

Dental Brandbook

### Shape the Future of Dental

DGSHAPE was established to provide digital manufacturing solutions for new trends. We accelerate the digitisation of dentistry and offer new value to our customers with the 3D digital processing technology and know-how which our parent company, Roland DG has cultivated over many years.

'make innovation, make life better'

DGSHAPE delivers innovation to shape the future of dentistry.





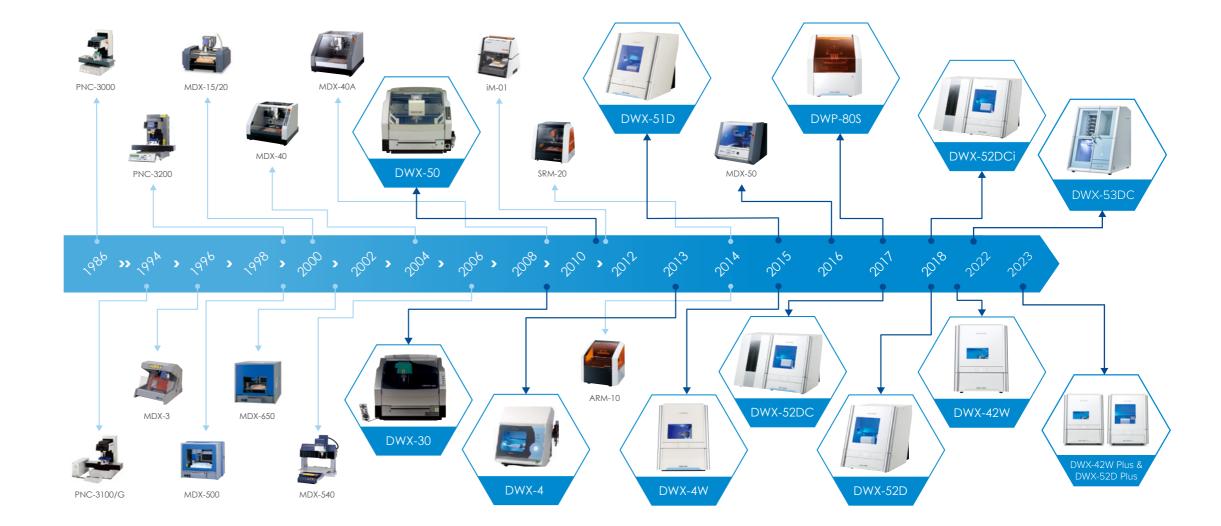
### Why Digital Dentistry?

Digital technology has brought about innovation in work, life, industry, healthcare, and all other fields. Dental technicians are no exception: previously analog, handmade items are now created with digital data from 3D scanners and manufactured on desktop CNC machines. This evolution of workflow has become commonplace in many labs and clinics due to the development of digital technology. Innovation from analog to digital brings us many unique advantages, such as speed and accuracy. By using digital technology, repetitive tasks are automated while maintaining high levels of quality. This means that skilled technicians are free to focus on more creative and challenging work.

Dentistry is no different to any other industry, once the core technology within computers was advanced enough to handle the vast amount of data coming from scanning devices, the digital era for dentistry had started. There is no going back, technology will advance.

### Roland DG & DGSHAPE 3D Products Timeline

Roland DG Corp released the desktop 3D milling machine for the first time in 1986, in the early days of personal computing. Since then our technology has scaled along with the PC. Though we only entered the Dental CAD/CAM market starting in 2009, the DWX stands on the shoulders of over 30 years worth of knowledge accumulated and obtained throughout our history with 3D milling.

