

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 500W 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 etc. 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



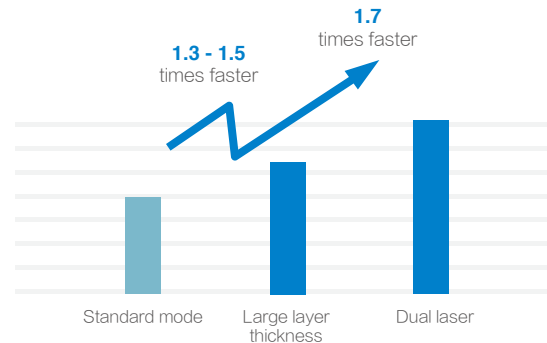
High Performance

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



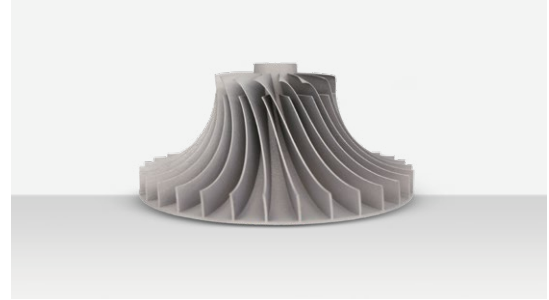
High efficiency

- The Layer thickness can be up to 100 μ 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



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



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



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.



Safety design



Anti-electric shock



Prevention of Misoperation



Fire prevention



Anti-pollution



Working environment monitoring



Gas source status monitoring



Anti-waste

Specifications

EP-M150

Device model	EP-M150
Build Volume (X*Y*Z)	Φ150*120 mm ³ (The hight is customizable)
Optical System	Fiber Laser , 200 W / 500 W (single or dual-laser optional)
Spot Size	40-60 μm
Max Scan Speed	8 m/s
Layer Thickness	200 W laser : 20 μm - 50 μm ; 500W laser : 20 μm - 100 μm
Building speed ⁽¹⁾	Single laser : 5 cm ³ /h - 7.5 cm ³ /h ; Dual laser : 8.5 cm ³ /h - 12.75 cm ³ /h
Materials	Titanium Alloy, Aluminium Alloy, Nickel Alloy, Maraging Steel, Stainless Steel, Cobalt Chrome, Copper Alloy, etc.
Power Supply	220 V , 16 A , 50~60 Hz 3 kW
Gas Supply	Ar/N ₂
Oxygen Content	≤100ppm
Dimension (W*D*H)	1750 mm * 800 mm * 1800 mm
Weight	900Kg
Software	EP-Hatch ; E-Plus 3D
Input Data Format	STL or Other Convertible File

⁽¹⁾ : The printing speed will vary depending on the equipment configuration and process parameters and the number of lasers

* Notice: E-Plus 3D reserves the right to explain any alteration of the specifications and pictures.