

# **EP-M150 PRO**

# High Compact & High Precision Metal Additive Manufacturing Equipment



# EP-M150 PRO

EP-M150 PRO adopts metal powder bed selective melting MPBF <sup>™</sup> (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 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

 $\cdot$  High consistency and uniform laser beam quality from different positons in the building platform



### **High Performance**

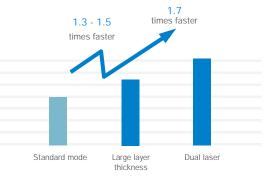
- $\cdot\,$  The density of printed parts can reach nearly 100 %
- Volatility of mechanical properties < 5 %</li>
- · In dual laser printing mode, precision deviation in

alignment area 0.15 mm

## High efficiency

- $\cdot\,$  The Layer thickness can be up to 100  $\,\mu\,\text{m}$
- $\cdot$  With the latested upgrated technology combining dual-laser with large layer thickness mode, the productivity has been risen for 2.3  $\sim$  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

### Afforadable Operation Cost

- Air consumption during processing < 3 L / min (0.3 MPa)
- · Powder supply is accurate, stable and controllable, 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.





2 minutes quick operation

One-click printing



Safety design

Anti-electric shock

Fire prevention



Prevention of Misoperation





Anti-pollution

Working environment monitoring

Gas source status monitoring

Anti-waste

# Specifications EP-M150 PRO

Device model	EP-M150 PRO
Build Volume (X*Y*Z)	150*240 mm <sup>3</sup> (The hight is customizable )
Optical System	Fiber Laser , 200 W / 500 W ( single or dual-laser optional )
Spot Size	60 µm
Max Scan Speed	8 m/s
Layer Thickness	200 W laser : 20 μm - 50 μm ; 500 W laser : 20 μm - 100 μm
Building speed (1)	Single laser:5 cm³/h - 7.5 cm³/h; Dual laser:8.5 cm³/h - 12.75 cm³/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 <sub>2</sub>
Oxygen Content	100ppm
Dimension (W*D*H)	2120 mm * 800 mm * 2000 mm
Weight	1500Kg
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.

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