

www.bulltech3d.com



Laser makes manufacturing easier

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BULLTECH
Laser makes manufacturing easier

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Bulltech™ is National High-tech Enterprise of China. Bulltech™ owns over 30 certified patents, committed to R&D, production and sales of laser application equipment, with the leading core optical and control technology, Bulltech provides Industrial Laser Additive Manufacturing Solutions to global customers for nearly 20 years, sales and service network cover over 20 countries and regions.

Bulltech™ provides Additive Manufacturing solutions includes equipment, consumables, technical services, etc. to customers in multiple industries: Aviation, Energy, Medical, Industrial Moulds, Automobile Manufacturing, Metal Processing, Advertising and other relative industries.

With CE, ISO, FDA certified, Bulltech will continue helping our clients reducing costs, improving efficiency and creating value by focusing on technology and quality control.

Our Mission:

Laser makes manufacturing easier

Our Vision:

Leading market with Core Optical Technology and Control Technology

WIN-WIN COOPERATION GLOBAL SERVICE



For many years, Bulltech™ has won the favor of customers domestic and abroad with its exquisite technology, win-win cooperation and product quality and service. Our products have been sold to many countries and regions, such as North America, South Asia, South America and Europe.

CORPORATE CULTURE

01 Be enterprising

05 Strictly prohibit

02 Breach

06 Team

03 Sincerity

07 Absorbed

04 Innovate

08 Details

Our Promise

Local Expertise: We insist to provide local engineer services, speak local language and understand the client's need clearly.

Affordable Product: We provide the products and services of the highest quality at affordable prices, which providing our clients high competitiveness in their business.

User-friendly: We provide the most user friendly systems and solutions. Easy operation, easy maintenance, flexible accessories that guarantee our customers high productivity and availability at low operating costs.

Good performance: We use the best components in this industry and combined with the highest quality control standard and after-services system to ensure the good and stable performance of our machines.

Trusted partner: Our customers and dealers can count on us because we offer them safety, continuity, and transparency.

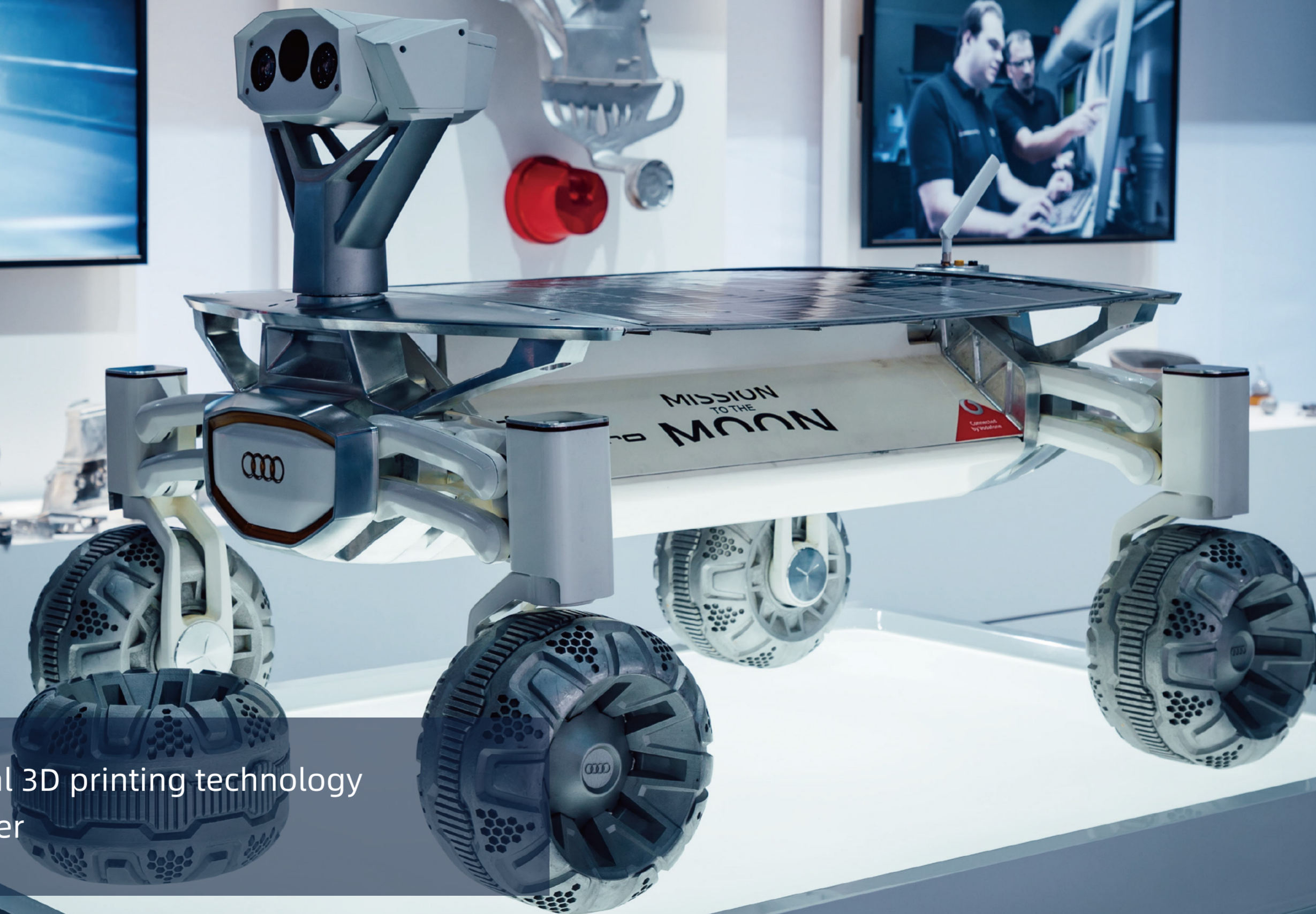
Finance support: We provide financial support to our financial approved clients or dealers to help them generate a healthy cash flow with Zero interest.



