

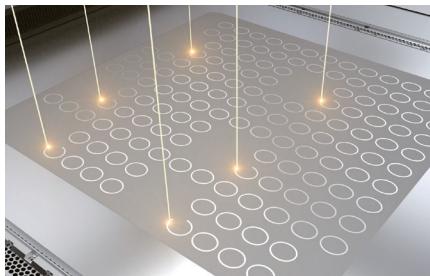
HBD 400

Metal Additive Manufacturing System

The most sustainable approach for serial production!

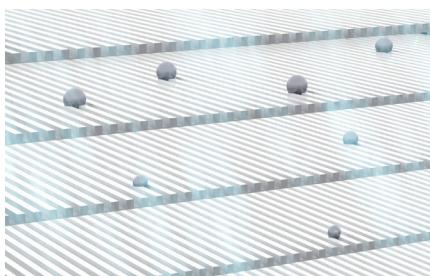


► WHY HBD 400?



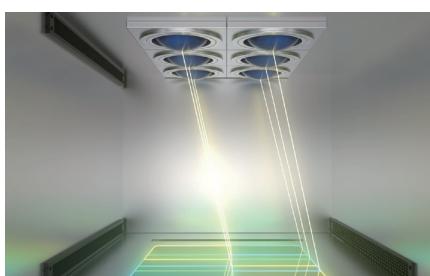
High Productivity Configuration

Six precise 500W/1000W fibre lasers operate, intelligent variable speed design and bidirectional re-coater completing the process in 3 seconds, coupled with a large building volume of 350mm×400mm×400mm, this results in an efficient solution for scaled production.



Long-lasting Filtration System

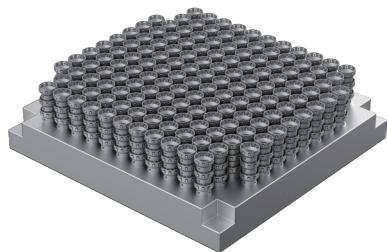
The filtration system utilizes next-generation PTFE-coated filter elements, meeting HI3 standards with a capture efficiency of up to 99.9%, capable of trapping particles as small as 0.3µm. The filter includes self-cleaning features, providing a filter element lifetime of over 5 years. Optimized gas-flow configuration enables secure and efficient waste reclamation in inert gas environments, ensuring optimal printing conditions.



Precision Laser Calibration System

Seamless multi-beam laser stitching, the HBD 400 automatic laser calibration system enables an automatic scanning strategy tailored to the process conditions, with a calibration accuracy up to 0.05 mm, enhancing process stability and part quality.

► 3D Print Cases



Charger Plug Terminal

Industry: 3C Electronics

Material: 316L

Size: 24x23x15mm

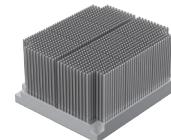
Weight: 4.8g

Quantity: 444

Time: 23h 54min



Coffee Cup Lid Mould



Hinged Cover



Shoe Mold

The production of charger plug terminal utilizing HBD 400 metal AM system achieves integrated forming of multiple stacked parts with 6 synchronized lasers. The output reaches 19.2 pieces per hour, which is three times more efficient than dual-laser systems. Rapid prototyping speeds up the development cycle without additional tooling costs, making small batch production more cost-effective.

► Technical Parameters

Build Volume	350mm x 400mm x 400mm (height incl. build plate)		
Laser Power	4 Lasers, 500W/1000W	6 Lasers, 500W/1000W	8 Lasers, 1000W
Layer Thickness	20μm-120μm		
Spot Diameter	70μm-80μm, 140μm-160μm (Optional: Guangchil II)		
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	Titanium alloys, Aluminum alloys, Superalloys, Stainless steel, Mould steel, etc.		
Process Parameter Configuration	Tailored parameter set for the specific application, user-modifiable		
Weight	Est. 3300kg		
External Dimensions	1900mm x 1650mm x 2300mm		
Power Supply	500W: AC380V, 50/60Hz, peak power ≤ 14-16kW, average power ≤ 5.5-8.5kW 1000W: AC380V, 50/60Hz, peak power ≤ 15-19kW, average power ≤ 6.5-11.5kW		

► 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 consumer electronics, mold and die, automotive and more.



Cutting-edge Solutions

Acclaimed metal 3D printing machines installed in 37 countries, offering advanced capabilities.