

# Perfect finish for dental products from the 3D printer

## **Rapid Shape's innovative devices offer an entirely new level of ease and cleanliness during cleaning and final curing**

When the 3D printer signals completion of the printing process, this does not mean that the production process is over. "The printed dental product still needs to be cleaned, and at the end, it must be illuminated for final curing of the material," explains Andreas Schultheiss, the founder and managing director of Rapid Shape, one of the leading providers of 3D printing solutions for dental products.

He emphasizes that both processes are decisive for the quality and biocompatibility of the end product and adds: "In the light of this, our newly developed RS wash and RS cure systems are innovative additions to our product range that take 3D printing results to the highest quality level for the specific needs of the dental sector. At the same time, the systems can be operated easily and intuitively."

## **RS wash: automatic, environmentally-friendly cleaning**

The RS wash automated cleaning system boasts several new features to make cleaning particularly safe and easy. While the cleaning process in the past was mainly manual work, the RS wash system offers efficient automation. The data for cleaning the piece produced are transmitted to the cleaning system via an interface that is compatible with all Rapid Shape 3D printers.

Based on this information, RS wash selects the appropriate cleaning medium and then starts the optimal cleaning process. At the same time, the device monitors the condition of the cleaning medium and starts an automatic exchange, if necessary. This reduces the consumption of cleaning agents to a minimum, while ensuring optimal cleaning results.

The medium is provided in bottles, which users only have to unscrew for initial use or close them again after maximum use and then dispose of them. "As it is a closed system, users are never in contact with the cleaning liquid; this ensures maximum safety at work and environmental protection," indicates Schultheiss. Due to an internal filter system, it is virtually impossible for vapors to escape. This means that cleaning stations don't have to be equipped with an extraction system.

## **RS cure: 360° illumination with certified programs**

The fully-automated RS cure illumination unit offers additional innovations. At the core of the unit there is a newly developed 360° illumination system. The produced piece is illuminated evenly from all sides with powerful LEDs with radiation in the UVA and UVB spectrum. This ensures even curing and obviates the need for turning the dental product manually during illumination.

RS cure is equipped with an data link to the 3D printer for automatic transmission of the information on the material. The individual illumination programs are certified by the respective manufacturers of the materials: this ensures a validated and secure process from the start of the printing all the way to the fully-automated curing process.

## **Safety and speed throughout the entire process**

With RS wash and RS cure, Rapid Shape rounds off its range of devices for high-quality 3D printing of dental products and thus offer a holistic and optimally aligned package of solutions for dental practices and laboratories. Managing director Andreas Schultheiss emphasizes that their focus is on production speed, next to safety and qualitative reproducibility: "With printing times of approximately 15 minutes, plus 6 to 8 minutes for cleaning and illumination, the Rapid Shape devices produce a perfectly fitting dental product in about half an hour."

## **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](http://www.rapidshape.de)

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