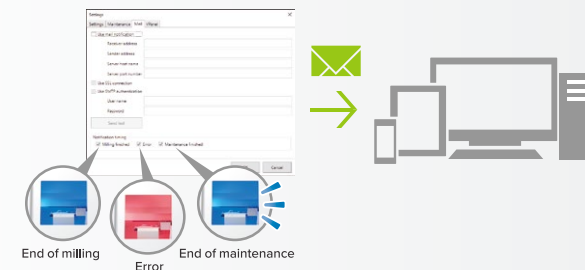
### New Clamping System

A new snap-on clamp system with six included adapters for 98.5mm discs offers fast and secure set-up of zirconia, wax, PMMA, gypsum, PEEK, glass fiber-reinforced resin, composite resin and CoCr sinter metal materials. Disc material adapters maintain the original point-of-origin when milling reinserted discs. A pin-type material adapter enables setting up and milling eight pin-type blocks consecutively.



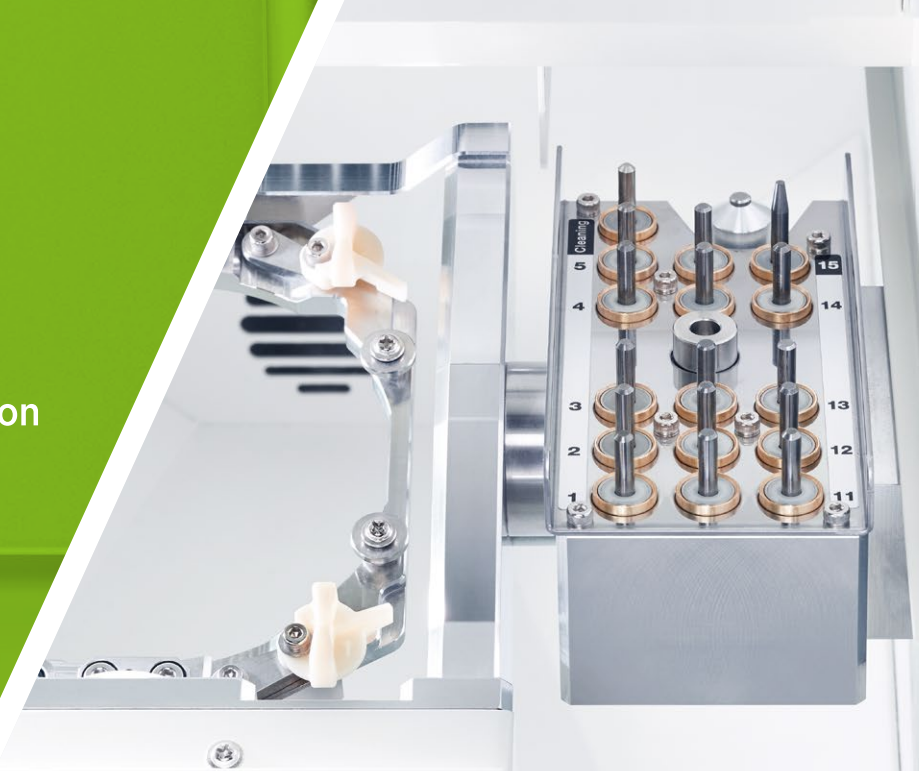
### User-friendly Design

A user-friendly Virtual Machine Panel (VPanel) enables convenient production and device monitoring from your computer. Email notifications keep you informed of operational status, including milling and maintenance completion, or any errors in order to minimize down time.



### 15-Station Automatic Tool Changer (ATC)

The DWX-52D provides continuous, unattended milling with a 15-station Automatic Tool Changer (ATC) and includes dedicated slot for an included cleaning tool. Now you can load the included cleaning tool into the ATC and set it up to automatically sweep away zirconia powder and other material dust for a cleaner milling surface.



### Adapter Rack for Increased Efficiency

Six adapters for 98.5mm material discs are included as standard with the DWX-52D allowing you to queue up multiple milling jobs for efficient job management. An optional disc adapter rack is also available.



### Precision 5-Axis Milling

The DWX-52D simultaneously rotates and tilts discs for deep undercuts and milling large arch applications and other full-mouth restorations with ease.

### Intelligent Tool Control

VPanel operation has been upgraded to include an Intelligent Tool Control function that intuitively swaps out tools from their stocker position when they have reached their user-defined lifespan with a designated replacement tool without needing to pause production.

### Comprehensive Support Network

In addition to online or telephone assistance, DGS SHAPE also offers educational seminars aimed at increasing customers' familiarity and confidence with products and services. Service engineers are also available worldwide to assist customers with any questions they may have.

