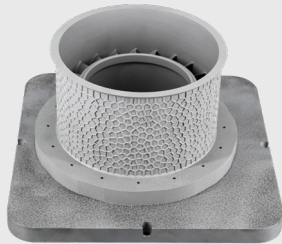


KINGS M450F

Kings Industrial SLM 3D Printers

Four-Laser System
Metal 3D Printing Equipment








KINGS M450F

Kings

◆ Overview

The M450F is a mid-sized industrial metal 3D printer with a 450 × 370 × 450 mm build volume. Designed for aerospace, defense, nuclear, automotive, and tooling sectors, it features a four-laser system for fast, precise production of large, complex parts. With closed-loop powder handling, intelligent recoating, and real-time monitoring, it ensures stable 24/7 operation and high-quality output.

◆ Features

-  **Four-Laser System**
High productivity and precision for complex components
-  **Intelligent Dual Recoating**
Single/dual blade dynamic bidirectional powder spreading
-  **Closed-Loop Powder Handling**
Continuous inert powder supply and recovery without downtime
-  **Real-Time Monitoring**
Tracks powder spreading, quality, and system status
-  **Permanent Filtration**
Long service life without filter replacement

◆ Advantages

- Large Build Volume – Produces oversized parts in one print
- Reduced Assembly Time – Cuts production time and costs
- Stable 24/7 Operation – Ensures continuous, reliable output
- Broad Material Support – Compatible with titanium, high-temp alloys, and stainless steel

◆ Technical Data

Build Size	450 × 370 × 450mm
External Dimensions	4000 × 1400 × 2550mm
Layer Thickness	0.02-0.1mm
Laser Type	Single-mode Continuous Fiber Laser
Scanning System	F-θ Static Lens Focusing (2-4 galvanometers)
Optical Components	Max 7m/s
Software	Self-Developed Amuda Control Software and BP Software System, with BP Optional from Materialise or VoxelDance
Data Format	STL Files or Other Convertible Formats
Feeding Method	Top-Feed Bidirectional Intelligent Dynamic Powder Recoating
Power Consumption	15kw
Supply Voltage	380VAC 3ph/N/PE
Ambient Temperature	Operating Temperature 15-30°C
Forming Materials	Titanium Alloys, Aluminum Alloys, High-Temperature Alloys, Cobalt-Chrome Alloys, Stainless Steel, High-Strength Steel, Mold Steel

