

Industrial post-processing for polymer 3D printing now available

Cubicure presents optimized cleaning solutions for industrial series printing

Vienna, November 2, 2022. Cerion®, a novel 3D printing system that enables the stereolithographic production of industrial batch sizes, was launched by Cubicure last year. The 3D printing company now presents a cleaning solution for the industrially scalable post-processing of additively manufactured polymer components. This will further improve the sustainable use of material and occupational safety, as well as save time and money in post-processing. The process chain can be optimized individually depending on the application.

Sustainable production through material recycling

Cubicure presents a novel, customizable cleaning solution for light-based 3D printing. This allows the industrial scale-up of post-processing 3D printed polymer parts: several million high-precision components are thus additively manufactured and cleaned every year.

The first cleaning stage is the centrifugal removal of material residue from the building platforms. This residual resin is collected in a container and easily recycled in the 3D printing process. "Hot Lithography is already a highly material-efficient process. Thanks to our post-processing solutions, excess material removed during component cleaning can simply be reused," explains Dr. Bernhard Buseti, product manager for 3D printing systems at Cubicure. "This allows companies to be more sustainable and save costs."

Safe and fast post-processing for industrial 3D printing

Additively manufactured components are then processed in an energy-efficient cleaning plant. The plant is equipped with an ultrasonic setting that gently cleans delicate components. The cleaning agent is recycled via a built-in distillation unit so that even at very high throughput, as little new solvent as possible has to be added. Fine cleaning can be performed using superheated steam. Finally, the components are dried in a vacuum cycle. Since cleaning is fully automated and takes place in a closed area, the use of a cleaning system improves occupational safety. Depending on the application, the printed components are separated either directly after printing, between the cleaning steps, or at the end of the entire process chain.

Cubicure's cleaning solutions represent a further step on the road to fully digital production. The sustainable cleaning of polymer components means that a future-proof solution for the integration of additive manufacturing into modern industrial production processes has been found.

Press release



Cubicure's cleaning solutions are used to additively manufacture and clean several million high-precision components per year.



Cleaning systems for 3D printed polymer components improves occupational safety and sustainability.

Images: Cubicure GmbH/Otmar Winterleitner

Cubicure GmbH develops, produces and distributes industrial 3D printing solutions for polymer parts. With roots in academia and the ambition to help shape the digital future of manufacturing, this Vienna-based company has been setting the course for agile production since 2015. Their Hot Lithography process enables the unprecedented additive manufacturing of resilient precision components. Learn more at [cubicure.com/en](https://www.cubicure.com/en).

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