Mission to the Moon



Metal 3D Printing



Audi is using the metal 3D printing technology building the lunar rover

Bulltech SLM 3D Printer Family



Bulltech uses SLM technology to provide customers with various sizes of metal 3D printing equipment. Bulltech's metal printing equipment can be equipped with dual galvanometer systems, four galvanometer systems and even more to improve printing efficiency. In addition, the Bulltech M300-Multiple 3D printer has a variety of material printing technology, allowing customers to perform mixed printing of 2-4 metal materials.

Bulltech SLM 3D printer



Product Display:



Technical Parameter:

LASER SYSTEM	Type: IPG Fiber laser Wave length: 1064nm Power: 200W-1000W
RECOATING SYSTEM	Process: Dual direction scraper coating Normal Build: 0.05mm Quick Build: 0.05~0.15mm Precision Build: 0.02~0.05mm
OPTICAL & SCANNING	Beam (diameter@1/e2): 0.06-0.20mm Scanning Galvanometer: ScanLab
POWDER VAT	Volume: Approx. 2L-160L Size: 100mm(X)*100mm(Y)*120mm(Z) -500mm(X)*420mm(Y)*800mm(Z) Maximum part weight : 10kg-300kg

MATERIALS:

Stainless Steel / Die Steel / Titanium Alloy / Aluminum Alloy / Co-Cr Alloy / Nickel Alloy / Cuprum etc.

Key Features:

Parts with high quality surface before polishing
Parts in high accuracy, for precision samples
Directly produce functional metal parts, simplify the manufacture process
Parts have metallurgy and mechanical properties, density over 99%.

Building Samples:



Bulltech SLA 3D printer



Product Display:



Technical Parameter:

LASER SYSTEM	Aptowave Laser USA
RECOATING SYSTEM	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm
OPTICAL & SCANNING	Beam (diameter@1/e2): 0.10~0.50mm Scanning Galvanometer: ScanLab Reference Building Speed: 30~80g/h-150~500g/h
ELEVATOR	Position repeatability: ± 0.01 mm
RESIN VAT	Volume: Approx. 42L-1825L XY Platform: 300mm(X) \times 300mm(Y)- 1900mm(X) \times 1000mm(Y) Z Axis: 200mm-600mm Max Weight: 30kg-150kg

Key Features:

- Dynamic focus super-fast scanning style
- Large surface intelligent partitioning scanning
- Granite integrated Z axis lifting platform
- Intelligent positioning and vacuum adsorption recoater
- Damaged parts removal system

Building Samples:



Metal Powder Materials

Stainless Steel	316L	420	15-5PH	17-4PH
Density (g/cm ³)	≥ 7.90	≥ 7.70	≥ 7.76	≥ 7.70
Mechanical Properties (As built)				
Tensile Strength (MPa) ISO6892-1	637±50	≥1100	1200±100	1050±100
Yield Strength (MPa) ISO6892-1	550±50	900±100	725±100	900±100
Elongation after Fracture (%) ISO6892-1	34±5	≥ 2	16±4	16±4
Hardness HV ISO6507-1 / HRC ISO6508-1	215±10 HV5/15	48±3HRC	32-37HRC	/
Mechanical Properties (Heat treated)				
Tensile Strength (MPa) ISO6892-1	600±50	1000±100	1450±100	/
Yield Strength (MPa) ISO6892-1	/	/	1130±100	/
Elongation after Fracture (%) ISO6892-1	45±5	17±5	14±3	/
Hardness HV ISO6507-1 / HRC ISO6508-1	190±10 HV5/15	32±4HRC	≥ 40HRC	/

