Dental Handbook 2023

DGSHAPE



Through a network of sales subsidiaries and dealers, the Company's products and services now reach 200 countries and regions around the world. Marketing and sales activities tailored to local culture and customs are headed up by a team of regional staff members to ensure a proper fit for the market and its customers.



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 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, revolutionize business processes, and shape a better future.









SHAPE DIMENSION

DGSHAPE is a wholly owned subsidiary of Roland DG, the world's leading digital printing company. We also have roots in Roland, which has revolutionized the music industry through digital technologies. Together, the Roland DG Group provides products for digital artists to shape their ideas and creativity.

Since its beginnings more than 6 years ago, DGSHAPE has grown to prominence in the dental industry. We believe that dental technicians and dentists who pursue the functionality and esthetic of a single tooth, and who create designs that improve human health and enhance smiles, are indeed artists.

We had many opportunities to meet artists. Inspired by the extraordinary seen and unseen aspects of the world, artists believe in their own powers of imagination and diligently pursue their vision. They create ART that transcends the status quo and shapes the future.

DGSHAPE embraces its brand vision, "Empowering People to Shape the Future," and its mission, "Make Innovation, Make Life Better."

We have taken on many challenges and continue to innovate, from developing pen plotters to digital printers and from printers to advanced CNC 3D milling machines. Real innovation breaks with the present and moves our minds toward the future. ART is an essential part of our brand.

SHAPE DIMENSION

Together we create a new dimension to the future.



Innovation That Gives Shape to the Next Dimension



O1 TECHNOLOGY TRANSFORMING TO ART



Roland DG has been developing CAD/CAM technology for 42 years. Since the first generation of DWX dental mills was released in 2009, its mills have been highly praised for their advanced machining precision as well as their desktop size, user-friendliness, open architecture for use in combination with CAD/CAM software and scanners, and affordable price, and are used in dental laboratories around the world. The current lineup includes four dry mills (DWX-53DC, DWX-52DCi, DWX-52D, DWX-4), plus one wet mill (DWX-42W), which is specially designed for milling glass ceramics, a material that is gaining support from dental clinics and patients for its superior hardness and aesthetic qualities.

DWX-30 2009

DWX-4 2013

DWX-4W 2015

DWX-52DCi 2018

DWX-42W 2019











DWX-50 2011

DWX-51D 2015



DWX-52DC 2017



DWX-52D 2018





Technology Transforming to Art

Dental technicians create prostheses and dentures for patients, just like painters applying color by color. Each dental restoration is unique, exceptional, just like the most elaborate artwork.

They have the ability to create a perfect fit for the individual characteristics of the mouth. Their porcelain work pursuing authenticity and beauty.

In functionality and aesthetics, the power of dental technicians surpasses natural teeth.

"Automation" is not just the pursuit of efficiency; it is the technology to unlock the potential of human endeavor.

The DWX-53DC, the latest disc changer model, enhances the value of "craftmanship" through intelligence and vitality – state-of-the-art digital technology and machine frame embodying

"SMART" to unlock the next dimension.

The unlimited world of creativity unfolds beyond its frame.







DWX-53DC 2022



Dental Business Strategy

As technology continues to revolutionize the dental field, an increasing number of dental laboratories are installing digital systems, consisting of CAD/CAM software and milling machines, to replace conventional casting methods. New materials for dental prosthetics have also appeared, such as zirconia, composite resins, and glass ceramics, and there has been an accelerated increase in the installation of digital systems for efficient processing of these materials.

Manufacturers that provide digital systems often sell closed systems comprised of sets of scanners to capture the contours of the tooth, CAD/CAM software, milling machines, and proprietary materials. Closed systems create a barrier to adopting digital systems for dental laboratories concerned about a large initial investment and a low degree of freedom in choosing which materials they can provide to dental clinics and patients.

Within this market environment, in 2010 Roland DG applied its more than 25 years of 3D milling technology innovation to the dental market, launching its first dental milling machines. The DWX-30 instantly established Roland DG's presence in the market and was highly regarded for its compact size, ease of use, cost-effectiveness, and open architecture. Today, dental milling machines are widely adopted in dental laboratories around the world and are contributing to streamlining the workflow of dental prosthesis production.







DENTURE KIT FOR DWX DRY DENTAL MILLS

CA-DK2 for DWX-52DCi/52DC/52D

CA-DK2

DK2-53

CA-DK1



DGSHAPE's Denture Kit lets you choose to produce custom dentures with heat-cured or cold-cured acrylic. Carded, milled, or printed teeth are set in minutes as tooth pockets are milled into the denture base to ensure ease of sitting. Take the process a step further using the carded tooth tray and produce an aesthetic, full denture in less than four hours. Along with offering a

Denture Base workflow



choice of workflows, using the denture kit lowers production costs and improves turnaround times while providing high-quality

output, making it the ideal digital denture solution.