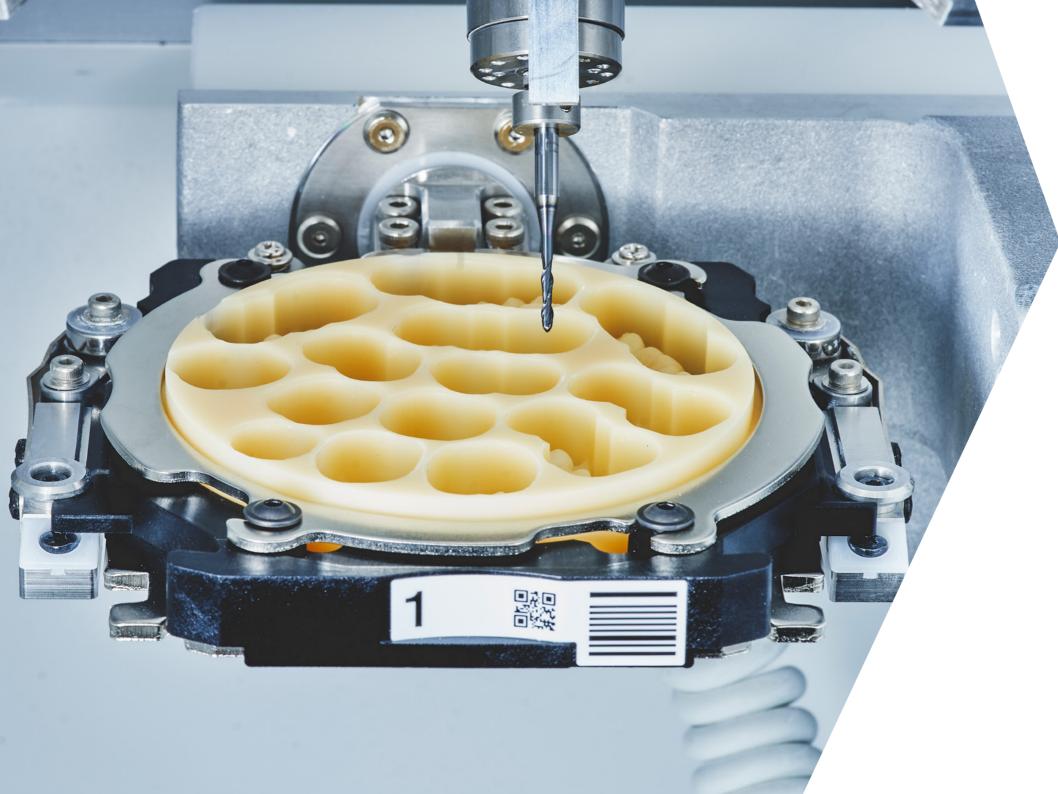




### Ease-of-Use

The DWX series combines simultaneous multi-axis milling with user-friendly one button operation. Even novice users can quickly set up and begin creating precision prosthetics the same day the machine arrives. This simple operation minimises the learning curve for new users and reduces time consuming mistakes.









#### Sophisticated Disc Changer With Smart Functions

The DWX-53DC 5-axis dry milling device optimises your production with a suite of automated features including a new and improved high-performance spindle, faster disc exchanges, a 15-slot automatic tool changer, and a new, internal camera for 24/7 operational visibility. This powerful device comes complete with everything you need to begin milling PMMA, Zirconia, Ascetal resin, composite resin, PEEK, PEKK and gypsum. Enjoy maximum workflow flexibility while tracking your results through DGSHAPE CLOUD.



5-Axis Dental Mill with Disc Changer



#### Stay one step ahead of the competition, with unprecedented efficiency and intelligence

"DWX-52DCi" is our flagship dental solution - a simultaneous 5-axis control equipped with a disc changer. In addition to being able to process diverse materials efficiently and easily, the laboratory will be transformed by "DWINDEX" performance management software that visualises the machine operation, milling burs, and material usage status. Bring your lab business to the next level. "DWX-52DCi" supports the efficient operation of your lab to grow into a full production facility.