Inconel	IN625	IN718	GH3536
Density (g/cm ³)	≥ 8.40	≥8.18	≥ 8.30
Mechanical Properties (As built)			
Tensile Strength (MPa) ISO6892-1	1000±70	1100±70	820±70
Yield Strength (MPa) ISO6892-1	730±70	800±70	650±70
Elongation after Fracture (%) ISO6892-1	35±5	24±4	30±5
Hardness HV ISO6507-1 / HRC ISO6508-1	270±10 HV5/15	300±20 HV5/15	270±5 HV5/15
Mechanical Properties (Heat treated)			
Tensile Strength (MPa) ISO6892-1	1050±70	1350±100	725±70
Yield Strength (MPa) ISO6892-1	700±70	/	330±70 MPa
Elongation after Fracture (%) ISO6892-1	35±5	16±4	43±5
Hardness HV ISO6507-1 / HRC ISO6508-1	/	/	/

Titanium	Ti6Al4V	TA15
Density (g/cm ³)	≥ 4.40	≥ 4.45
Mechanical Properties (As built)		
Tensile Strength (MPa) ISO6892-1	1150±70	1160±50
Yield Strength (MPa) ISO6892-1	1000±50	/
Elongation after Fracture (%) ISO6892-1	8±2	8±2
Hardness HV ISO6507-1 / HRC ISO6508-1	360±30 HV5/15	/
Mechanical Properties (Heat treated)		
Tensile Strength (MPa) ISO6892-1	1050±70	1100±20
Yield Strength (MPa) ISO6892-1	950±50	1040±20
Elongation after Fracture (%) ISO6892-1	12±2	13±5
Hardness HV ISO6507-1 / HRC ISO6508-1	330±30 HV5/15	/

Aluminum	AlSi10Mg
Density (g/cm ³)	≥ 2.65
Mechanical Properties (As built)	
Tensile Strength (MPa) ISO6892-1	430±30
Yield Strength (MPa) ISO6892-1	270±30
Elongation after Fracture (%) ISO6892-1	3±1
Hardness HV ISO6507-1 / HRC ISO6508-1	140±20 HV5/15
Mechanical Properties (Heat treated)	
Tensile Strength (MPa) ISO6892-1	350±50
Yield Strength (MPa) ISO6892-1	240±30
Elongation after Fracture (%) ISO6892-1	6±1
Hardness HV ISO6507-1 / HRC ISO6508-1	75±20 HV5/15

Metal Powder Materials

Cobalt Chrome	CoCrMo	CoCrMoW
Density (g/cm ³)	≥8.35	≥ 8.55
Mechanical Properties (As built)		
Tensile Strength (MPa) ISO6892-1	1150±100	1100±100
Yield Strength (MPa) ISO6892-1	900±100	900±100
Elongation after Fracture (%) ISO6892-1	10±2	10±2
Hardness HV ISO6507-1 / HRC ISO6508-1	/	/
Mechanical Properties (Heat treated)		
Tensile Strength (MPa) ISO6892-1	1050±100	1100±100
Yield Strength (MPa) ISO6892-1	/	/
Elongation after Fracture (%) ISO6892-1	15±2	9±2
Hardness HV ISO6507-1 / HRC ISO6508-1	/	/

Maraging Steel	18Ni300
Density (g/cm ³)	≥ 8.00
Mechanical Properties (As built)	
Tensile Strength (MPa) ISO6892-1	1150±100
Yield Strength (MPa) ISO6892-1	1050±100
Elongation after Fracture (%) ISO6892-1	12±3
Hardness HV ISO6507-1 / HRC ISO6508-1	35±3 HRC
Mechanical Properties (Heat treated)	
Tensile Strength (MPa) ISO6892-1	1950±100
Yield Strength (MPa) ISO6892-1	1900±100
Elongation after Fracture (%) ISO6892-1	4±2
Hardness HV ISO6507-1 / HRC ISO6508-1	53±3 HRC

Bronze	CuSn10
Density (g/cm ³)	≥ 8.78
Mechanical Properties (As built)	
Tensile Strength (MPa) ISO6892-1	500±50
Yield Strength (MPa) ISO6892-1	380±40
Elongation after Fracture (%) ISO6892-1	30±10
Hardness HV ISO6507-1 / HRC ISO6508-1	130±15 HV5/15
Mechanical Properties (Heat treated)	
Tensile Strength (MPa) ISO6892-1	/
Yield Strength (MPa) ISO6892-1	/
Elongation after Fracture (%) ISO6892-1	/
Hardness HV ISO6507-1 / HRC ISO6508-1	/



Disclaimer:

Many factors may affect the performance characteristics of products. We recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. Bulltech makes no warranties of any type, express or implied, including but not limited to, the warranties of merchantability or fitness for a particular use. This also applies regarding the consideration of possible intellectual property rights as well as laws and regulations. Bulltech reserves the right to change the technical data without notice.