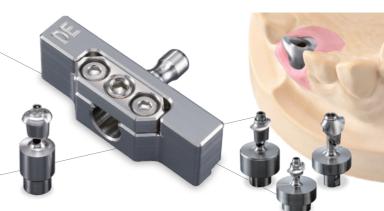


ABUTMENT KIT FOR DWX-42W

AK-1

Improve Profitability with In-house **Production of Custom Abutments**

Paired with the AK-1 Abutment Milling System, the DWX-42W offers a complete and easy to use solution for milling custom abutments in-house from titanium blanks produced by popular manufacturers like DESS, NT-Trading, MEDETiKA®, and GeoMedi. Users can switch in minutes to production of custom abutments, avoiding the hassles of outsourcing and making the production process faster, more convenient, and more cost-effective than ever.





DWX-42W



AK-1 attachment

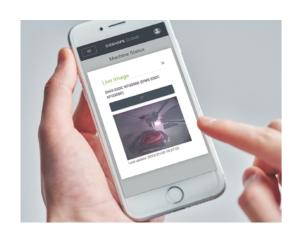
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The Future for Your Dental Business



DGSHAPE CLOUD



DGSHAPE CLOUD enables comprehensive, mobile management for DWX customers' milling center.

Using its suite of world class applications, they can remotely monitor and support their DWX devices, compare periodized production data, and oversee their milling center from anywhere, anytime.



Seamless Maintenance and Output Performance



VPanel for DWX has been developed to provide a complete solution that seamlessly combines maintenance and output performance control, and to enhance the relationship between DWX customers and DGSHAPE

DWX customers can oversee up to four milling devices from a single PC, and perform and track all maintenance operations through VPanel's user-friendly interface.

The latest VPanel enables the Feedback and Notification functions to enhance the interaction between DWX customers and DGSHAPE.

CONNECT UP TO MILLS











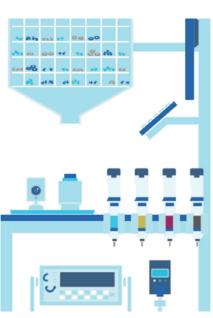
O7 TECHNOLOGY TRANSFORMING TO ART



Friendly to People and Strong in Quality

Digital Yatai

A User-friendly Manufacturing Support System Harnessing IoT



"Digital Yatai" is our patented Digital Production Indicate & Control System, which was developed by Roland DG in 2000 as a user-friendly manufacturing support system that harnesses IoT to respond quickly and flexibly to everchanging customer requirements. It achieves this by sharing digital data like 3D design data throughout the entire company from product design to manufacturing, quality control, sales and services to cut development time, reduce costs and increase product quality. As part of these efforts, Digital Yatai was further enhanced by the manufacturing department to facilitate efficient high-mix, low-volume production.

The most distinctive feature of Digital Yatai is that operators involved in monozukuri can use it as a system for achieving high quality and efficiency while maximizing their own capabilities and individual talents to the fullest extent in the shortest time.

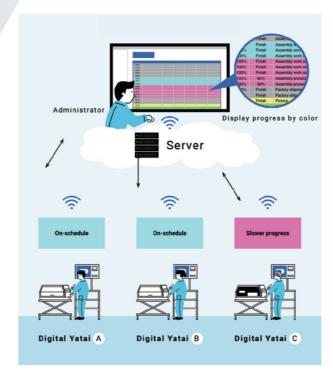
Digital data is available to support the operator in real time, which helps achieve reliable, high-quality manufacturing regardless of individual skill levels or varying degrees of attentiveness. At the same time, the system provides the operator with an environment in which they can focus on assembly with greater confidence which fosters a more exciting workplace atmosphere teeming with a high level of motivation and attention to detail and creating ideas for improvement.

Structure of DIGITAL YATAI

System

Multiple digital kiosks called "Yatai" connect to the server at the same time to assist the operator with assembly instructions and quality control in real time.





Created Value

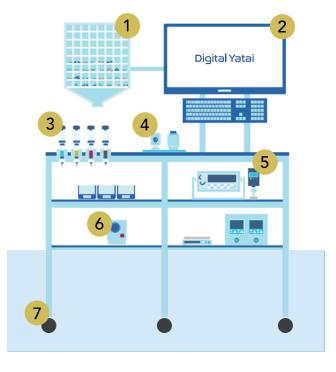
Creating an environment where operators feel comfortable focusing on assembly work not only helps improve quality and work efficiency, but also boosts the

motivation of operators as it makes work more rewarding for them. The reduction in effort required to learn work procedures also allows operators to explore their creativity such as finding new ways to improve operations.



