



**METROLOGY**  
SOLUTIONS



# EP-M150

High Compact & High Precision  
Metal Additive Manufacturing Equipment



# EP-M150

EP-M150 adopts metal powder bed selective melting MPBF™ (Metal Powder Bed Fusion) technology, single and dual-laser printing modes are optional, supporting 200 and 500 W laser, which can be perfectly used for the rapid production of high performance, high-precision parts. Compatible with most popular metal powder materials, including titanium alloy, aluminum alloy, nickel-based superalloy, Maraging steel, stainless steel, Cobalt, chromium alloy and ect. It has been applied in versatile applications such as industrial manufacturing, medical, education, dental, materials development and etc.

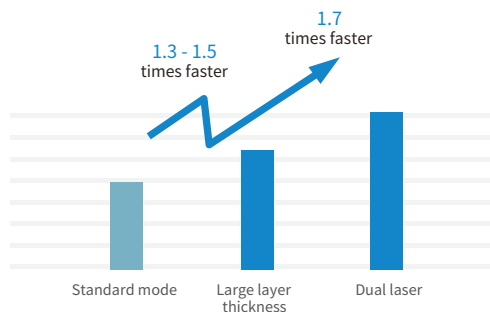


## « High Precision

- High laser beam quality.
- Tiny laser spot.
- High consistency and uniform laser beam quality from different positions in the building platform.

## » High Performance

- The density of printed parts can reach nearly 100 %.
- Volatility of mechanical properties < 5 %.
- In dual laser printing mode, precision deviation in alignment area  $\leq 0.15$  mm.



## « High Efficiency

- The Layer thickness can be up to 100  $\mu$ m.
- With the latest upgraded technology combining dual-laser with large layer thickness mode, the productivity has been risen for 2.3 ~ 2.7 times.



## » Openness

- High consistency, different machines could use the same set of process parameters.
- Machine compatible with multiple materials, the same machine can print multiple materials without adjusting the optical path.



2 minutes quick operation



One-click printing

## » Affordable Operation Cost

- Air consumption during processing < 3 L / min (0.3 MPa).
- Powder supply is accurate, stable and controllable, and high utilization rate of powder.
- The existing material parameter packages are provided for free.



Safety design



Anti-electric shock



Prevention of Misoperation



Fire prevention



Anti-pollution



Working environment monitoring



Gas source status monitoring



Anti-waste



## « User Friendly Operation System

- Ergonomics overall design for users.
- With "one-click printing" function, each process is ready to run, click the "print" button on the screen to start printing.
- The replacement of filter element, residual material tank substrate and recoater can be completed within 2 minutes.



## « Safer

- Safety design, anti-misoperation, anti-electric shock, fire prevention, anti-waste, anti-pollution.
- Real-time monitoring and traceable of working environment and gas source status, safe and reliable.



# EP-M150 PARAMETER

Machine Model	EP-M150
Build Chamber (XxYxZ)	Φ153 mm x120 mm <sup>3</sup>
Optical System	Fiber Laser, 200 W/500 W (single or dual-laser optional)
Spot Size	40-60 μm
Max Scan Speed	8 m/s
Building Speed <sup>(1)</sup>	Single laser : 5~20 cm <sup>3</sup> /h    Dual laser : 8~35 cm <sup>3</sup> /h
Layer Thickness	200 W laser : 20 μm -50 μm 500 W laser : 20 μm -100 μm
Material	Titanium Alloy, Nickel Alloy, Maraging Steel, Stainless Steel, Cobalt Chrome, Copper Alloy, etc.
Power Supply	220 V, 2.5 KW, 14 A, 50~60 Hz (Dual laser : 3.5 KW, 19 A)
Gas Supply	Ar/N <sub>2</sub>
Oxygen Content	≤100 ppm
Dimension (WxDxH)	1750 x 810 x 2190 mm <sup>3</sup>
Weight	900 kg
Software	EP Control, EP Hatch
Input Data Format	STL or other Convertible File

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

