

Press Release

Vienna, Austria, March 2020

Lithoz Presents the CeraFab System Family, the Latest Development in 3D-Printing for the Serial Production of High-Performance Ceramics (Hall 23 / Stand A32)

Lithoz GmbH, producers of world leading ceramic additive manufacturing technology, recently developed the CeraFab System family. This technology is the solution now ready for the industrial serial production of additively manufactured high-performance ceramics.

Boosted productivity, unmatched precision, consolidated reliability

CeraFab System 3D-printers come in 3 different sizes in terms of the build platform and with different resolutions depending on the need of the application. The modular design of the CeraFab System also allows for the combination (cascading) of up to 4 production units, creating a scalable and flexible production environment. With build speeds of up to 150 slices per hour, productivity is therefore increased fourfold and results in considerably lower cost per part. The current

generation of projectors with WQXGA resolution (2560 x 1600 pixels) - in combination with a lens specially developed for the process - guarantees absolute precision in the printed components, particularly in the micrometer range.

The central element of the CeraFab System is a database for storing and handling process data, facilitating end to end documentation of print jobs. The CeraDoc module is the best solution for 100 % traceability during production. The CeraFab System 3D-printers are especially suited to the production of highly reproducible components which meet the high level of quality for high-end markets including aerospace, industrial and medical. The recently developed CeraFab S230 has the largest build platform in the CeraFab System family and the first machine will be shipped in early 2020 to our first customer. The specifications of the CeraFab System S230 include lateral resolutions of 75 μ m, layer thicknesses of $25-200~\mu\mathrm{m}$ and build volumes of 192 mm x 120 mm x 320 mm. The newest generation of CeraFab 3D-printers, along with an expanded range of services and technical expertise offers Lithoz existing and future customers competitive advantage in terms of product quality and sustainability of their manufacturing process. A variety of functional applications can be now manufactured for diverse industry sectors, ranging from the most innovative ceramic cores

and shells for investment casting, industrial and machinery components, up to implants for medical and dental.

Lithoz is the world market and technology leader for 3Dprinters, materials and solutions for the industrial production of high-performance and bioresorbable ceramics. Lithoz was founded in 2011 and since then strives to break the boundaries of ceramic production and to support customers in expanding the manufacturing opportunities for the ceramic industry. Customers can benefit from a variety of outstanding materials ranging from alumina, zirconia, silicon nitride, silica-based for casting-core applications through medical grade bioceramics. Lithoz offers specific development to customers. The company's outstanding expertise has been a decisive success factor for meeting and exceeding market requirements and developing customer-specific product solutions around the world, reaching out as far as Brazil and Australia. Lithoz's clear commitment to sustained quality improvement, along with its well renowned R&D into additive manufacturing for ceramics, makes Lithoz the unrivalled partner in the field. Headquartered in Vienna, the company has an export share of almost 100%, more than 70 employees and, since 2017, a subsidiary in the USA. Since 2016, Lithoz has also been ISO 9001-2015 certified.

(3687 Characters)

Figure captions

(Lithoz_1_2020.jpg)

From semiconductor through to machinery, Lithoz's CeraFab System 3D printers facilitate the serial production of demanding industrial applications. Products with boosted functions and revenue-generating applications are produced with guaranteed consistency and quality

(Lithoz_2_2020.jpg)

Customized solutions to manufacturers of medical devices throughout the entire process chain of the additive manufacturing of ceramics

Press contact

Lithoz, Katharina Hofhansl, khofhansl@lithoz.com

CERAMIC APPLICATIONS, Karin Scharrer, k.scharrer@goeller-verlag.de

TREFFPUNKT KERAMIK
CERAMIC APPLICATIONS

Hannover Messe, Hall 23, Stand A32