

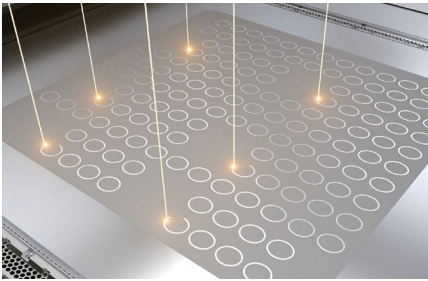
# HBD 400

## Metal Additive Manufacturing System

The most sustainable approach for serial production!

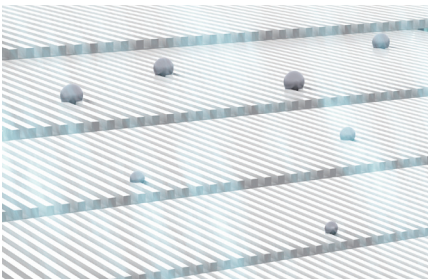


### ► WHY HBD 400?



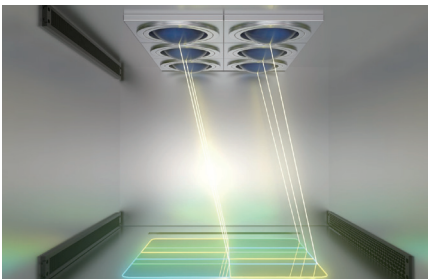
#### High Productivity Configuration

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

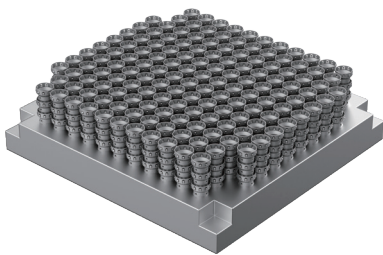
The filtration system utilizes next-generation PTFE-coated filter elements, meeting H13 standards with a capture efficiency of up to 99.9%, capable of trapping particles as small as 0.3µm. The filter includes self-cleaning features, providing a filter element lifetime of over 5 years. Optimized gas-flow 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

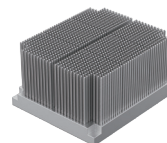


### Charger Plug Terminal

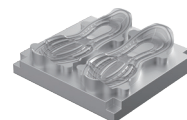
Industry : 3C Electronics  
 Material : 316L  
 Size : 24×23×15mm  
 Weight : 4.8g  
 Quantity : 444  
 Time : 23h 54min



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 × 400mm × 400mm (height incl. build plate)	
Laser Power	4 Lasers, 500W/1000W	6 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%	
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 × 1650mm × 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 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 consumer electronics, mold and die, automotive and more.



### Cutting-edge Solutions

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

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