Resin Materials

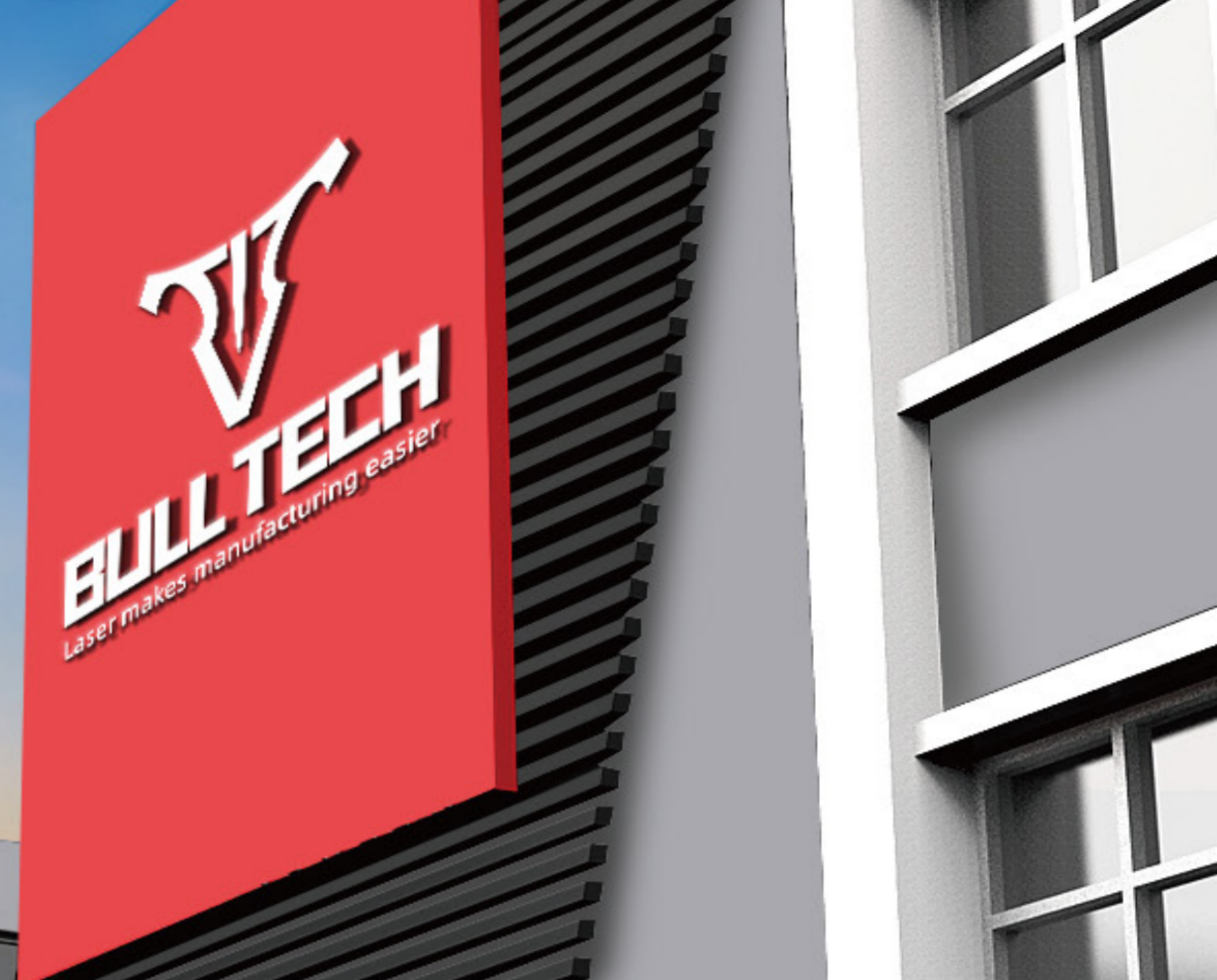
	Color: Accurate & White	680
PHYSICAL CHARACTERISTICS (LIQUID STATE)	Appearance	White liquid
	Density	1.10 g/cm ³ @25°C
	Viscosity	450 CPS@25°C
	Dp	≥0.16 mm
	Ec	8.5 mJ/cm ²
MOLDING PERFORMANCE A MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure	Bending Modulus	1500~1700 MPa
	Bending Strength	55~60 MPa
	Notched Impact Strength	60~68 J/m
	1.2mm Bend Angle	140~170°
	Bending Modulus	2688~2790 MPa
MOLDING PERFORMANCE B MOLDING PERFORMANCE @90min UV post-cure	Bending Strength	66~73 MPa
	Notched Impact Strength	60~68 J/m
	Hardness	88
	Elongation at break	10~15%
	HDT Heat deflection temperature	52 °C
	Tg Glass transition temperature	62 °C
	CTE Coefficient of thermal expansion	93*E-6

