Dental lab adds new 3-D printer technology

Glidewell Dental has expanded its partnership with Structo, a Singapore-based dental 3-D printing solutions provider, with an investment in two of Structo’s newly launched DentaForm 3D printers.

After running three Structo OrthoForm printers in production over the last year, Glidewell decided to further integrate Structo’s Mask Stereolithography (MSLA) technology-equipped printers to expand the company’s production capabilities. By adding two of the newly released DentaForm printers, Glidewell Dental is now operating a total of five Structo machines in its production facilities.

“Structo’s unique MSLA technology is just the type of innovation the industry needs,” said David Leeson, director of engineering at Glidewell Dental. “We are very excited to continue this partnership with Structo and improve our production efficiency by adopting the newly launched DentaForm 3D printer.”

A Glidewell Dental news release reports that after a comprehensive evaluation of expanding production needs, the company purchased two DentaForm 3-D printers instead of a larger number of printers from a competing manufacturer, favoring Structo’s high throughput capabilities. “Operating two of Structo’s new printers is not only sufficient to replace a number of our existing printers, but also allows us to increase capacity overall,” Leeson said, adding that the company anticipates further expansion with more DentaForm printers in the second half of this year.

The Structo DentaForm is capable of printing up to 30 dental models in approximately 90 minutes. Launched in February at the Association of Orthodontists Singapore Congress, the Structo printer continues to make waves in the industry by partnering with some of the world’s largest dental laboratories, according to the company.

“Despite being halfway across the world in Singapore, we are extremely pleased with the support provided by the entire team at Structo,” said Cory Kolb, head of support at Glidewell Dental. “We are constantly in touch with their engineering team to exchange ideas and provide feedback, which is crucial in ensuring that our machines constantly operate at an optimum level.”

Huub van Esbroeck, one of Structo’s founders, said: “Having one of the leading dental labs in the world place its trust in our technology shows that our solution is addressing a very critical need in digital dentistry. David and his team have been providing us with a lot of feedback that has contributed to new features and design elements of the DentaForm printer. We are really excited to continue this partnership with Glidewell to help them expand their capacity.”

About Structo 3D

Using proprietary MSLA technology, Structo designs, develops and builds 3-D printers tailored for dental applications. According to the company, MSLA 3-D printers are able to achieve speeds much higher than conventional SLA printers and are revolutionizing the field of digital dentistry with higher throughput and lower costs — all without compromising on print quality. Structo also builds control systems and software and formulates its own photo-polymer materials tailored specifically to each use in a range of dental 3-D printing applications.

For more information, you can visit www.structojd.com.

About Glidewell Dental

Based in Newport Beach, Calif., Glidewell Dental is a privately owned corporation with more than 45 years of history as a provider of dental products, high-quality restorations and lab services to dental professionals worldwide. Its CAD/CAM processing capabilities are recognized as among the industry’s most advanced.

“According to the company, its industry-leading role is driven by innovative dental technology, an experienced R&D department and dedication to providing free or affordable clinical and technical education to promote industry growth.”

To view the large selection of Glidewell Dental clinical videos, continuing education courses, and products and services, you can visit www.glidewelldental.com.

(Source: Glidewell Dental)
INDUSTRY NEWS

By Designs for Vision Staff

Designs for Vision’s new LED DayLite® WireLess™ Mini headlight frees you from being tethered to a battery pack. The simple modular designs uncouple the headlight from a specific frame or single pair of loupes. Prior technology married a cordless light to one pair of loupes via a cumbersome integration of the batteries and electronics into the frame. The compact design of the LED DayLite WireLess Mini headlight is independent of any frame/loupes.

Less than 1 ounce

The LED DayLite WireLess Mini weighs less than 1 ounce, and when attached to a pair of loupes, the combined weight is half as much as the weight of integrated cordless lights/loupes. The LED DayLite WireLess Mini produces over 27,000 lux and the spot size of each of the LED DayLite WireLess headlights will illuminate the entire oral cavity.

The WireLess Mini is powered by specialty rechargeable lithium-ion cylindrical cells, and the headlight comes complete with three batteries. The charging cradle allows you to independently recharge two batteries at the same time and shows the progress of each charge cycle.

The Micro Series loupes from Designs for Vision are fully customized and use proprietary lens coatings for the greatest light transmission. The Micro 2.5x loupes weigh as little as 1.2 ounces and are 23 percent smaller than other loupes. The Micro 2.5x magnifies the entire oral cavity while providing high resolution, true 2.5x enhancement.

