Designed specifically for dental labs and technicians, DWX Dental Milling Machines are Roland’s newest CNC milling devices built on more than 20 years of experience. The result is a compact design, clean, quiet operation, and precision machining of copings, crowns and bridges.

The all new DWX-50 streamlines the production process with 5-axis simultaneous machining capability and a 5-station automatic tool changer. An integrated air blower system aids with difficult to machine materials, such as PMMA or zirconia, along with a built-in dust collection tray that can be easily connected to any lab vacuum system, keeping the cutting area clean and free of debris.

While there are numerous dental milling machines in the marketplace, only the DWX Series delivers the advanced features the market demands at an attractive price point – backed by Roland’s proven reliability and legendary support.
High Quality Machining of Materials
DWX Dental Milling Machines are ideal for precisely milling wax, zirconia, and PMMA* with a maximum machine speed of 3,600 mm/min and maximum spindle speed of 30,000 rpm.

5-Axis Simultaneous Machining
The DWX-50 features 5-axis simultaneous machining, milling on X, Y, Z axes and rotating the blocks and discs of material 360 degrees in both clockwise and counterclockwise movements. This also allows for materials to be tilted forward and backward 20 degrees to support complex cuts. The DWX-30 features 4-axis milling.

Five Station Automatic Tool Changer
The five station Automatic Tool Changer with a tool length sensor enables the user to run multiple tools for one job, or to run an entire disc unattended. Instead of inspecting finished pieces to determine if everything was milled correctly, the integrated tool diagnostics feature will notify users if a tool was broken prior to completion, resulting in reduced waste. Using the tool length sensor, the automatic tool changer will also verify that a tool was properly placed back in the magazine, preventing mechanical failures.

Virtual Machine Panel
The DWX-50 features Roland’s Virtual Machine Panel (VPanel). Serving as the main operation panel for the DWX-50, users can automatically setup the dental clamp and quickly set the origin points from their computer. The VPanel includes an hour meter to keep track of overall machine time for maintenance purposes.

Clean Cutting Area Leads to Precision
Equipped with an integrated air blower system* that aids with difficult-to-machine materials, such as zirconia and PMMA, the DWX-50 also features a built-in dust collection tray that can be easily connected to any lab vacuum system**, keeping the cutting area clean and free of debris.

Multicast Capable
DWX-50 offers multicast capability, making it possible to connect up to four machines to one computer, allowing you to easily grow your business by adding additional production capability at a fraction of the cost.

Built-In LED Light
Designed for low power consumption, the DWX-50’s internal LED light allows for easy follow-up on the production process.

Open Design for Easy Integration
Built on open technology, the DWX is G-Code compatible and supports a wide range of software and tools, allowing for easy integration with any commercially available dental prosthetic production solution. It can take industry standard materials as disks or blocks.

One-Year Warranty
Roland milling machines combine unbeatable performance with legendary Roland reliability. As further proof of their unmatched reliability, Roland offers a One-Year Warranty for DWX Dental Mills.

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DWX-50</th>
<th>DWX-30</th>
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<tbody>
<tr>
<td>Cuttable material</td>
<td>Zirconia (pre-sintered), wax, PMMA</td>
<td>Zirconia (pre-sintered), wax</td>
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</table>
| Loadable workpiece shape| Disc (with steps): External diameter (step section): 3.85 in to 3.94 in (99 mm to 100 mm)  
External diameter (body section): 3.74 in (95 mm)  
Height: 0.67 in (17 mm)  
Disc (without steps): External diameter: 3.85 in to 3.94 in (98 to 100 mm)  
Height: 0.63 in to 0.79 in (16 to 20 mm)  
Block: Width x Depth x Height: 1.50 in x 1.25 in x 0.24 in (38 mm x 32 mm x 6 mm)  
Height: 0.63 in to 0.87 in (16 to 22 mm) | NA |
| Operating speed| X and Y axes: 0.24 to 141.73 in./min. (6 to 3600 mm/min.)  
Z axis: 0.24 to 70.87 in/min. (1800 mm/min.) | NA |
| Spindle motor / Spindle speed| Brushless DC motor, maximum 100W | 6,000 to 30,000 rpm | NA |
| Number of tools housed| 5 | NA |
| Required tool dimensions| Shank diameter: 0.16 in (4 mm), Length: 1.57 in to 2.17 in (40 to 55 mm) | NA |
| Required compressed air| 0.2 to 1.0 MPa (29 psi to 145 psi) | NA |
| Vacuum requirements| 8 kPa Static Pressure or more | NA |
| Interface| USB (compliant with Universal Serial Bus Specification Revision 1.1) | NA |
| Power requirements| Voltage and frequency: AC100 to 120 V/220 to 240 V ±10%, 50/60 Hz (overvoltage category II, IEC 60664-1)  
Required power capacity: 2.8 A (100 to 120 V) | 1.2 A (220 to 240 V)  
Voltage and frequency: AC100 to 120 V/220 to 240 V ±10%, 50/60 Hz | NA |
| Power consumption| Approx. 275W | NA |
| Operating noise| During operation: 70 dB (A) or less (when not cutting)  
During standby: 45 dB (A) or less | During operation: 60 dB (A) or less (when not cutting)  
During standby: 40 dB (A) or less |
| External dimensions| Width x Depth x Height: 25.9 x 25.9 x 22 in. (666 x 666 x 557 mm)  
Height: 110 lb (50 kg) | Width x Depth x Height: 23.9 x 25.9 x 22 in. (606 x 666 x 557 mm)  
Height: 104 lb (47 kg) |

* DWX-50 only  **vacuum not included with machine