

## Metal Additive Manufacturing System

# BLT-S1000



ISO9001:2015 / ISO14001:2015 / ISO45001:2018

### Constantly Innovating in Metal AM

Selecting Great Component

Stably Full-substrate Printing

Multi-lasers to Build More Efficient

Large-size and High-quality Production

More Valuable after Multiple Tests



**Large Build Dimension**  
Precision forming of meter-sized parts



**Multi-beam Lasers Splicing**  
The building quality of each area is consistent



**Hard Scraper**  
Fixed layer thickness  
Adhere to the quality



**Long-life Filtration System**  
Automatic blowback cleaning  
Long filter life



**Self-adapting Powder Spreading Correction**  
Deep learning technology makes printing smarter



**3D Reconstruction**  
Building visualization is easy for quality traceability



**Automatic Circulation of Powder**  
Powder closed-circulation processing system  
Automatic recycling sieving and supply

Supporting Materials	Titanium Alloy, Aluminum Alloy, Superalloy, Stainless Steel, High-strength Steel
Build Dimension <sup>(1)</sup>	1200mmx600mmx1500mm (W × D × H)
Wave Length	1060nm-1080nm
Laser Power	500WX8; 500WX10; 500WX12
Beam Quality	M <sup>2</sup> <1.1
Optics System	F-theta Lens
Maximum Scanning Speed	7m/s
Layer Thickness	20μm~100μm
Building Speed <sup>(2)</sup>	200cm <sup>3</sup> /h; 250cm <sup>3</sup> /h; 300cm <sup>3</sup> /h
Preheating Temperature	RT+20°C~100°C
Recoating	Single/Double-direction
Minimum Oxygen Content	≤100ppm
Gas Requirement	Ar
Power Requirement	≤30kW; ≤33kW; ≤35kW
Supply Voltage	AC380V 3Ph/N/PE
Dimension of the System <sup>(3)</sup>	10200mm×6800mm×5190mm (W × D × H)
Weight of the System	Approx. 34000kg
Software	Magics, BLT-BP, BLT-MCS



\*The figure of the machine is only for illustration, and the product is subject to actual sales.

 **LinkedIn**  
Bright Laser Technologies-BLT

 **YouTube**  
Bright Laser Technologies

 **TikTok**  
@brightlaser.technologies

Citations: (1)Excluding substrate thickness. (2)Dependent on part geometry, material and parameter set used.

(3)The height does not include the height of the maintenance guardrail. The dimension is only theoretical, the actual data is affected by the configuration, subject to the installation.

\*The data is under the condition of BLT, and the data is subject to actual sales.

## ➤ BLT-S1000 APPLICATION CASES



### Array Panel

Material: Aluminum Alloy

Dimension: 1125mm×1300mm×20mm (W × D × H)

Weight: 3.5kg

Build Time: 50h

This part is an antenna array panel structure in the satellite application, which adopts a lattice structure for lightweight design, which can achieve a better high-rigidity and light-weight effect than the traditional honeycomb panel structure.

## ➤ BLT-S1000 INTELLIGENT MODULES

### Standard Functions

Diagnosis Fault-grading/Process Data Traceability/Height Self-checking on Parts/  
Recoating Detection/3D Reconstruction

### Optional Functions

BLT-MCS Connect/BLT-MES System

## ➤ BLT-S1000 AUTOMATION SOLUTIONS



Powder Sieving Machine  
BLT-SF400



Powder Collection Machine  
BLT-WL400



Powder Adding Machine  
BLT-GF500



Powder Circulation System  
BLT-XH500

## ➤ BLT-S1000 CONSUMABLES AND POWDERS

### Consumable

Scraper/Substrate

### Powder

Titanium Alloy/Aluminum Alloy/Superalloy/Stainless Steel/High-strength Steel/Tool Steel