# Automated Milling Day and Night



#### **Consistent Performance, Trusted Reliability**

#### 5-Axis Dental Mill



The DWX-52D Plus provides cutting-edge technology in a precise, easy-tooperate 5-Axis Dental Milling Device. Access up to fifteen different milling tools or take advantage of intelligent tool control to automatically switch tools when they reach their anticipated lifetime. Make mill operation worryfree with automated air pressure, dust collector control and a new cleaning tool that removes zirconia dust for a safer milling environment. A new spindle, collet, spindle belt, and tool holder increases grip force by 1.8x and provides enhanced rigidity, offering greater PMMA milling performance, better milling accuracy, and less visible surface from tool flexion.

# Precision Performer & Efficiency Expert







#### Start Small to get BIG Results

The industry's most cost-effective and user-friendly dental mill, the DWX-4 is a small dental milling machine that produces crowns, copings, bridges and hybrid abutments with precision and ease. The DWX-4 is the ideal device for labs and practices just getting into digital milling. With the DWX-4 dental milling machine, you can quickly and economically mill on-demand in a wide variety of materials, including the latest composite resins. DWX-4 Key Features:

- Mills wax, zircona, PMMA and composite resins in standard 98.5mm Disks, blocks and pin-types
- · Combines simultaneous 4-axis milling with simple one-button operation
- Automatic tool changer with two tools for unattended milling (four tool option available)
- Mill up to four different pin-type materials simultaneously with an optional multi-pin clamp
- 98.5mm Disk Adapter now available



Small footprint, Big opportunity.





#### Sophisticated Innovation to Refine Digital Dentistry

DGSHAPE applied its more than 30 years of cutting-edge engineering excellence in developing the DWX-42W Plus – one of the most accurate standalone wet milling devices ever built. A smooth and steady ball-screw driven system provides exceptionally precise, esthetically accurate results for glass ceramic, composite resin, PMMA, and titanium applications. A fourth axis allows the DWX-42W to rotate and tilt pin-type material for deep undercuts, simultaneously producing multiple dental restorations with ease. A new spindle offers a more rigid spindle shaft and an enhanced coolant system to offer greater milling performance, with the coolant water more likely to hit the edge of grinding bur, and the spindle air outlet closer to the spindle shaft reduces adhered milling waste.



#### 4-Axis Wet Dental Mill



Intelligent Machine.Effortless Production.Superior Results.



### **DWX-53DC** Options

#### Disc Material Adapter

#### ZMA-53DC

Adapter for setting and loading materials into the machine. For addition and replacement. Supported devices: DWX-53DC

#### Open Edge Disc Material Adapter

#### ZMA2-53DC

Open Edge Adapter for setting and loading materials into the machine. Supported devices: DWX-53DC

#### Disc Adapter Rack

Adapter rack for ZMA-53DC and ZMA2-53DC

#### Milling Bur

#### ZRB-200D

ZR-53DC

4.0 mm Roughing Tool for DWX-53DC Supported devices: DWX-53DC



## DWX-52D/52DCi Options

#### Disc Material Adapter

#### ZMA-52DC

Adapter for setting and loading materials into the machine. For addition and replacement. Supported devices: DWX-52D, DWX-52DC, DWX-52DCi

#### Open Edge Disc Material Adapter

#### ZMA2-52D

Open Edge Adapter for setting and loading materials into the machine.

Supported devices: DWX-52D,DWX-52DC, DWX-52DCi

#### Disc Adapter Rack

#### ZR-52D

Adapter rack for ZMA-52DC Supported devices: DWX-52D, DWX-52DC, DWX-52DCi

#### Pin Material Adapter

#### ZV-52D

Adapter for setting block materials and loading into the machine. For addition and replacement.

Supported devices: Availabe for all DWX-5x milling units



















### **DWX-4** Options

#### Disc Clamp

**DISC ADAPTER DWX-4** Clamp for using disc materials in the DWX-4.

Supported devices: DWX-4



#### Multi-Pin Clamp

ZV-4D Several types of pin type materials can be set.

Supported devices: DWX-4 \*Can not be used with the 4-position ATC ZAT-4D. See below





#### ZAT-4D

The standard 2 tool changer can be expanded to 4 tools

Supported devices: DWX-4

\*Can not be used with the multi-pin clamp ZV-4D. 76x38mm block material cannot be used.



