

HBD 600

Metal Additive Manufacturing System

Build limitlessly, boost your productivity
with HBD 600!

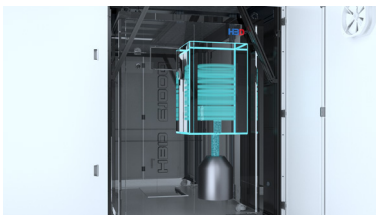


► WHY HBD 600?



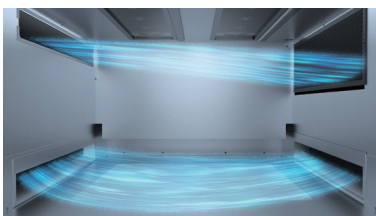
Enhanced Production Capacity

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.



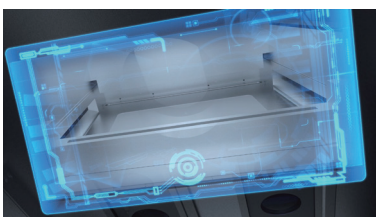
Cost-Effective & Efficient Operations

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 ($M2 \leq 1.1$) 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



Mixed Flow Impeller

Material : Aluminum Alloy

Size : 600×600×710mm

Weight : 32kg

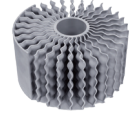
Industry : Aerospace

Time : 132h

The large sealed impeller structure is composed of 15 complex thin-walled curved blades, which can be printed in an integrated unit by metal 3D printing to shorten the manufacturing cycle, reduce the production process, and ensure the accuracy and consistency.



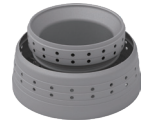
Aero-engine
Impeller



Helix-Radiator



Heat Exchanger



Aero-Engine

► Technical Parameters

Build Volume	660mm × 660mm × 1250mm(height incl. build plate)
Laser Power	8 Lasers, 500W/1000W
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%
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.
Relative Density	99.9%+
Process Parameter Configuration	Tailored parameter set for the specific application, user-modifiable
Weight	Est. 16000kg
External Dimensions	7050mm × 3630mm × 4480mm
Power Supply	500W: AC380V, 50/60Hz, peak power ≤35kW, average power ≤25kW 1000W: AC380V, 50/60Hz, peak power ≤40kW, average power ≤30kW

► About Us



Global Recognition

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 37 countries, offering advanced capabilities.

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