



# Print Genius 250

POWDER BED FUSION



## DUAL LASER MACHINE FOR HIGH PRODUCTIVITY PRINTING

Print Genius 250 is a machine for additive manufacturing with a build volume of 262x262x350 mm for the fabrication of medium sized components.

It is the ideal solution for high productive metal printing applications thanks to its dual 500W laser and intelligent control and operating software for quick part orientation and machine functions definition.

Complete material change capability in less than 2 hours due to modular and easily removable components.



### PRODUCTIVE

The two lasers work simultaneously to improve the production time. Possibility to work with single laser printing mode. Small parts could be printed in the same job using just one laser.



### USER FRIENDLY

A total new HMI, intuitive, easy to use also for a non expert operator with the possibility to check and report the key printing parameters.



### EFFICIENT

Improved gas recirculation system to reduce the purge time to fill the chamber to 25 minutes and reduce gas consumption during the process.



### SAFE

Equipped with two line of I+I filter solution that increases the filter lifetime, decrease the frequency of changing cartridges, and allow to change the filter during the process thanks to the removable cylinder.

# Technical Specifications

## Print Genius 250

<b>DIMENSIONS (LxWxH)</b>	3500 (L) - 1250 (W) - 2240 (H)
<b>WEIGHT</b>	2500 kg.
<b>POWER SUPPLY</b>	380 V / 50 Hz / 10 kW
<b>LASER IR</b>	Laser Yb (Itterbio) IR single mode
<b>LASER POWER</b>	2 x 500 W
<b>LASER FOCUS DIAMETER</b>	70 – 100 µm
<b>BEAM WAVELENGTH</b>	1060 - 1080 nm
<b>BUILDING VOLUME</b>	262 * 262 * 350 mm
<b>BEAM DEFLECTION SPEED (DUAL SCANNER)</b>	2 * 8 m/s
<b>POSITIONING SPEED</b>	10 m/s
<b>BUILD RATE *</b>	25 - 50 cm <sup>3</sup> /h
<b>LAYER THICKNESS</b>	0.02 mm - 0.1 mm
<b>LAYER WIDTH</b>	0.1 mm (single line width)
<b>BUILDING PLATFORM Z-AXIS</b>	Travel: 350 mm / Speed: max 6 mm/s / Res: 0.01 mm
<b>HEATING PLATFORM</b>	up to 200°C
<b>MONITORING OF O2 LEVEL</b>	Below 100 ppm (0.01%)
<b>PERMISSIBLE ROOM TEMPERATURES</b>	15 - 30°C
<b>GAS (Consumption - running / filling)</b>	6 L/min (running)
<b>SYSTEM FILL CONSUMPTION</b>	20 L / min. (up to filling)
<b>CAM SOFTWARE</b>	Materialise Magics
<b>CONTROL &amp; OTHER SOFTWARE</b>	Eplus control software (EPC)
<b>INDUSTRIAL INTERFACES</b>	Ethernet

\*Dependent on process parameters and material used

<span style="display: inline-block; width: 15px; height: 10px; background-color: #4F81BD; margin-right: 5px;"></span> Size & Power
<span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; margin-right: 5px;"></span> Laser
<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFA500; margin-right: 5px;"></span> Machine and additive process details
<span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90; margin-right: 5px;"></span> Peripheral & auxiliaries - Software