LITHOZ®

CeraMax Vario V900

The New LIS-based Ceramic 3D Printer

Thanks to water-based suspensions and the easy reintroduction of green parts into the familiar post processing steps, LIS closely follows the classical ceramic process chain.

PROF. DR. JENS GÜNSTER | BAM

For the traditional ceramic industry, the CeraMax is a perfectly easy-to-use entry into 3D printing.

DR. THOMAS MÜHLER | QEP3D GMBH

The printer

Weight
ca. 450 kg

Size
2.20 m
0.95 m
1.85 m

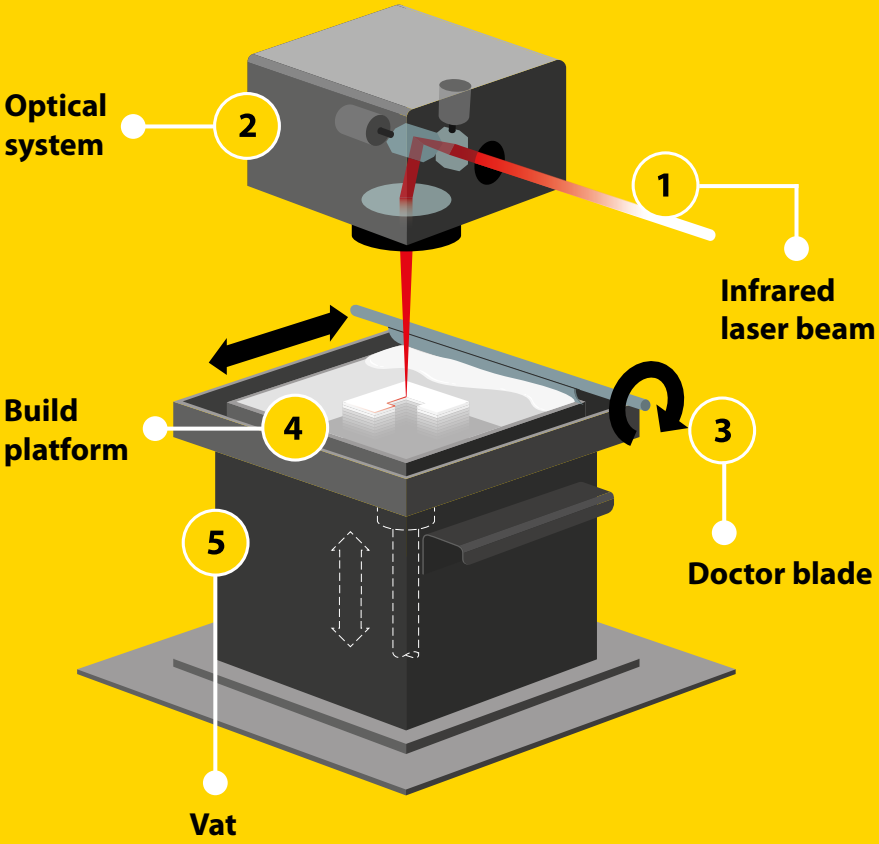
Power
120 W

Discover more

The specs

Layer thickness	200–1000 µm
Building envelope (x / y / z)	100 x 100 x 290 mm or 250 x 250 x 290 mm
Data format	.stl (binary)
Number of vats	1
Number of build platforms	1
Laser spot diameter ($1/E^2$)	approx. 0.5 mm
Light source	CO_2 Laser
Cooling options	Water-cooled chiller (stand-alone device)
Size (L x W x H, incl. signal tower & handles)	1.85 x 0.95 x 2.20 m
High precision optics	F-Theta-lens; high speed scanner
Scan speed	up to 8 m/s
Weight	ca. 450 kg
Power	120 W

The technology

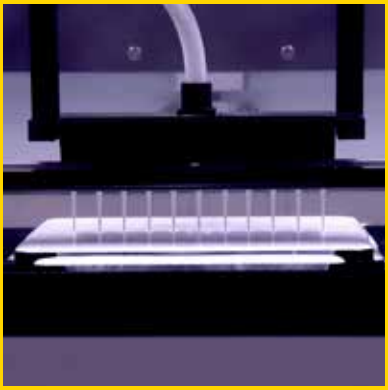


Discover more

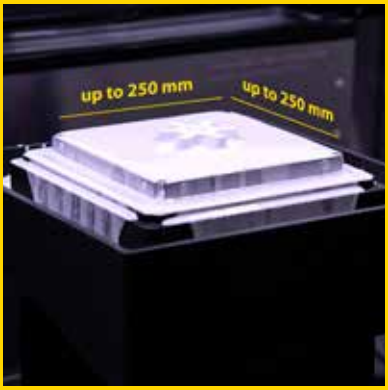
The benefits

- Ceramic 3D printing of large parts with thick walls and high density
- Processing of dark ceramics such as silicon carbide
- Economical water-based slurry with very little organic binder
- Straightforward use of slightly adapted own materials
- Elimination of tools and time-consuming sampling trials
- Flexible scan strategies adjustable to part design
- Rapid build-up speed: up to 1.000 µm in < 60 sec. per layer
- No additional debinding necessary
- Green bodies simply reintroduced in conventional post-processing
- Easy machining of near-net-shape components in green state
- Precisely repeatable results thanks to water-cooled laser system
- Easy-to-understand, low risk technology for ceramic industry

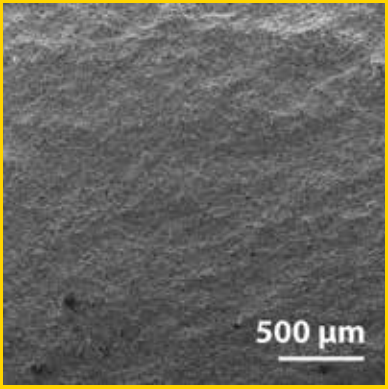
The details



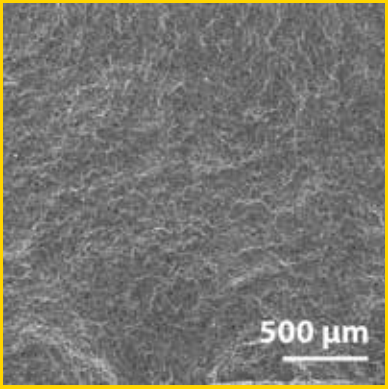
A new layer of slurry being deposited with a height of 300 µm.



A finished green part after being elevated from the vat.



SEM image of sintered alumina sample manufactured on the CeraMax Vario V900.



SEM image of sintered silicon carbide sample manufactured on the CeraMax Vario V900.

You've been asking. Time to deliver.

DR. JOHANNES HOMA | LITHOZ GMBH

Visit our webinar on 29.6.2022

Discover the LIS technology, with the leading experts explaining all about its capabilities.

Contact us

Please find us on our website www.lithoz.com or scan the QR-code and contact us directly.

Lithoz GmbH

Mollardgasse 85a / 2 / 64 – 69 | 1060 Vienna • Austria
Tel: + 43 1 9346612 – 200 | Email: sales@lithoz.com