Digital Yatai

Digital Yatai is responsible for guiding the operator's assembly procedures.



- 1 Component inventory control
- 2 Digital operator instructions
- 3 Wireless electric driver
- 4 CCD camera
- 5 Wireless measuring instruments
- 6 Remote control operation
- 7 Moveable cart

IDENTIFICATION OF THE PARTY OF

Increased Quality Assurance from a Single Process

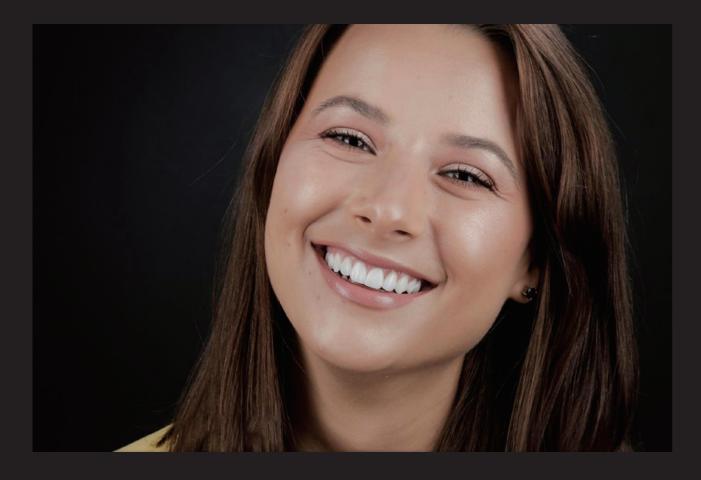
At ordinary production sites, the inspection process is conducted after products are assembled. Assembly and inspections are also performed by different people at different places, with inspection and control processes conducted separately.

With Digital Yatai, products are inspected automatically as they are assembled. Products that have not been completed exactly as per the instructions cannot move forward to completion. The system is designed to automatically guarantee the quality of a particular process as long as work is completed exactly as per the instructions.

VOU ARE THE ARTIST

DGSHAPE: A Bridge between Dental Technicians, Dentists, and Patients

Creating Beautiful Smiles Worldwide



By creating a "virtual bridge" between dental technicians and dentists using digital technology, DGSHAPE is helping improve the patient experience and create beautiful smiles worldwide.

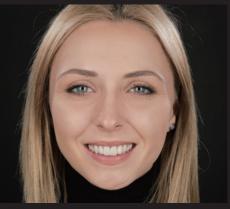
The partnership between dental technicians, dentists, and patients is crucial to the success of CAD/CAM technology in dentistry. The "Together is Better" philosophy that DGSHAPE embraces is a testament to our commitment to improving patient outcomes and advancing the field of digital dentistry.

The use of CAD/CAM technology in dentistry provides a range of benefits for patients, including faster, more convenient, and more accurate treatments that result in comfortable, natural-looking, and long-lasting restorations.

This is especially true when dental technicians and dentists work together using digital dental technology to create customized treatment plans that meet each patient's unique needs.

As Connie Stevens once said, "Nothing you wear is more important than your smile." With our collaborative approach and advanced technology, we at DGSHAPE are proud to be a part of creating beautiful smiles worldwide.







Treatment architect Specialists

Florin Cofar Smile Design, Composite Fillings, Veneers, Dental

Venceslav Stankov Crown Lengthening, Soft

Florin Bratiloveanu Root Canal Treatment

Retreatment Old implant restorations and veneers

5-10 years ago, the main focus when placing an implant was osteo-integration, less attention was given to tissue reconstruction. Today we know that if we don't take tissue shrinkage into account, which is inevitable after any dental extraction, this will impact final design, in the sense that it's really hard to have an aesthetic outcome, because the gingival profile of the implant will be different. Also, it's unanimously accepted today that there is a direct correlation between the stability of an implant restoration in time and the gingival volume around the implant.