You can see the Visible Difference® yourself by visiting Designs for Vision’s booths at upcoming dental meetings, No. 505 at ADHA, No. 105 at PNWDC and No. 15 at the Florida Dental Association meeting. Or you can contact Designs for Vision to arrange a visit in your office at (800) 345-4009 or at info@dvimail.com.

New: Micro 2.5x loupes, Mini WireLess headlight

Left, the Wireless Mini headlight is powered by specialty rechargeable lithium-ion rechargeable cylindrical cells, and it comes complete with three batteries. Right, the Micro 2.5x loupes weigh as little as 1.2 ounces. Photos/Provided by Designs for Vision
By Sulzer Mixpac Staff

Sulzer Mixpac has developed a new one-component system for hygienic dental applications: the 1 ml system. The product has a standard Luer Lock, which provides a highly secure connection because of its screw-thread design. And it comes with three different, bendable and rotatable cannulas.

The company reports that its 1 ml application system has an innovative, flexible cannula, which is available in three different gauges: 18, 20 and 22.

“The metal cannula on our Luer Lock tips is 360-degree rotatable and can be bent up to 180 degrees without reducing the inner diameter and the material flow. This allows an individual and safe application of low-viscosity to gel materials in difficult clinical situations,” said Anja Stouten, the company’s head of product management/dental.

Reliable quality
The metal cannula is rounded by a vibratory finishing process. Because of this special surface treatment, the metal is deburred, and therefore the cannula is optimally prepared to use on the patient, according to the company.

For the production of the 1 ml system, only high-quality, FDA-listed materials are used. This is the case for the plastic materials as well as for the medical stainless steel of the cannula.

Easy and safe handling
The application process is described by the company as being “intuitive.”

The ergonomic design of the 1 ml cartridge ensures a stable and precise application. The coated silicone O-ring facilitates application and reliably seals the system. The cartridges are available in white, black and transparent and thus suitable for different dental materials.
Rhein83, which produces attachments for removable prosthesis, describes its OT EQUATOR as being the smallest dimensional attachment system on the market. The system employs a reduced vertical profile of 2.1 mm with a 4.4 mm diameter. According to the company, the attachment is compatible with all implant systems and brands and provides superior stability and retention for the prosthesis.

Features include:
- The smallest dimensional implant abutment available on the market.
- Manufactured to be compatible with all implant brands and platforms.
- Available in eight different gingival heights.
- Titanium coating procedure used to increase the attachment’s hardness and durability.
- Variety of elastic retentive caps available.
- Smart Box system now available to enable corrections of more than 50 degrees in implant divergence.
- Single castable and threaded titanium attachment systems available.
- Customized ordering based on implant brand, diameter and gingival height.
- ISO 9001 – ISO 13485 valid certificates.
- Patent validated by FDA, CE, Russia, Canada, Japan, Korea and other countries.

For additional information, you can visit www.rhein83.com, send an email to marketing@rhein83.it or telephone internationally at 003 (905) 124-4510.

Smart Box
Rhein83 also has developed Smart Box, which can be used with the OT Equator in cases of extreme divergencies between the implants. The Smart Box has an inner tilting mechanism that enables a passive insertion with divergent implants up to 50 degrees.

An expert’s opinion
Roberto Scrascia, DDS, is a prosthodontist specializing in bone regenerative surgery. He has written numerous clinical articles for publications in Italy and throughout the world (Roberto.scrascia@gmail.com). Following are his comments about his use of the OT Equator attachment system and the Smart Box:

In the implant prosthetic rehabilitation with an overdenture, the choice of the retentive systems is a crucial moment; it is fundamental to analyze and evaluate carefully the options provided by the market in order to avoid problems that may occur at an early stage or during the treatment.

Before the Smart Box, there was little chance of being able to take advantage of the performances of the OT Equator when there were severe divergencies of the implants due to the lack of bone because of resorption in the jaws of older patients. In situations like these, a low-profile attachment is often the preferable solution, because it provides good stability and all the space for an esthetic denture.

Thanks to the innovative and original mechanism of the Smart Box, we can extend the limit of usability of the OT Equator attachment without losing any of its performances and qualities.

The Smart Box, with its tilting mechanism, allows and facilitates the smooth insertion of the prosthesis, a positive feature of the OT Equator by Rhein83. Smart Box is a new product that provides us a good opportunity to enhance the solutions we can offer to our patients in our everyday work.