### **DWX-42W** Options

#### Titanium Abutment Kit

#### AK-1

Attachments that allow the custom milling of titanium abutments from popular manufacturers such as GeoMedi, MEDENTiKA, NT-Trading, and DESS.

Supported devices: DWX-42W

#### Multi-Pin Clamp

#### ZV-42W

Mill up to 6 ceramic, composite resin, or PMMA jobs simultaneously.

Supported devices: DWX-42W

#### Milling Burs

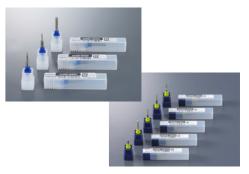
#### ZGB & ZGB2

DGSHAPE's new improved milling burs for wet mills provide even finer milling Quality.

Supported devices: DWX-4W and DWX-42W







## **Time Reduction Kit**

#### For Dental Models

#### CA-MK1













## Time Reduction Kit

#### For Full Denture Production

#### CA-DK1-TR

In this full denture production, it is not necessary to manually bond the artificial teeth at the end of the workflow. Supported devices: DWX-52D, DWX-52DC, DWX-52DCi





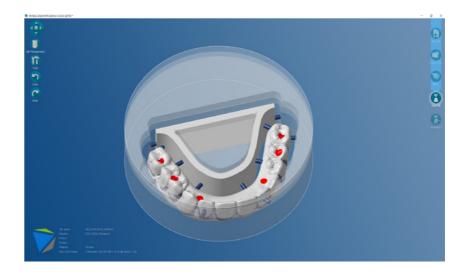
### **MillBox**

CIMsystem has applied its long experience to the development of new CAD/CAM solutions for the dental sector, creating new products with high technological value, in order to improve the quality of the performance and operative efficiency of dental labs. MillBox and SUM3D Dental offer the answer to all people working in this field and requiring **simple, flexible and affordable** tools with high performance in a short time.

MillBox is the dental CAM solution developed for milling any kind of restoration with any material. Equipped with a simple to follow user interface that is both innovative and appealing, MillBox simplifies the nesting and toolpath creation.

An Interface specifically developed for immediate use, with exciting new features that allow you to work even faster. Specially designed for professionals who require simple and reliable tools. MillBox provides high performance in less time to get the work you want processed in a few simple steps.

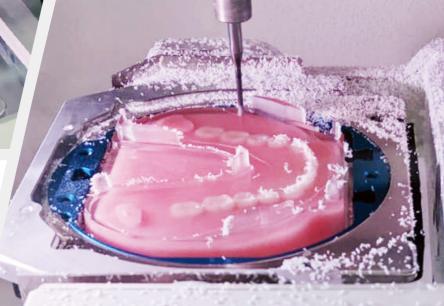
The constant development of MillBox allows the continuous release of new features and improvements.













## Milling Tools for Dry Mills



#### Premium Diamond Coated Tools

Sierra's Premium Diamond coated tools are the longest lasting tools in the industry. Our true diamond technology sets the standard for the competition. We combine efficient cutting geometry and our proprietary chemical vapor deposition process to achieve unmatched performance in modern dental materials.

- Best Performance in the Industry Life up to 10x of conventional tools
- · Real Diamond Grown on the Tool Surface hardest material known
- Extremly Sharp Cutting Edge Reduces Margin Chipping
- Low Coefficient of Friction (Similar to Teflon)
- Highest Tensile and Compressive Strength
- Best tool Availabe to Mill Zirconia

#### Midline CVD Diamond

Sierra's Mid line CVD tool is the perfect alternative to our Premium CVD diamond tool. Enjoy high quality, validated tooling at a lower initial price point.