In other words, tissue reconstruction is the key element in achieving both a natural and long lasting result. In this case we retreated a case with implants placed 5 years ago, which suffered from the aforementioned problems. The implants were ok, so we re-used them, but we augmented the gingiva, and together with that we redesigned the restorations, which served us as support for guiding the healing. We also replaced the existing composite restorations with ceramic veneers, and harmonised the smile with a long term option (lifetime of a ceramic veneer is significantly longer than of a composite veneer)

Technicians

Ioana Popp Ceramic Restoration Guides

Gabriela Lascu Kois Deprogramme Design, Crown Lengthening Guide

Procedures Logistics

Root Canal Treatment Crown Lengthening Veneers Dental Crowns Soft Tissue Grafts







Orthodontics Achieving a larger smile

There are many things that are achievable with an orthodontic treatment, beyond the alignment of teeth, especially when working interdisciplinary. This case is a perfect example. Here outside of aligning teeth, we managed to correct the gingival display and we also reshaped the buccal corridors. The resulting smile is wider and more balanced. As a final touch, we personalised the details using naturally looking ceramic veneers. This case is featured on Smilecloud, as the whole treatment has this technology at its core.

Treatment architect Specialists

Veneers, Dental Crowns, Crown Lenathenina

Ioan "Johnny" Barbur

Gustavo Giordani Dental Implants, Miniplates

Marcelo Giordani Dental Implants, Miniplates

Adrian Argint Veneers, Dental Crowns

Logistics

Maria Macarescu Coordonator Tratament

Procedures

Orthodontics Veneers Dental Implants Dental Crowns Crown Lengthening

Technicians

Restauratii Ceramice,

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Message from the President

Roland DG Corporation embraces three slogans: "Inspire the Enjoyment of Creativity," "Be the BEST rather than the BIGGEST," and "The Roland Family — Cooperative Enthusiasm." DGSHAPE is the brand name of Roland DG's 3D business, founded to transform these slogans, which can be said to be our DNA, into reality, especially in the dental industry.

Since Roland DG was founded in 1981, we have developed the technology related to CNC machining and 3D digital milling with worldwide partners. In 2010 we transformed our technology into our first desktop dental mill, the DWX-30, and since then, the DWX series has grown into a product brand that has been highly praised for its usability and profitability by dental technicians around the world. In recent years, we have been working on the development of next-generation products that make full use of cutting-edge digital technologies such as the cloud and IoT. In 2022 we released the DWX-53DC and DGSHAPE CLOUD.

As a wholly owned subsidiary of Roland DG, DGSHAPE has offices in 13 countries worldwide and an international staff working with customers and partners in more than 200 countries and regions. Going forward, we will continue to develop digital solutions that meet the needs of the new era while staying close to your ideas and requests through our global network.

Empowering People to Shape the Future

We aim to be a company that provides people with the power to create a better future through "Real Innovation" breaking the status quo.

To the next dimension, together.

Hisashi Bito

President, Representative Director







EMPOWERING PEOPLE TO SHAPE THE FUTURE

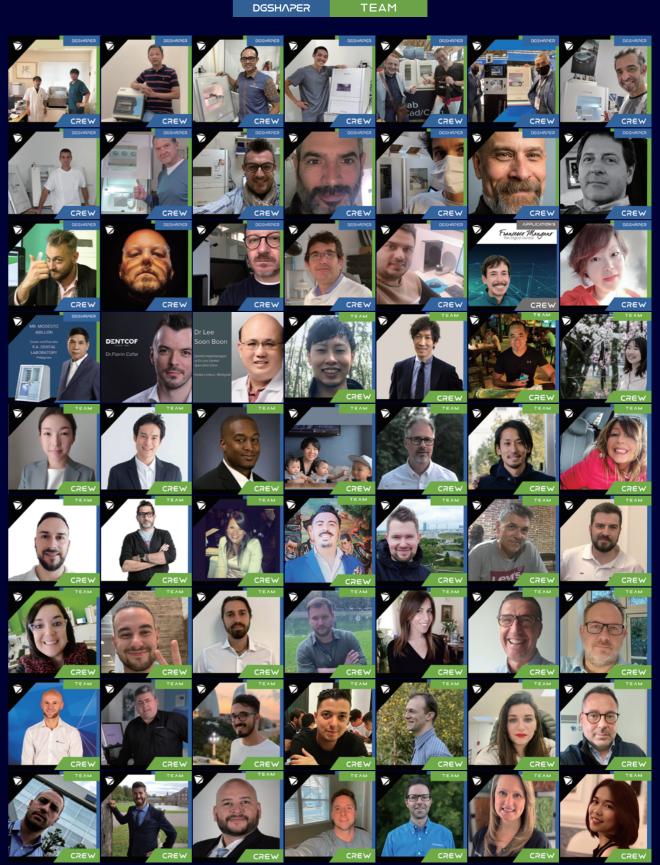
Together is Better

Like a crew on a ship, we all (Team, Dealers, and Customers) have a role to play in the groth and well-being of society.

Our boat is running fast because for us being part of a crew means "We are all rowing in the same direction, with passion and enthusiasm



DGSHAPER



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