

Capsule-based 3D printing at your practice

Innovation: Rapid Shape presents the quick and easy solution for fast 3D printing of dental products in daily dental practice.

Can 3D printing of dental medical devices be as quick and easy as operating an espresso machine? This was the challenge facing the engineers at Rapid Shape, the experts in 3D printing, for the design of the D10+ capsule dental production system. "We aimed to find a solution for 3D printing at dental practices, which can be operated by existing staff without requiring additional training and delivers validated results at the same time," says Andreas Schultheiss, the founder and managing director of Rapid Shape, of the requirements.

Insert capsule, print, finished

As a worldwide first, the D10+ capsule 3D printing system offers a ready-to-use capsule for single use. For each currently available end product, such as drilling templates, crowns & bridges or occlusal splints, Rapid Shape offers a specific capsule, where the type and quantity of materials are optimally adapted to the product to be printed. The dental practice personnel merely have to select the right capsule and set up the 3D printer for printing in a few quick and easy steps.

The practical, self-explanatory system obviates the need for extensive training and reduces the time required for operating the device to a minimum. This is especially true as the capsule does not require preparatory and finishing tasks, such as cleaning components or safe storage of not fully used materials. But for all its ease of use, Rapid Shape does not compromise on quality: the various materials are provided by the laboratories of the leading manufacturers of dental materials. The manufacturing process of the dental products is certified and delivers validated results with the utmost precision.

Print data shared internally or externally through Cloud services

The print data can be generated in different ways, based on an intra-oral scan. If the dental practice has a CAD workstation, the data set can be generated on site. If the dental practice works with an external dental laboratory, the lab technician can generate the desired design from the scan data and return the print data directly to the D10+ capsule at the dentist's practice. "As the 3D printer is equipped with a Cloud connection, an external laboratory can transmit the data directly to the printer and start the production process remotely. In this way, products needed immediately can be printed on the spot in the practice," explains Andreas Schultheiss. For dentists without a link to an in-house or external CAD laboratory, certified CAD service providers offer a design service.

After inserting the capsule in the 3D printer, practice staff only need to wait for the start of the printing process and can remove the finished end product after about 15 minutes.

Apart from safe, easy handling, the D10+ capsule version offers additional benefits, such as environmental friendliness: as the entire material hardens out after the printing process, no liquid material residue remains in the machine. Unlike liquid residue, which is special waste, hardened residue can be disposed of with normal waste. In addition, there's the easy cost allocation and billing. As each dental product requires exactly one capsule, no complex calculations are needed to identify the material costs.

Additional innovations for small and medium-sized laboratories

Apart from the D10+ capsule system, Rapid Shape is introducing other innovative product solutions for small and medium-sized dental laboratories at IDS 2019. These include the D20+ cartridge 3D printing system, which is equipped with a reusable material basin and small bottled materials. This is a particularly economical entry-level 3D solution for operators who would like to produce below ten individual items per day at low initial investment costs. The open D20+ system can be upgraded at any time. Moreover, additional components for 3D printing, such as the automated RS wash cleaning unit or the RS cure LED-based lightcuring system, are among the innovations that Rapid Shape, the technology leader in 3D printing systems for dental products, will be presenting at the fair

About Rapid Shape

Rapid Shape is a German company that specializes in the development and manufacture of high-end systems for additive printing. Rapid Shape has positioned itself as one of this industry's leaders through proprietary technology that has set new standards in speed, reliability and precision. Rapid Shape provides solutions for industrial, dental, hearing aid and jewellery markets. Precision, quality and cooperation with sales, material and technology partners distinguishes this company from its competitors. For further information about Rapid Shapes 3D-printer please visit

www.rapidshape.de

Rapid Shape GmbH

Roemerstraße 21
71296 Heimsheim, Germany
+49 (0) 7033 309878-0
www.rapidshape.de

Contact

Marketing
+49 (0) 7033-309 878-25
marketing@rapidshape.de