Available in 2mm, 1mm, 0.6mm, 0.3mm Ball End Specifically designed for Zirconia Milling

- Real Diamond Coating
- High performance up to 5x conventional burs
- Sharp Cutting Edge Reduces Margin Chipping .
- Robust, Industrial Cutting Geometry
- High Quality Tungsten Carbide
- No Slip Centerless ground shank



#### Premium Carbide

Our Premium Carbide tools are specially designed to outperform in Wax and PMMA. They're a vast improvement over other non-coated tools. Sierra employ proprietary Lapped Edge Technology to produce a cutting edge that's far sharper than anything else on the market.

Available in 2mm, 1mm, 0.6mm, 0.3mm Ball End and 2mm, 1mm Flat End Tools,

- Sharpest cutting edge in the industry
- Proprietary Lapped Edge Technology
- High Grade Tungsten Carbide

#### Premium Carbide-Rapid Reduction

The Premium Carbide Rapid Removal tool makes removable milling a viable and cost-effective option in Roland DWX series mills.

Available in 3mm Toric

- Proprietary cutting geometry for fast material removal greatly reduced process times
- · Clean cuts even in soft, sticky materials
- Extremely sharp edge minimizes cutting loads.
- Deep, polished flute design allows for large "bite" of material to be taken per cut.
- · Long reach for deep cavities and thick pucks.
- Chip-Channel Technology removes material up and away when deep pocketing.
- No Slip Shank. The shank is treated to ensure it is held in the collet securely during milling.







## **Extraction Options**



THE WORLD LEADER IN FUME EXTRACTION TECHNOLOGY

#### **BOFA** Fume Extraction Units

BOFA is considered to be marklet leaders in the fume and dust extraction inductry. Tailored specifically to the Dental Industry, BOFA's DentalPRO systems remove harmful dust and particulate through features such as multi-stage filtration, digital speed control and volatile organic compound (VOC) sensors.

#### Features:

- Brushless motors provide efficient long running times, low maintenance and high performance.
- HEPA Filters
- Optional Compressor
- Remote start / stop interface

#### Models:

- DentalPRO Universal
- DentalPRO Base (with or without compressor)
- DentalPRO 400 Multi user dust extraction system for hand finishing dental applications









Base



**DustPRO** 400



#### Renfert SILENT powerCAM EC

Powerful, bag-free extraction unit with automatic filter cleaning and EC motor technology for heavily used CAM units. Features:

- Bi-directional communication between extraction unit and CAM unit thanks to the PLC interface.
- Low operating noise of max. 54.3 dB (A).

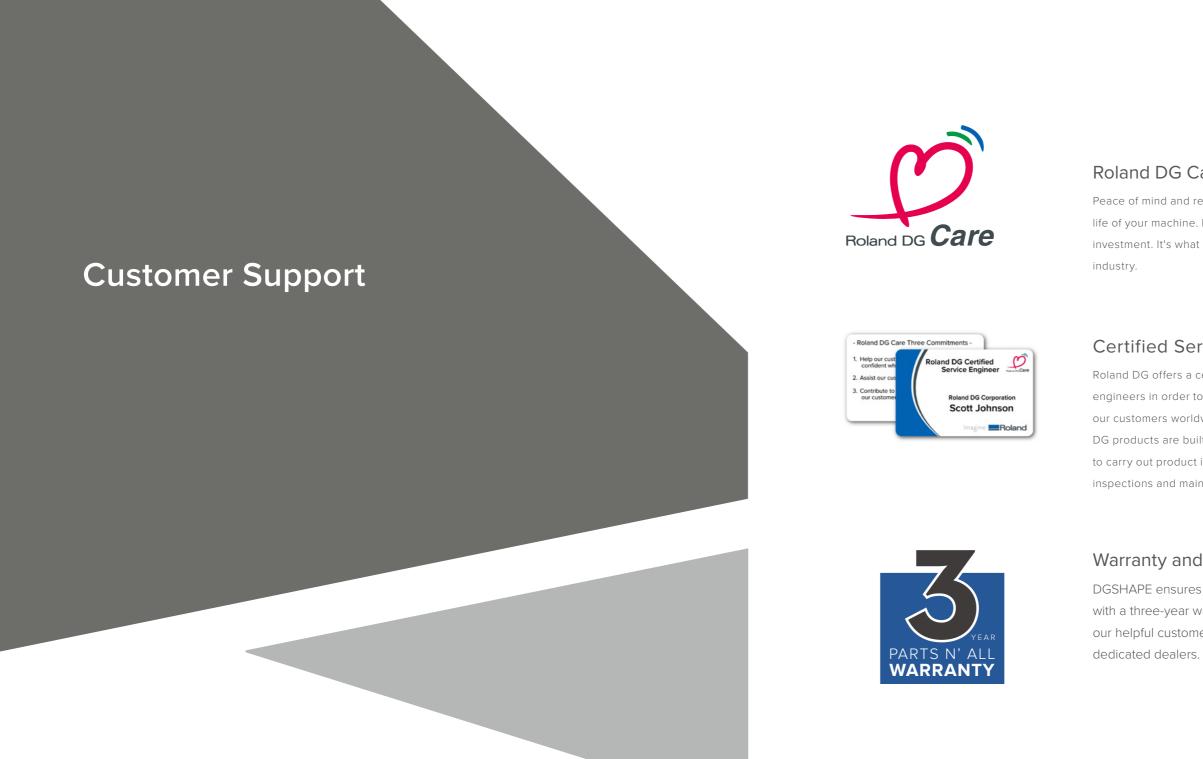
Details:

