

# CONCEPTLASER

a GE Additive company

## Mlab cusing Metal laser melting system

The ideal machine for manufacturing metal components with elaborate structures, and parts made from reactive materials like titanium.

Ideally suited to fine detail, high quality surface finish, and precision component structures.



Standard design available in grey, optional in white.



## Mlab cusing TECHNICAL DATA

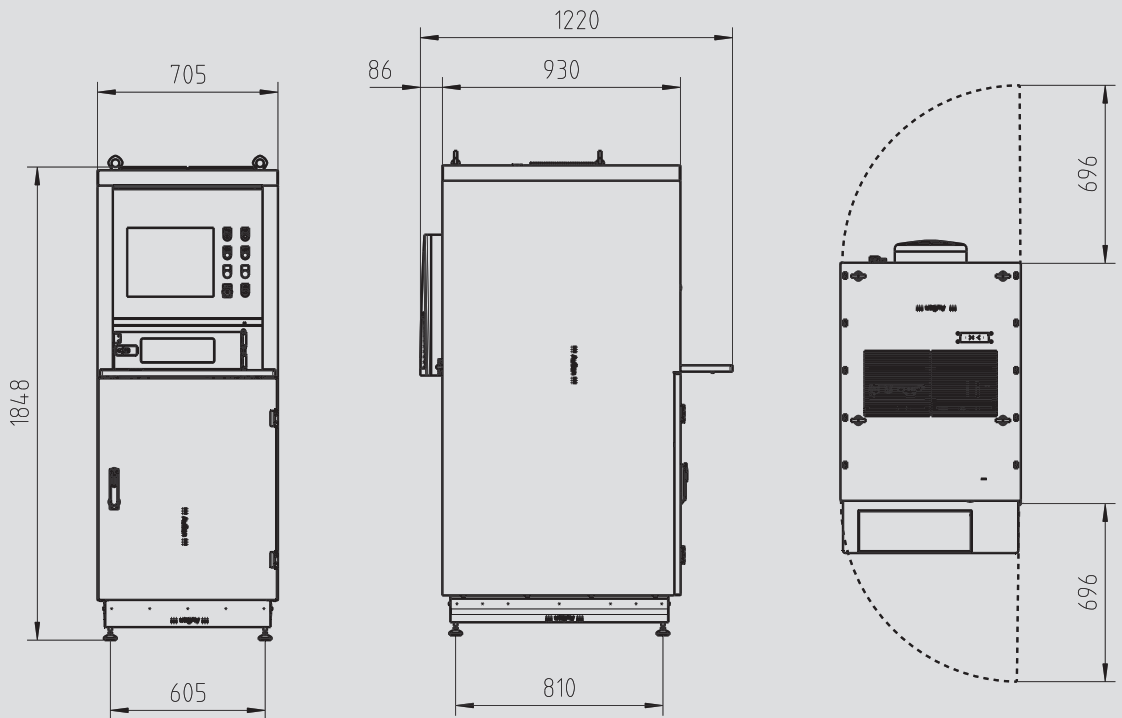
Build envelope LaserCUSING®	50 x 50 mm <sup>2</sup> (x, y) 70 x 70 mm <sup>2</sup> (x, y) 90 x 90 mm <sup>2</sup> (x, y) z = 80 mm																
Layer thickness LaserCUSING®	15 – 50 µm																
Production speed LaserCUSING®	1 – 5 cm <sup>3</sup> /h (depending on material)																
Laser system	Fibre laser 100 W (cw)																
Max. scanning speed	7 m/s																
Focus diameter	approx. 50 µm																
Fixation of the building plate	mechanical (clamping system being prepared)																
Connected loads	Power consumption 1.5 kW Power supply 1/N/PE AC 230 V, 16 A																
Inert gas supply	1 gas connection provided / Nitrogen or Argon																
Inert gas consumption	approx. 0,6 – 0,8 l/min*																
Dimensions	705 x 1848 x 1220 mm <sup>3</sup> (W x H x D)																
Weight	approx. 600 kg																
Operating conditions	15 – 35°C																
LaserCUSING® materials	<table border="0"> <tr> <td>CL 20ES</td> <td>Stainless steel (1.4404)</td> </tr> <tr> <td>remanium® star CL</td> <td>Cobalt-chromium alloy (Dentaurum)</td> </tr> <tr> <td>CL 80CU</td> <td>Bronze</td> </tr> <tr> <td>Yellow gold</td> <td>18 carat 3N***</td> </tr> <tr> <td>Rose gold**</td> <td>18 carat 4N***</td> </tr> <tr> <td>Red gold**</td> <td>18 carat 5N***</td> </tr> <tr> <td>Platinum</td> <td>950 ‰ Platinum alloy***</td> </tr> <tr> <td>Silver alloy</td> <td>930 ‰ Silver alloy***</td> </tr> </table>	CL 20ES	Stainless steel (1.4404)	remanium® star CL	Cobalt-chromium alloy (Dentaurum)	CL 80CU	Bronze	Yellow gold	18 carat 3N***	Rose gold**	18 carat 4N***	Red gold**	18 carat 5N***	Platinum	950 ‰ Platinum alloy***	Silver alloy	930 ‰ Silver alloy***
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\* Inert gas consumption during the building process with N<sub>2</sub>

\*\* The material is currently being prepared.

Other materials on request.

\*\*\* Parameter from Concept Laser GmbH, material procured directly from precious metal supplier, contact details available on request.



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