E-Plus-3D

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 ect. It has been applied in versatile applications such as industrial manufacturing, medical, education, dental, materials development and etc.



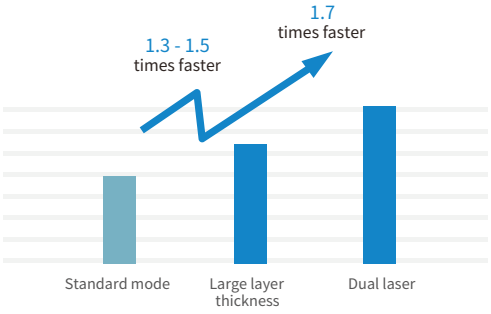
High Precision

- High laser beam quality.
- Tiny laser spot.
- High consistency and uniform laser beam quality from different positons 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 μm.
- With the latested upgrated technology combining dual-laser with large layer thickness mode, the produc-tivity 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 machinecan print multiple materials without adjusting the optical path.



2 minutes quick operation

One-click printing

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 control-lable, 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, fireprevention, 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)	Φ153mm x120mm^3
Optical System	Fiber Laser, 200W/500W (single or dual-laser optional)
Spot Size	40-60 μm
Max Scan Speed	8m/s
Building Speed (1)	Single laser : 5~20cm^3/h Dual laser : 8~35cm^3/h
Layer Thickness	200W laser : 20μm -50μm 500W laser : 20μm -100μm
Material	Titanium Alloy, Nickel Alloy, Maraging Steel, Stainless Steel,Cobalt Chrome, Copper Alloy, etc.
Power Supply	220V, 4.2KW, 14A, 50~60Hz (Dual laser : 5.8KW, 19A)
Gas Supply	Ar/N_2
Oxygen Content	⩽100 ppm
Dimension (WxDxH)	1750x810x2190mm^3
Weight	900kg
Software	EP Control, EPHatch
Input Data Format	STL or other Convertible File

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