	Color: Tough & White	710
PHYSICAL CHARACTERISTICS (LIQUID STATE)	Appearance	White liquid
	Density	1.10 g/cm ³ @25°C
	Viscosity	400 CPS@25°C
	Dp	≥0.16 mm
	Ec	7.9 mJ/cm ²
MOLDING PERFORMANCE A MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure	Bending Modulus	2000~2300 MPa
	Bending Strength	75~85 MPa
	Notched Impact Strength	35~45 J/m
	1.2mm Bend Angle	≥170~180°
	Bending Modulus	2813~3520 MPa
MOLDING PERFORMANCE B MOLDING PERFORMANCE @90min UV post-cure	Bending Strength	83~90 MPa
	Notched Impact Strength	42~50 J/m
	Hardness	87~92
	Elongation at break	13~20%
	HDT Heat deflection temperature	52 °C
	Tg Glass transition temperature	62 °C
	CTE Coefficient of thermal expansion	93*E-6

Resin Materials

	Color: High Transparency	820
PHYSICAL CHARACTERISTICS (LIQUID STATE)	Appearance	Transparent liquid Pale Purple
	Density	1.10 g/cm ³ @25°C
	Viscosity	190 CPS@25°C
	Dp	≥0.18 mm
	Ec	6.9 mJ/cm ²
MOLDING PERFORMANCE A MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure	Bending Modulus	1500~1700 MPa
	Bending Strength	45~55 MPa
	Notched Impact Strength	25~35 J/m
	1.2mm Bend Angle	140~170°
	Bending Modulus	1890~2340 MPa
MOLDING PERFORMANCE B MOLDING PERFORMANCE @90min UV post-cure	Bending Strength	55~62 MPa
	Notched Impact Strength	40~55 J/m
	Hardness	79
	Elongation at break	10~15%
	HDT Heat deflection temperature	52 °C
	Tg Glass transition temperature	62 °C
	CTE Coefficient of thermal expansion	93*E-6

	Color: Bright yellow	Real ABS
PHYSICAL CHARACTERISTICS (LIQUID STATE)	Appearance	Bright yellow liquid
	Density	1.10 g/cm ³ @25°C
	Viscosity	400 CPS@25°C
	Dp	≥0.16 mm
	Ec	7.9 mJ/cm ²
MOLDING PERFORMANCE A MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure	Bending Modulus	2000~2300 MPa
	Bending Strength	75~85 MPa
	Notched Impact Strength	35~45 J/m
	1.2mm Bend Angle	≥170~180°
	Bending Modulus	2813~3520 MPa
MOLDING PERFORMANCE B MOLDING PERFORMANCE @90min UV post-cure	Bending Strength	83~90 MPa
	Notched Impact Strength	42~50 J/m
	Hardness	87~92
	Elongation at break	13~20%
	HDT Heat deflection temperature	52 °C
	Tg Glass transition temperature	62 °C
	CTE Coefficient of thermal expansion	93*E-6



Resin Materials

	Color: Pink	Redwood
PHYSICAL CHARACTERISTICS (LIQUID STATE)	Appearance	Epoxy Tooling Board Like (Pink) liquid
	Density	1.10 g/cm ³ @25°C
	Viscosity	400 CPS@25°C
	Dp	≥0.16 mm
	Ec	7.9 mj/cm ²
MOLDING PERFORMANCE A MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure	Bending Modulus	2000~2300 MPa
	Bending Strength	75~85 MPa
	Notched Impact Strength	35~45 J/m
	1.2mm Bend Angle	≥170~180°
MOLDING PERFORMANCE B MOLDING PERFORMANCE @90min UV post-cure	Bending Modulus	2813~3520 MPa
	Bending Strength	83~90 MPa
	Notched Impact Strength	42~50 J/m
	Hardness	87~92
	Elongation at break	13~20%
	HDT Heat deflection temperature	52 °C
	Tg Glass transition temperature	62 °C
CTE Coefficient of thermal expansion	93*E-6	



