

Avimetal-MT100

Laser Powder Bed Fusion Equipment

Desktop Metal 3D Printer

Compact & Industrial-Precise

For Dental, R&D, Training


Compact Desktop Body

0.4m² footprint,
Approx.200kg,
table-mountable

Industrial-Grade Quality

Meets industrial
equipment standards
Desktop size, industrial core

Flexible Custom Printing

Φ 100×80mm build size
Customization/R&D/
small batches

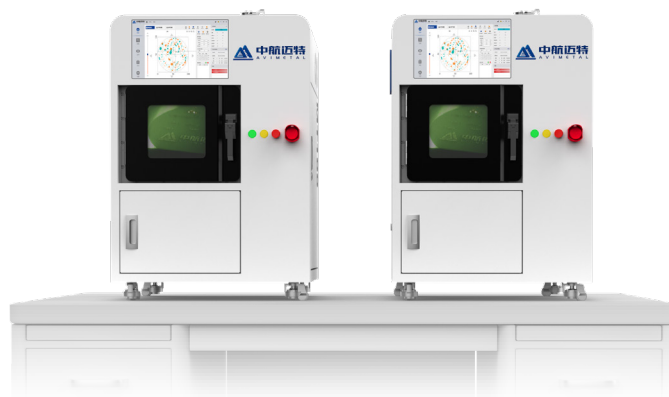
High-Efficiency & Quality Forming

300W laser system
15cm³/h forming rate

Multi-powder Material Compatibility

Preloaded extensive
print parameters
Customizable &
adjustable

Real-time Monitoring

Real-time recording,
output, self-diagnosis


Equipment Parameters

Build Material	Superalloy, Cobalt-Chromium Alloy, Stainless Steel, Die Steel, etc.		
Build Size ^①	φ 100×80mm (D×H)	Recoating Mechanism	Unidirectional Powder Spreading
Laser System	300W×1	Gas Support	Ar/N ₂
Scanning System	High-Precision Scanning Galanometer	Working Oxygen Content	≤100ppm
Focusing System	F-theta Field Lens	Build Efficiency ^②	15cm ³ /h
Beam Quality	M ² ≤1.1	Host Dimensions	675×675×900mm (L×W×H)
Beam Diameter	50±5μm	Power Supply	AC220V
Maximum Scanning Speed	7m/s	Power Consumption	≤3kW
Layer Thickness	30~40μm	Equipment Weight	Approx.200kg

^① Excluding the thickness of the build platform.

^② The building efficiency can vary due to differences in equipment configuration, process parameters, and the operating status of the laser.

* The above data are obtained under AVIMETAL operating conditions. The final equipment parameters are subject to the actually sold products.



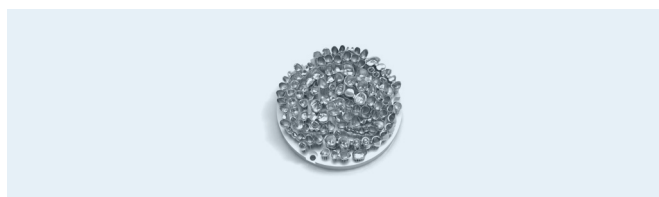
Application Areas

	Dental Crowns & Frameworks		Scientific Research		Research & Education
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Application Cases



Dental Framework
(MT-CoCrMo)



Dental Crown
(MT-CoCrMoW)

Parameter Smart Module

Standard Configuration: AVIMETAL-Pretreatment data preprocessing software, AVIMETAL-Control system (intelligent process diagnosis, real-time data tracking, real-time status monitoring), permanent dust removal.

Optional Configuration: 3D part reconstruction, powder spreading monitoring, automatic splicing, path planning, AVIMETAL-MES management system.

Consumables

Rubber scraper, metal build plate

Pre-Sales & After-Sales : Multi-location service support, 24x7 rapid response

 Customized Matching Specialized technical team supports deep customization	 Assembly & Debugging Standardized installation, rapid optical system calibration	 Personnel Training Comprehensive tiered training: operation, process handling, etc.
 Product Upgrades Equipment iteration services including supporting software	 Spare Parts Service Provides maintenance parts and consumables	 Operational Support On-site equipment inspection and maintenance by engineers

Materials

More than 200 alloy grade powder materials, including superalloys, titanium alloys, aluminum alloys, cobalt chromium alloys, stainless steels, die steels, high entropy alloys, refractory metals, and copper alloys, etc.

Process

Design Modeling → Structured Process → Forming Process → Process Control → Heat Treatment → Surface Treatment → Detection Analysis

