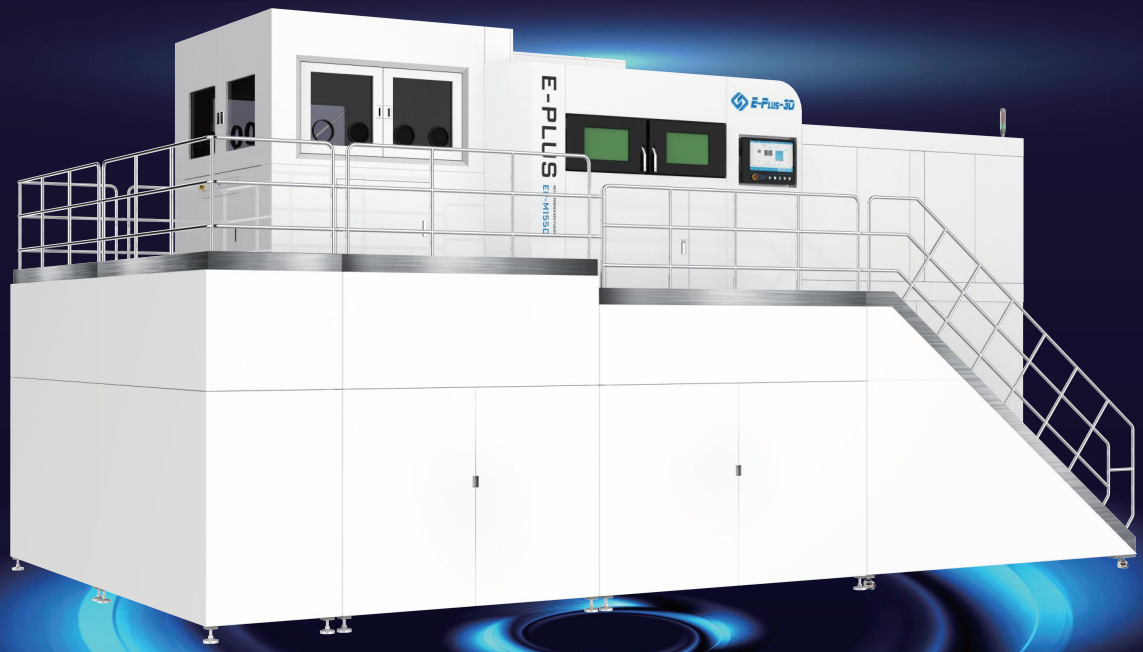
E-Plus-3D

EP-M1550

16-laser Large Format
Metal Additive Manufacturing System

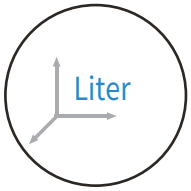


EP-M1550

EP-M1550 is using a large building envelope and 16-laser system to ensure a high efficiency production. The multi-laser precise positioning and overlapping control technology offers uniformity and stability throughout the whole printing phase. Compatible with titanium alloy, aluminium alloy, nickel alloy, maraging steel, stainless steel and cobalt chrome, etc, EP-M1550 is an ideal choice for direct manufacturing of large-size, high-precision and high-performance parts for aerospace & aviation and other industries.

HIGH EFFICIENCY & HIGH PRODUCTIVITY

- Printing of oversize parts in the 2670 Liter build chamber.
- 16 lasers are printing simultaneously with speed up to 650 cm^3/h.
- Excellent beam and power stability, as well as energy control strategies can inhibit porosity, micro-cracks and non-fusion defects.



EXCELLENT QUALITY & GOOD CONSISTENCY

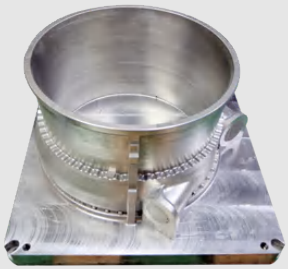
- Excellent high beam quality ($M^2 \leq 1.1$) and detail resolution ensure the forming accuracy and mechanical properties of printed parts.
- Print density > 99.9% and fluctuation of mechanical properties < 5%.
- Optimized design of wind field structure ensures effective removal of dust and splash and uniform printing of full-format parts.

HIGH INTELLIGENTIZATION & AUTOMATION

- User-friendly interface with fully automatic one-click printing and pickup function.
- With automatic cleaning (backblowing), the filtration system can realize online back blowing during printing.
- Equipped with permanent filter elements.
- The build job information is displayed in real time with traceable printing parameters report.

REAL TIME MONITORING & HIGH SECURITY

- Real time monitoring of working environment and air source status, safe and reliable.
- The equipment has passed the EU CE certification and FDA laser safety certification, with high safety.
- Safety design, prevent mis-operation, electric shock, fire, waste and pollution.
- Automatic powder circulation under inert gas protection environment can be realized, with complete closed operation to realize powder isolation, simple and safe operation.



EP-M1550
PARAMETER

Machine Model	EP-M1550
Build Volume (X x Y x Z) (height incl. build plate)	1550 x 1550 x 1100 mm (61.02 x 61.02 x 43.31 in)
Optical System	Fiber Laser 16 / 25 x 500 W (700 W and 1000 W are optional)
Spot Size	70 - 120 µm
Max Scan Speed	8 m/s
Layer Thickness	20 - 120 µm
Theoretical Printspeed	Up to 650 cm^3/h
Material	Titanium Alloy, Aluminum Alloy, Nickel Alloy, Maraging Steel, Stainless Steel, Cobalt Chrome, Copper Alloy, etc
Power Supply	380 V, 50 / 60 Hz, 77 kW
Gas Supply	Ar / N_2
Oxygen Content	≤100 ppm
Dimension (W x D x H)	10180 x 5690 x 5650 mm
Weight	70000 kg
Software	EPControl, EPHatch
Input Data Format	STL or other Convertible File

Notice: Eplus3D reserves the right to explain any alteration of the specifications and pictures.