

CONCEPTLASER

a GE Additive company

Mlab cusing Metal laser melting system

The ideal machine for manufacturing metal components with elaborate structures.

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



Mlab using TECHNICAL DATA

Build envelope	50 x 50 mm ² (x, y) 70 x 70 mm ² (x, y) 90 x 90 mm ² (x, y) z = 80 mm	
Layer thickness	15 – 30 µm	
Production speed	1 – 5 cm ³ /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	
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 ³ (W x H x D)	
Weight	approx. 600 kg	
Operating conditions	15 – 35°C	
Materials	CL 20ES CL 80CU CL 92PH Yellow gold Rose gold Red gold ** Platinum Silver alloy remanium® star CL	Stainless steel (316L/1.4404) Bronze Precipitation hardening stainless steel (17-4 PH) 18 carat 3N *** 18 carat 4N *** 18 carat 5N *** 950 ‰ Platinum alloy *** 930 ‰ Silver alloy *** Cobalt-chromium alloy (Dentaurum)

07/2018 | Subject to technical changes.
Machine layout: meyer-design.net
Photos: uwe-muehlhaeuser.de
Artwork: brandnew-design.de

* Inert gas consumption during the building process with N₂.

** 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.

