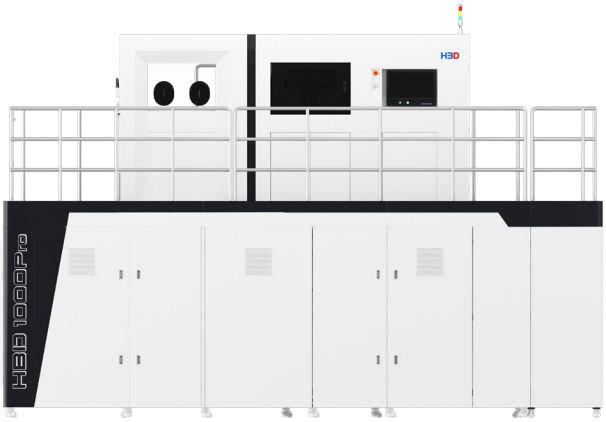
Expert on Metal 3D Printing

HBD 1000Pro

Metal Additive Manufacturing System

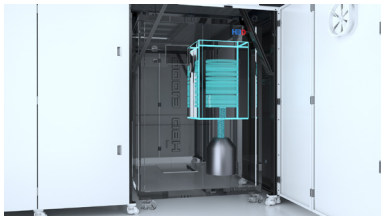
Build limitlessly, boost your productivity with HBD 1000Pro!



WHY HBD 1000Pro?

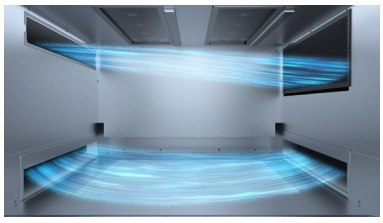
Enhanced Production Capacity

With a high production capacity and equipped with 8 lasers, this system has a forming size of 660mm*660mm*1250mm and a forming volume of more than 500L. It achieves large layer thickness printing between 20μm and 120μm, significantly boosting printing efficiency and productivity to a new level.



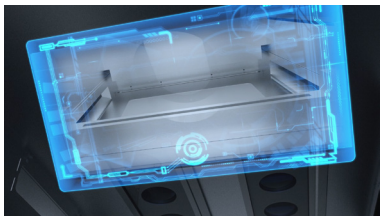
Cost-Effective & Efficient Operations

Our standard permanent filtration purification system minimizes filter replacement frequency, significantly reducing operating costs - perfect for long-term printing needs. The closed-loop intelligent powder handling system under inert gas protection enhances powder utilization rates and production safety.



Superior Quality Printing

Our advanced gas flow structure effectively eliminates smoke and splatter, ensuring uniform consistency in large-format printed parts. The high-quality beam (M2≤1.1) and seamless alignment guarantees forming accuracy and mechanical performance of printed parts.



Intelligent Management System

The built-in industrial-grade camera can monitor powder coating quality and intelligently handle various abnormal situations. The optional thermal imaging online monitoring module can detect temperatures in real-time at different positions of the printing slot, helping optimize printing process parameters. The HBD AMES intelligent management system integrates the HBD System equipment control system and HBD Build expert path planning software, offering parameter openness and customized services.

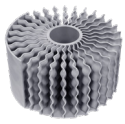
3D Print Cases

Thrust Chamber

Material : 316L
Size : 602×633×1000mm
Weight : 90.851kg
Industry : Aerospace
Time : 314h

3D printed aerospace thrust chambers provide intricate design capabilities, enhancing engine performance. They also reduce costs and production times by eliminating complex tooling, while integrated cooling channels improve heat management and durability. These advantages drive innovation and cost-efficiency in aerospace propulsion.

Aero-engine Impeller



Helix-Radiator

Heat Exchanger

Aero-Engine

Technical Parameters

Forming Size	660mm X 660mm X 1250mm(height incl.build plate)
Laser Power	500W X 8
Layer Thickness	20μm-120μm
Scanning Track Width	70μm-200μm
Scanning Speed	≤ 10m/s
Oxygen Content	≤ 100ppm
Protective Atmosphere	Integral sealed, automatic monitoring of oxygen content, recycling cleaning and collection coefficient ≥ 99%
Relative Density	99.9%+
Typical Accuracy	0.05-0.2mm
Metal Powder	Stainless steel, cobalt-chrome alloy, Hastelloy, Titanium alloy, Nickel-based alloy, Tool Steel, Aluminum alloy, and some refractory metals like Tungsten and Tantalum, etc.
Software Package	Full open as hardware allowed
Processing Parameter Package	Equipped and customizable
Weight	16000KG
External Dimensions	7050mm × 3630mm X 4480mm
Power Supply	AC380V, 50/60Hz, peak power ≤16kW, average power ≤8kW

About Us

Global Leader

Recognized globally for developing and manufacturing metal additive manufacturing equipment, with over 200 patents and prestigious certifications.

Innovation and Quality

Continuous improvement and technological advancements to keep customers ahead.

Tailored to Industries

Customized metal additive manufacturing solutions for aerospace, automotive and more.

Cutting-edge Solutions

Acclaimed metal 3D printing machines installed in 30+ countries, offering advanced capabilities.

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