

# M280 SERIES

## Kings Industrial SLM 3D Printers

Medium-sized laser selective melting metal 3D printer



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*Kings*

## ◆ Overview

Kings M280 series 3D metal printers ensure superior part quality with ultra-precision filtration system and fresh air protection system, offering dual protection to minimize defects and featuring moderate build size and high precision.

Ideal for small-batch, moldless production or customization, M280 series printers excel in mold manufacturing, industrial precision components, aerospace, automotive, medical applications, and scientific research.

## ◆ Advantage



### High precision & high quality:

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.



### Fully pop-up piston system:

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



### 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.

## ◆ Ideal Applications

- Mold making, industrial precision components, aerospace, automotive, medical applications, scientific research, etc.

## ◆ Technical Data

Build Size	250mm × 250mm × 320mm
External Dimensions	1650mm × 1100mm × 2150mm
Forming Materials	Stainless Steel, Titanium Alloy, Mold Steel, Aluminum Alloy, High-temperature Alloy, Tungsten, Tantalum, 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	0.02~0.1 mm
Protection System	Efficient Protective Gas Circulation System (Nitrogen, Argon)
Supporting Consumables	Stainless Steel Powder 316L, No Less Than 50kg, With Various Material Process Parameter Packages
Laser Type	IPG 500W×2 (1064nm)
Scanning System	SCANLAB*2 (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 (STL file)
Equipment Control Software	Independently Developed by Kings
Operating System	Windows 10
Data Format	STL/SLC/JOB
Power Supply	380V 50 Hz
Rated Power Consumption	12kW/14kW, Three-phase Electricity
Preheat Temperature	RT+20°C~80°C
Industrial Control Computer Configuration	Gen i7, 16GB RAM
Forming Efficiency	20~50cm <sup>3</sup> /h
Relative Humidity	Below 40%, Frost-free
Ambient Temperature	15-30 °C
Equipment Weight	1200kg