- High volume flow of approx. 4000 l/min.
- No follow-up costs due to bag-free dust collection.
- Safe disposal of fine milling dust with the help of a disposal bag.



Reliable production process through brushless EC motor technology (guaranteed runtime of 5000 operating hours).





### Roland DG Care

Peace of mind and reliability from Sale to Installation and for the entire life of your machine. Roland DG Care support services safeguard your investment. It's what makes Roland DG and DGSHAPE the best in the

### Certified Service Engineer System

Roland DG offers a certification program for its service engineers in order to provide uniform high-quality service to our customers worldwide. SEs are instructed in how Roland DG products are built and receive in-depth training on how to carry out product installation, make repairs, conduct inspections and maintenance.

#### Warranty and Support

DGSHAPE ensures that your machine is always up-and-running with a three-year warranty, plus unmatched support from our helpful customer support team, and a local network of

## Who is DGSHAPE?

#### A Brief History of DGSHAPE

Electronic musical instrument manufacturer "Roland Co., Ltd." established in 1972, established "Roland Digital Group Corporation" ("Roland DG") in 1981 to take advantage of the emerging computerised music market. Roland DG developed a device for holding pens and outputting (plotting) printed music created on Roland musical instruments. The "pen plotter" was well received by the market and was more accessible than large and expensive equipment at the time. After that, the pen plotter evolved into vinyl cutters and eventually into the large-format inkjet printer/cutter, which is the main product of Roland DG Corporation. During this evolution, engraving and milling technologies were also developed in-house to serve new market niches. Roland DG developed its proprietary 3-axis motion control firmware technology by adding a Z axis to the X and Y axes of pen plotter and in 1986 the "CAMM-3 PNC-3000" desktop milling machine was born. Since then, Roland DG has provided multiple generations of desktop CNC milling and engraving technology designed for use with the personal computer. Roland DG's 3D products are used in multiple fields and are highly regarded by customers around the world. In recent years, 3D products that specialize in dental treatment have been released, and have been recognised as the de facto standard in the dental laboratory industry. Roland DG knew that in order to take full advantage of Dental and other 3D emerging market opportunities, a new team with dedicated resources and independent decision making authority was needed. So, in 2016, DG established a new corporate spin-off: "DGSHAPE Co., Ltd.," which manages Roland DG's entire 3D/engraving product line. DGSHAPE Corporation, a wholly-owned subsidiary of Roland DG Corporation, will take over all 3D-related businesses. We will develop new business models and explore new markets to provide high value-added solutions with a single goal: Empowering People to Shape the Future.





 $\Box$  www.rolanddg.com.au/dgshape