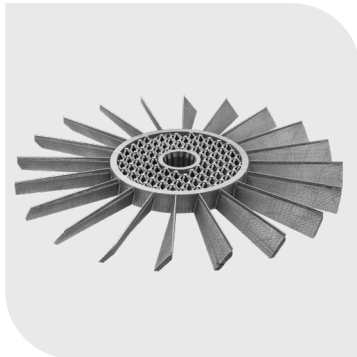


M500

Kings Industrial SLM 3D Printers

4-Laser 4-galvanometer Large Size Metal 3D Printing
Equipment on the Same Radial Surface



◆ Overview

Kings M500 presents an efficient solution specifically designed for large-scale metal 3D printing needs. By incorporating a quad-laser and quad-galvanometer system with a unified forming approach, this solution dramatically increases printing efficiency by over 200%. Kings M500 has a closed internal powder processing system, aimed at reducing dust and minimizing harm to the human body. This innovative solution finds diverse applications in moulds, automobiles, aerospace, nuclear power, military industries, orthopedic medicine, etc.

◆ Advantage

-  500mm*400mm*300mm large build volume, suitable for forming large parts across a wide range of applications.
-  7*24h unattended, highly stable operation with seamless switching between automatic and manual control, self-diagnosis, safety protection, and automatic fault alarms.
-  Quad-laser scanning on the same build area, increasing forming efficiency by more than two times.
-  Efficient operation of the internal circulation and fresh air system, with air-shower shielding for the field lens to ensure high-precision forming.

◆ Ideal Applications

- Industrial Molds, Automotive Parts, Aerospace, Nuclear Power and Military Industry

◆ Technical Data

Build Size	500mm × 400mm × 300mm (Net Build Size)
External Dimensions	2040mm × 1450mm × 2170mm
Forming Materials	Stainless Steel, Cobalt-Chromium Alloy, Titanium Alloy, Tool Steel, Aluminum Alloy, High-Temperature Alloy
Powder Supply Method	Top Powder Supply & Two-Way Powder Feeding
Printing Accuracy	±0.1(L≤100 mm); ±0.1%*L(L>100 mm)
Layer Thickness	0.02-0.2mm
Protection System	Efficient Protective Gas Circulation System (Nitrogen, Argon)
Supporting Consumables	316L Stainless Steel Powder, No Less Than 100kg (With Multiple Material Process Parameter Packages)
Laser Type	IPG 500W×4 (1064nm)
Scanning System	SCANLAB*4 with F-theta lens
Laser Speed	Scanning:1.0~4.0m/s (Recommended); Jumping:7-7m/s (Recommended) ; Up to 11m/s
Data Processing Software	Voxeldance Additive (STL file)
Equipment Control Software	Independently Developed by Kings
Operating System	Windows 10 and Above
Data Format	STL/SLC/JOB
Power Supply	380V 50 Hz
Rated Power Consumption	15kW, Three-phase Electricity
Heating Method	RT+20°C~80°C
Industrial Control Computer Configuration	10th Gen i7, 16GB RAM
Forming Efficiency	20-80 cm ³ /h
Relative Humidity	Below 40%, Frost-free
Ambient Temperature	15-30 °C
Equipment Weight	2000kg