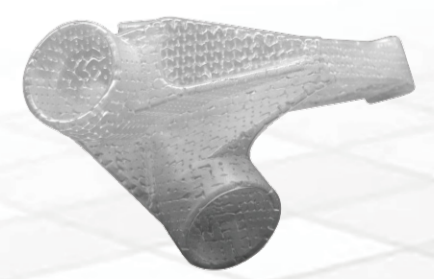
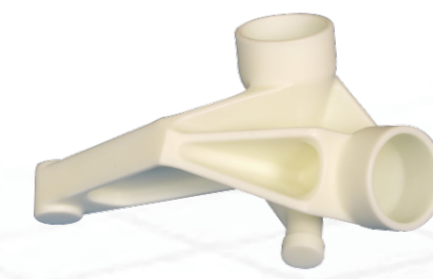
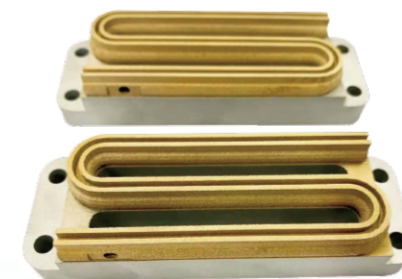
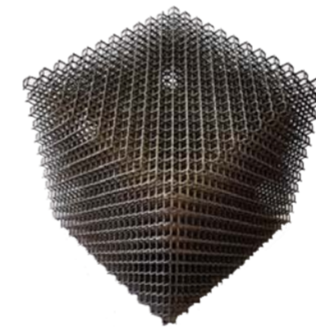
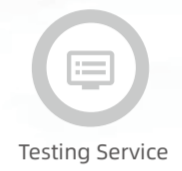
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Bulltech Providing the 3D printing with SLM and SLA technologies

Bulltech is targeting to provide the one-stop and comprehensive 3D solutions, helping users to achieve optimal design, reducing production costs, improving production efficiency, improving product quality and creating value.

