

M100 SERIES

Kings Industrial SLM 3D Printers

High power and high efficiency forming
Fully pop-up piston system



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Kings

◆ Overview

Kings M100 Series are cutting-edge 3D printers tailored for dental labs. 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. With its refined design and upgraded build cylinder, it delivers exceptional precision and efficiency, specializing in processing materials like Titanium (Ti), Cobalt-Chrome (Co-Cr), Stainless Steel (SS), and more. It is 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



Customizable configuration:

The configuration can be customized according to the customers' application requirements, making the use flexible



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, etc.;
- Research education, etc.

◆ Technical Data

Build Size	100mm × 100mm × 100mm
External Dimensions	735mm × 920mm × 1780mm
Forming Materials	Stainless Steel, Cobalt Chromium Alloy, Titanium Alloy, Tool Steel, etc
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	Efficient Protective Gas Circulation System (Nitrogen, Argon)
Supporting Consumables	Stainless Steel Powder, No Less Than 20kg, With Various Material Process Parameter Packages
Laser Type	IPG 500W×1 (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 7.8m/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	3kW, Three-phase Electricity
Preheat Temperature	No Substrate Preheating
Industrial Control Computer Configuration	10th Gen i7, 16GB RAM
Forming Efficiency	20~50cm ³ /h
Relative Humidity	Below 40%, Frost-free
Ambient Temperature	15-30 °C
Equipment Weight	300kg

