

# **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 200W laser, which can be perfectly used for the rapid production of high performance, high-precision parts. Compatible with the most popular metal powder materials, including titanium alloy, nickel alloy, maraging steel, stainless steel, cobalt chrome, etc. It has been applied in versatile applications such as industrial manufacturing, medical, education, dental, materials development, etc.



### **W** 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.





#### **W** HIGH EFFICIENCY

- $\cdot$  The layer thickness can be up to 50  $\mu$ m.
- With the latest upgraded technology combining dual-laser with large layer thickness mode, the productivity has been risen accordingly.

#### **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.









One-click printing

#### **W** 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 build plate and recoater can be completed within 10 minutes.

#### AFFORDABLE OPERATION COST

- · Air consumption during processing < 3 L/min.
- · 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

#### 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 Volume (X x Y x Z) (height incl. build plate)	Φ 150 x 140 mm (Φ 5.91 x 5.51 in)
Optical System	Fiber Laser 200 W (single or dual-laser optional)
Spot Size	40 - 60 μm
Max Scan Speed	8 m/s
Theoretical Printspeed	Up to 35 cm <sup>3</sup> /h
Layer Thickness	20 - 50 μm
Material	Titanium Alloy, Nickel Alloy, Maraging Steel, Stainless Steel, Cobalt Chrome, etc.
Power Supply	220 V, 50 / 60 Hz, 3 / 4 kW
Gas Supply	Ar / N <sub>2</sub>
Oxygen Content	≤100 ppm
Dimension (W x D x H)	1750 x 799 x 1828 mm
Weight	900 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.

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