

M50 SERIES

Kings Industrial SLM 3D Printers

Small-sized Selective Laser Melting Equipment
With High Manufacturing Accuracy



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Kings

◆ Overview

Kings M50 Series is a new generation of metal 3D printers specially developed by Kings 3D for the vocational education industry, moulding small parts with high precision. It is very suitable for low-cost education and training work, providing complete metal 3D printing operations and skills training for students and vocational trainees.

◆ Advantage

-  **Work without protective gas:**
Metal 3D forming without protective gas, saving exhaust time and protective gas costs.
-  **High precision and strong stability:**
High-precision scanning galvanometer ensures high precision and strong stability.
-  **Dual-circulation wind site protection system:**
Dual-circulation wind site protection system to extend the lifespan of the optical components.
-  **High security multiple safety insurance:**
High safety performance.

◆ Ideal Applications

- New materials and processes R&D
- Education
- Scientific Research
- Dentistry
- Jewelry industry

◆ Technical Data

Build Size	Φ70mm × 50mm
External Dimensions	720mm × 810mm × 1500mm
Forming Materials	Metal Powders
Powder Supply Method	Double Cylinder One-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	No Need For Protective Gas
Supporting Consumables	Metal Tin Powder 20 kg
Laser Type	High Performance Domestic Laser 200W (1064nm)
Scanning System	Domestic Scanning Galvanometer System (Equipped with F-theta Field Lens)
Laser Speed	Scanning:1.0~4.0m/s (Recommended); Jumping: 10.0m/s(Recommended); Up to 7.8m/s
Data Processing Software	Voxeldance Additive / Magics (STL/SLC File)
Equipment Control Software	Independently Developed by Kings
Operating System	Windows 10
Data Format	STL/SLC
Power Supply	220V 50 Hz
Rated Power Consumption	1kW, Single Phase
Preheat Temperature	No Substrate Preheating
Industrial Control Computer Configuration	10th Gen i7\8G
Forming Efficiency	5-20 cm³/h
Relative Humidity	Below 40%, Frost-free
Ambient Temperature	15-30 °C
Equipment Weight	150kg

