DGSHAPE Corp. was formed in 2016 as a wholly owned subsidiary of Roland DG Corp. of Hamamatsu in Japan. Roland DG has been designing, engineering and manufacturing computer peripherals, such as pen plotters, vinyl cutters, engravers, wide-format inkjet printer/cutters and benchtop CNC milling machines since 1981. Starting in 2016, DGSHAPE assumed control of the design, engineering and manufacturing of all products, formerly in the Roland DG portfolio, that cater for the 3D, manufacturing and healthcare industries. Our products are assembled in Japan and distributed all over the world.

DGSHAPE is an independent company under the umbrella of the Roland DG group of companies. We feel that this is an important distinction. Roland DG will continue to engineer and manufacture digital printing products for the sign and graphics industries. These products will continue to be innovative, high quality and reliable. DGSHAPE, however, has something quite different in mind. The emphasis on product quality is not the only inspiration for our products and services. Here at DGSHAPE, it is not enough to bring a stellar product to market; we are also concerned with the purpose of the applications for which our products will be used. We are interested in the strategic intent of our current and future customers. At DGSHAPE, we share our parent company’s mantra of “Transforming your imagination into reality”. We also believe that we can take that notion one step further in our mission statement, “Empowering people to shape the future”.

At DGSHAPE, we make products for a variety of different industries, including healthcare, education, manufacturing and retail personalisation. Each of our products is designed with two basic ideas in mind: “make innovation, make life better”. If we envision a solution for a given market, we must first ask ourselves these two questions: is this product innovative and does it make life better?

Our dental portfolio includes products that help dental professionals restore people’s smiles. At first glance, this would seem like a simple treatment of a problem using digital technology. But, put that into perspective: by giving people their smiles back, the dental professionals and craftspeople that use our machines are giving patients back their confidence and their health, improving their future (Fig. 1).
DGSHAPE continues rapid growth at World Dental Congress

DGSHAPE Corp., a wholly owned subsidiary of Roland DG Corp., makes its second appearance on the international stage with a booth at the World Dental Congress exhibition in San Francisco’s Moscone Center. The company continues to celebrate successful milestones in its brief two-year history, including the shipment of its 10,000th unit, updated branding and partnerships with CAD software manufacturers for clinical chairside workflows using DWX devices.

Speaking at the DGSHAPE booth, DGSHAPE Global Brand Manager Dana Curtis commented, “We launched our new DGSHAPE brand at IDS 2017, to establish the DGSHAPE company as the future of Roland DG dental and 3D products businesses. As DGSHAPE, we deliver the same excellence of build quality, reliability and technical innovation that we have always done, with the added benefit to our users that, now as a business focused purely on dental and 3D technologies, we are more agile and pioneering...
Additive manufacturing creating significant growth potential in the dental industry

Additive manufacturing has found its way into not only more and more dental practices but other areas of dentistry as well—including orthodontics and implantology. Three-dimensionally printed drill guides and bite splints, custom-made impression trays and dental models are just some of the applications. Using 3D printing to make crowns and bridges is another established technique.

Indeed, the dental industry was one of the first to recognise and leverage the benefits of additive manufacturing. Bridges and crowns have been 3D printed since the turn of the millennium. The quality of the systems, processes and materials involved has continued to improve in the interim, ushering in a significant increase in applications. As a result, the market’s growth has seldom dropped into single-digit figures. Additive manufacturing is now generating around US$260 million in annual revenue (2018) in the dental industry according to an extensive study done by the Chinese market research and consulting firm QY Research. This strong growth in the additive dental industry is expected to continue into the future—or even to accelerate. QY Research projects an increase in global revenue to US$930 million by 2025—a more than threefold increase within six years.

These developments are giving rise to even more attractive business opportunities for dentists, dental laboratories and other users. The certification of processes and products has improved not only manufacturing quality but the commercial possibilities in the industry as well. All things considered, additive manufacturing now has the potential to replace metal casting in the dental technology segment.

Formnext exhibition offers an overview of technological innovations

Additive manufacturing creating significant growth potential in the dental industry

Cologne in Germany, DGSHAPE celebrated this success, with the 10,000th unit being shipped during the show. Curtis said, “It is easy for us to understand where this rapid growth is coming from when we talk to our customers and hear their success stories. While there are thousands of labs with a single DGSHAPE machine, we also come across many labs with multiple-unit installations. We love to see how scalable our technology is, and we are constantly looking for ways to add value for future growth.”

DGSHAPE is continuing its innovation in the dental space with the first liquid-cure digital denture milling solution—Time Reduction Kits—and the first asset performance management software for dental devices—DWINDEX.

For users, knowledge of the entire production process is key. That includes everything from design, software and printers to process monitoring, post-processing and quality control. Formnext, the world’s premiere exhibition in additive manufacturing and other modern production technologies, offers an excellent overview of the current and future possibilities afforded by additive manufacturing. On 19 to 22 November 2019, leading international manufacturers will showcase the latest developments in Frankfurt am Main in Germany. These innovations will include a number of solutions specifically designed for the dental industry, such as small, high-precision 3D printers and corresponding materials for metal dental prostheses.
X-Mind trium
Finally a TRUE LOW DOSE 3D CBCT imaging system

Premiering at IDS 2019, TRUE LOW DOSE is the latest X-Mind trium CBCT innovation from ACTEON, with up to 50% less radiation exposure* and no loss of image quality and accuracy. This is possible thanks to new algorithm** associated with an innovative mechanism that brings the X-ray sensor and source closer to the patient. This results in increased protection for the patient, while preserving the most reliable and accurate diagnosis possible for the practitioner. This innovation confirms ACTEON’s leadership in the design of less invasive and less traumatic dental imaging technologies.

X-ray radiation reductions of up to 50%*
The new algorithm developed by ACTEON allows image acquisition with significantly reduced exposure time, resulting in a lower dose to the patient. The algorithm applied to these lower-dose projections improves contrast and decreases noise, thus accurately revealing the anatomical structures. This unprecedented patient protection is achieved without compromising image quality.

Greater child protection through increasingly less invasive innovative technologies
The new specific acquisition mode for smaller patients, and children in particular, reduces their radiation exposure. The X-ray sensor and source slide closer to the patient. In close proximity to the head, the unit emits less radiation while achieving image quality equivalent to standard acquisition.***

Pioneer on true innovation on the worldwide dental imaging market, ACTEON is maintaining and expanding its position with its TRUE LOW DOSE solution: facilitating procedures for the practitioner through features that are less traumatic and more acceptable for the patient.

** Accuracy based on DAP measurements from standard X-Mind trium settings: 90kV-8mA-300pps
*** Coming soon
**** Patent pending

www.acteongroup.com