

## Metal Additive Manufacturing System

# BLT-S800



ISO9001:2015 / ISO14001:2015 / ISO45001:2018

### The Pillar of, "BRIGHT", Dancing with the Lasers

Selecting Great Component

Stable Full-substrate Printing

Multi-lasers to Build More Efficient

Large-size and High-quality Production

More Valuable after Multiple Tests



**Batch Application Verification**  
Maturity and stability of system operation



**Large Build Dimension**  
Precision forming of parts within 800mm



**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



**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, Tool Steel
Build Dimension <sup>(1)</sup>	800mm×800mm×600mm(W × D × H)
Wave Length	1060nm-1080nm
Laser Power	500W×6; 500W×8; 500W×10
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>	150cm <sup>3</sup> /h; 200cm <sup>3</sup> /h; 250cm <sup>3</sup> /h
Preheating Temperature	RT +20°C~100°C
Recoating	Single/Double-direction
Minimum Oxygen Content	≤100ppm
Gas Requirement	Ar
Power Requirement	≤22kW; ≤25kW; ≤28kW
Supply Voltage	AC380V 3Ph/N/PE
Dimension of the System <sup>(3)</sup>	5700mm×5600mm×4400mm(W × D × H) Height of Tri-color Indicator: Approx.410mm
Weight of the System	Approx. 25200kg
Software	Magics; BLT-BP; BLT-MCS



**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 dimension does not include the height of tri-color indicator and the height is remarked separately. The dimension is only theoretical, the actual data is affected by the configuration, subject to the installation.

## ➤ BLT-S800 APPLICATIONS



### Engine Integration Component

Material: Superalloy

Size:  $\Phi 800\text{mm} \times 400\text{mm}$

Weight: 27kg

Build Time: 175h

Taking aero engines as the basic configuration carrier, the product combines the advantages of additive manufacturing with high flexibility design and the principle of additive manufacturing process adaptability. Through integrated design, it integrates typical complex features such as light-weight, spatial multi-scale structures, special-shaped curved surfaces, flow channel, etc. This product finally realizes the overall preparation of large-size components and partial flexible mobility features.

## ➤ BLT-S800 INTELLIGENT MODULES

### Standard Functions

Diagnosis Fault-grading/Process Data Traceability/Height Self-checking on Parts/  
Powder Spreading Quality Control/3D Reconstruction

### Optional Functions

BLT-MCS Connect/BLT-MES System

## ➤ BLT-S800 AUTOMATION SOLUTIONS



Powder Sieving Machine  
BLT-SF400



Powder Collection Machine  
BLT-WL400



Powder Adding Machine  
BLT-GF500

## ➤ BLT-S800 CONSUMABLES AND POWDERS

### Consumable

Scraper/Substrate

### Powder

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