

# M150 SERIES

# **Kings Industrial SLM 3D Printers**

All closed looped powder handling system high precision & high quality











#### Overview

After multiple technical advancements, the Kings M150 Series printers exhibit outstanding performance, boasting low operating costs and high precision. Equipped with an ultra-precision filtration system and a fresh air protection system, they provide dual protection, effectively minimizing forming defects and ensuring the quality of the parts produced.

They are used in small-batch moldless production, customization of mold manufacturing, industrial precision components, education, medical and dental applications, scientific research, and more.

### Advantage



#### High precision & high quality:

Supports 20µm laser spot size. Precisely print out every structural details. Adopting a concentrated laser, the energy greatly enhances the density and strength of the printed part



#### All closed looped powder handling system:

The low oxygen content in the manufacturing environment ensures that the metal is not oxidized, and is compatible with powders of different specifications



#### Dual-circulation wind site protection system:

Dual-circulation wind site protection system to extend the lifespan of the optical components



#### Fully pop-up piston system:

Equipped with a fully pop-up piston system, it is more convenient and quicker to replace metal powder, and 100% eliminates cross powder contamination when replacing powder

### Ideal Applications

R&D and production of small precision parts for dentistry, orthopedics, jewelry, research education, etc.

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## **♦ Technical Data**

Build Size	150mm × 150mm × 120mm
External Dimensions	1462mm × 894mm × 1795mm
Forming Materials	Stainless Steel, Cobalt Chromium Alloy, Titanium Alloy, Tool Steel, etc
Powder Supply Method	Double Cylinder Two-Way Powder Feeding
Printing Accuracy	±0.1(L≦100 mm); ±0.1%*L(L>100 mm)
Layer Thickness	0.02-0.2 mm
Protection System	Efficient Protective Gas Circulation System (Nitrogen, Argon)
Supporting Consumables	Stainless Steel Powder, No Less Than 40kg, With Various Material Process Parameter Packages
Laser Type	IPG 500W×1/2 (1064nm)
Scanning System	SCANLAB (Equipped with F-theta Field Lens)
Laser Speed	Scanning:1.0~4.0m/s (Recommended); Jumping: 5~7m/s(Recommended); Up to 11m/s
Data Processing Software	Voxeldance Additive / Magics (SLC file)
Equipment Control Software	Independently Developed by Kings
Operating System	Windows 10
Data Format	STL/SLC/JOB
Power Supply	220V 50 Hz
Rated Power Consumption	7kW, Three-phase Electricity
Preheat Temperature	No Substrate Preheating
Industrial Control Computer Configuration	10th Gen i7, 16GB RAM
Forming Efficiency	20~50cm³/h
Relative Humidity	Below 40%, Frost-free
Ambient Temperature	15-30 ℃
Equipment Weight	700kg