One-Stop 3D Printing Service



Marble Countertop

Stable under various temp. and environment

Stability ensures precision





Cyclone separation

Efficiently control system, three stages filter system
Clean Safe Healthy

Multiple galvanometers

Multiple areas

Efficient, time saving

excelliSCAN 14

Intelligent partitioning scanning

Reduce tension

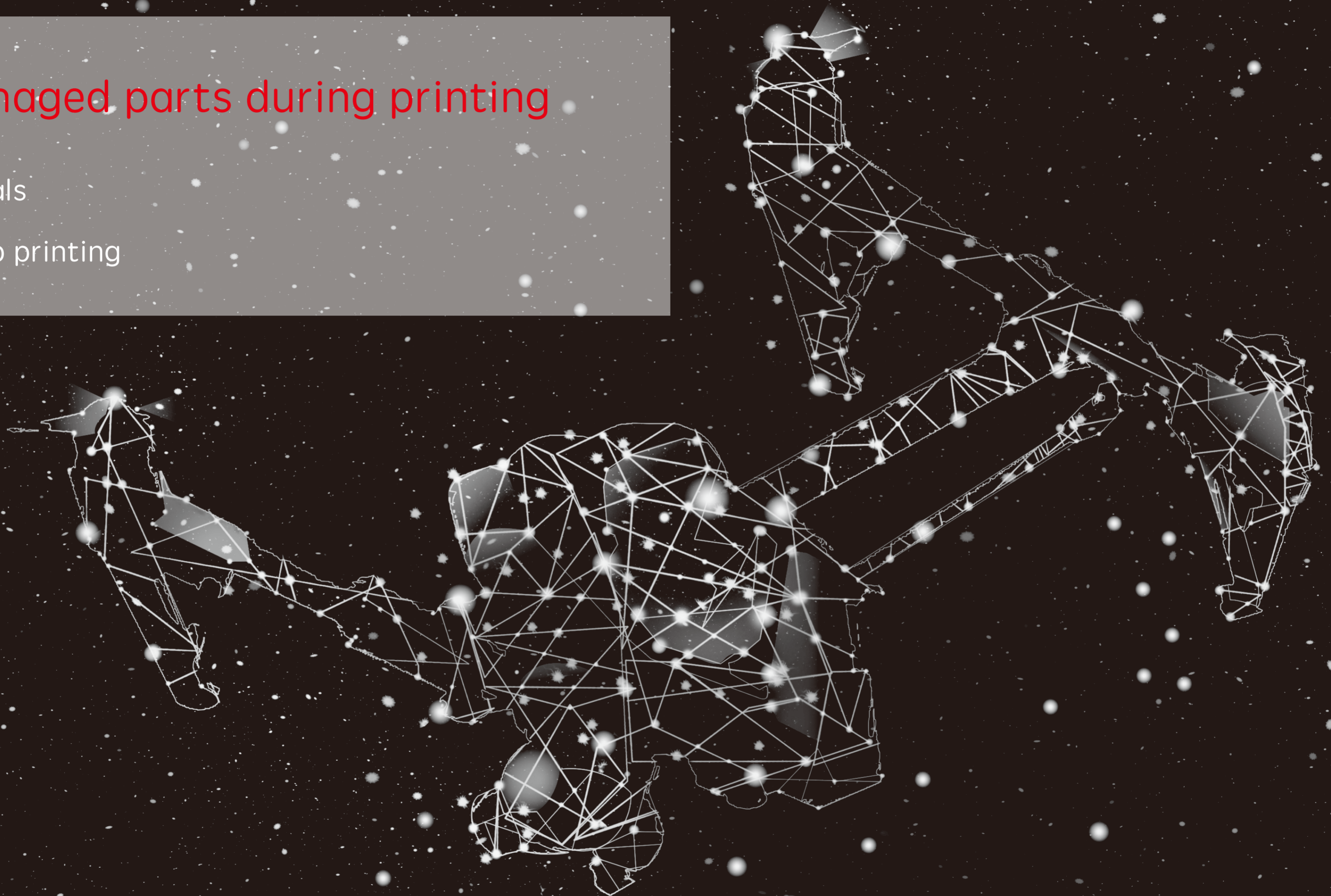
Prevent deforming

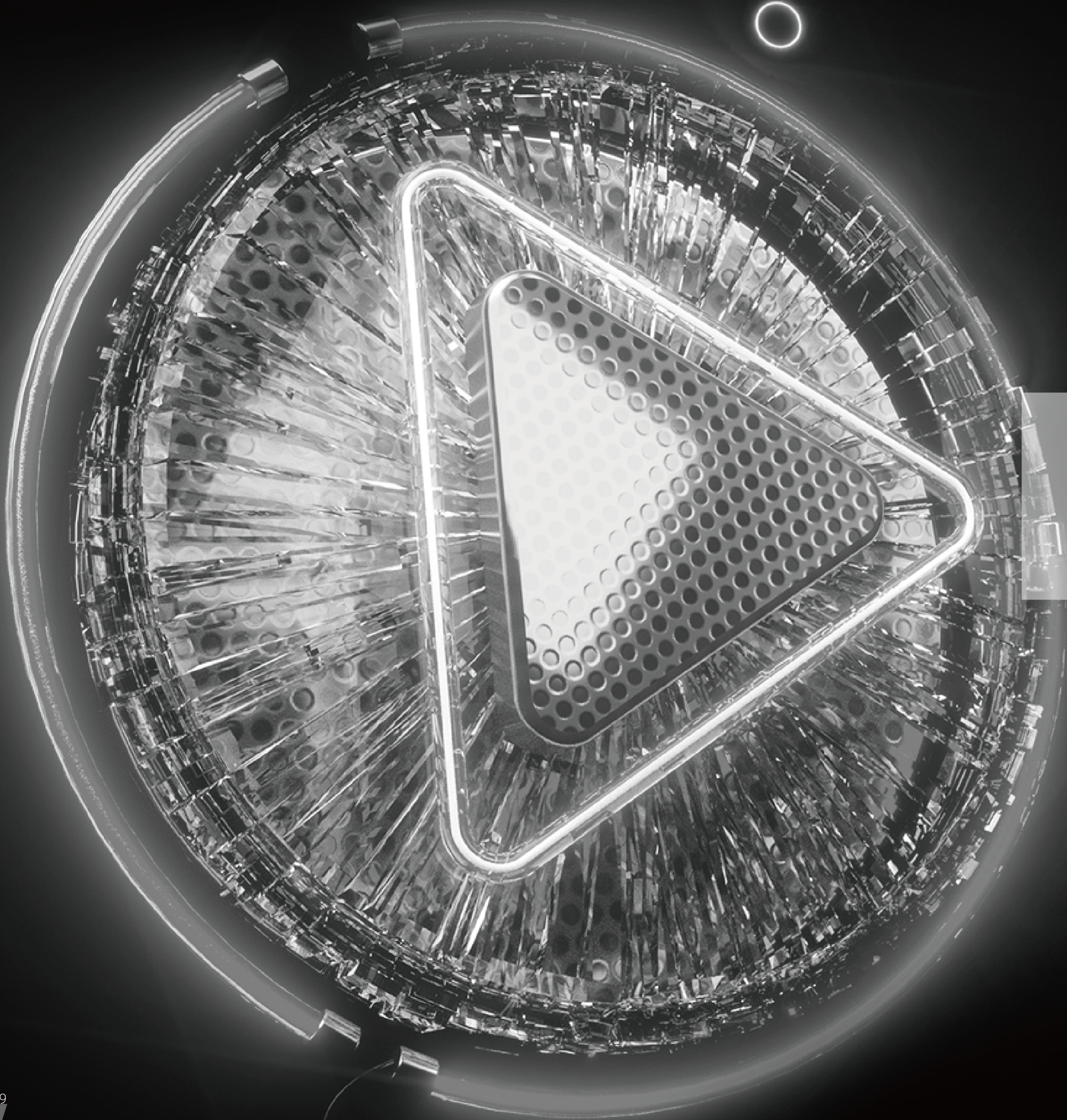


Skip damaged parts during printing

Save materials

Without stop printing





One press working
Automatic monitoring



Following Printing

Laser follows the recoator makes the building speed **30%** faster Super dynamic zoom technology reduces manufacturing time again by **72%** (SLA).

