MetalFABG2 System Specifications*

Process type:	Laser Beam Powder Bed Fusion
Net build envelope:	420 x 420 x 400 [mm] (16.5 x 16.5 x 15.7 [In])
Laser:	Yb fibre lasers 500W (1 [kW] under development)
Number of Lasers:	1 to 4 full field, preventing laser overlap regions
Configurability:	Configure 3 up to 11 modules for more productivity or post-processing automation
Build plate:	Automated levelling and positioning
Powder handling:	Automated extraction, sieving and recycling during the build cycle
Autonomous operation:	112 [hrs], maximum 8 build jobs
Productivity:	Up to 1.000 dm3/yr (with 4 lasers, depending on material)
Accuracy:	< |0.050 + 0.002 x part length| [mm]
Reproducibility:	< |0.050| [mm]
Layer Thickness:	20-100 µm
Optical calibrations:	In-line, automated, laser-2-laser and focus
Safety:	No direct powder exposure during regular operations
Storage positions:	8 empty build plates
Job preparation:	Off line build set up, Dynamic Laser Assignment
Remote access & monitoring:	Yes, through Additive World Platform
Materials	Titanium (Ti6Al4V), Aluminium (AlSi10Mg), ScalmAlloy©, Stainless Steel (316L), Inconel (IN718), Tool Steel (1.2709)
Preheating	175 °C

** Specifications may change*