Printing process package pre-loaded

Saving time

Easy operation

** Suitable for common used material and process

Remote APP Intelligent monitoring

Remote service support

Remote trouble shooting



Smart calculation

Saving 30% material

Life time free system upgradation

Open system setting

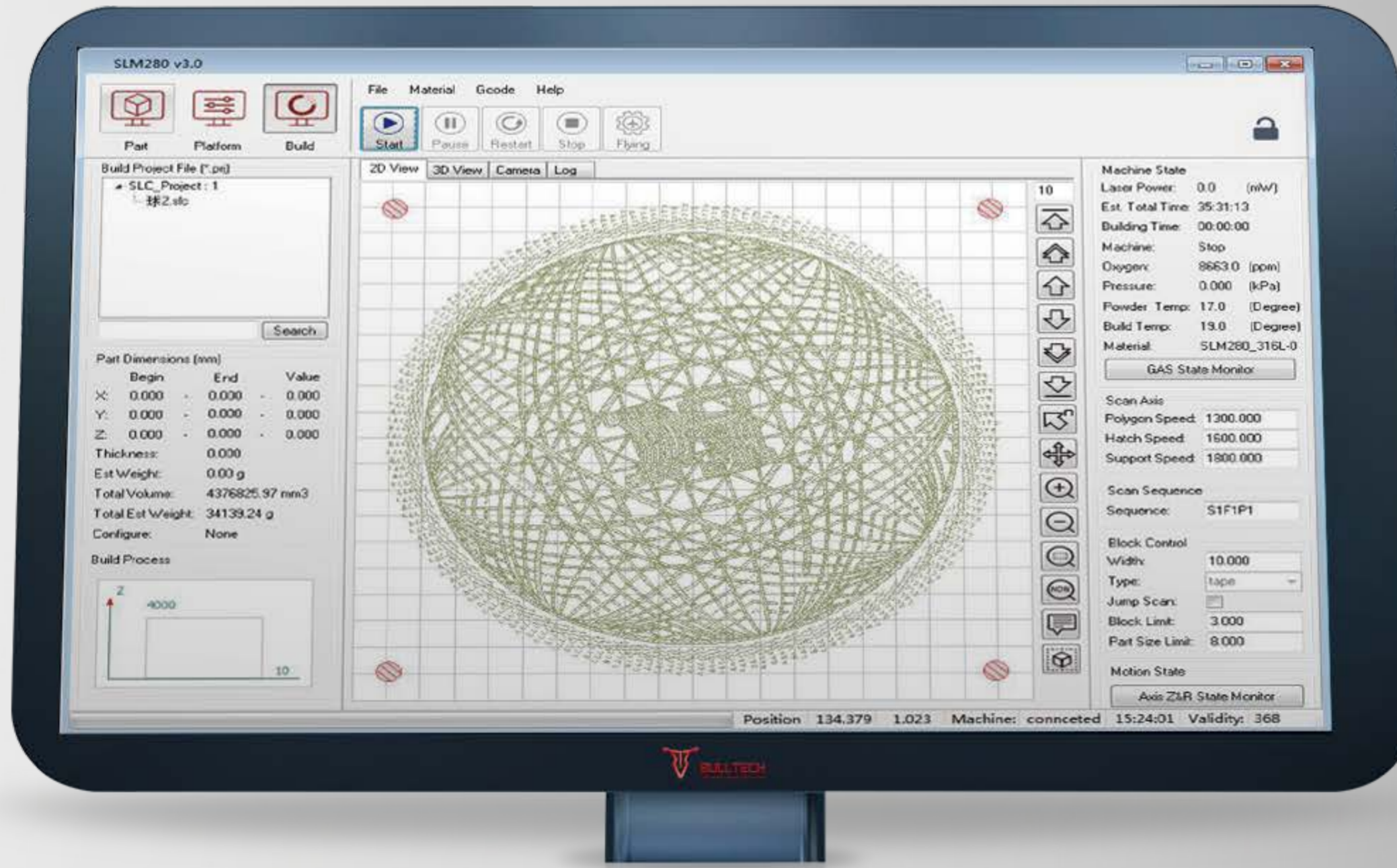
More friendly to different materials

Unique MultiOL technology.

Eliminate the step effect, makes the surface smoother.
High precision scanning and building layer,
high metal strength, high density, finish product can
be used directly.



BullEye 21.5' touch screen



Multiple printer network production

Intelligent interconnection and visualization of production process provide optimization support for the overall production process and realize mass production, which is the development trend of additive manufacturing in the future.

