



SLA-600

SLA Industrial 3D Printer

High-precision Molding | High-end Application Scenarios | Reducing R&D Costs



Photocuring Industrial 3D Printer

Product
Interest points

Craftsmanship Creates Quality



Industrial High
Precision

0.05-0.15mm



Large-size
Printing

600*600*400mm



High-speed
Printing

6-10m/s



Variable Spot
Technology

0.06-1.2mm



High-precision
Coating

accurate
positioning



Anti-vibration
Drive System

large torque, good
impact resistance



Crystal
Laser

laser wavelength
355nm



High-speed Scanning
Galvanometer

intelligent integrated
scanning system



Optimized
Slicing

simple slicing
operation

Product Parameters

Specifications	Model	Vnici-SLA-600
	Appearance Dimensions	1140*1300*1900mm
	Net Weight	860KG
	Machine Power	550W
Laser System	Laser Quantity	1
	Laser Type	Diode-Pumped Solid-State Laser Nd:YVO ₄
	Laser Wavelength	355nm
	Laser Power	5W
Optical Scanning System	Spot Diameter	0.06-0.8mm
	Scanning System	High - speed Galvanometer Scanning System
	Part Scanning Speed	Recommended 6m/s
	Jumping Speed Of Parts	Recommended 10m/s
	Reference Production Speed	200-500g/h
Coating System	Coating Method	Precision Positioning - Vacuum Adsorption
	Normal Layer Thickness	0.1mm
	Rapid Layer Thickness	0.2mm
	Precision Layer Thickness	0.05mm
	Characteristic Layer Thickness	0.05mm-0.15mm(Selectable)
Resin Tank	Resin Tank Capacity	Approximately240kg
	Maximum Forming Size	600*600*400mm
Lifting System	Basic Platform	Grinding Grade Marble Benchmark Platform
	Repeat Positioning Accuracy	±0.01mm
	Maximum Part Weight	25kg

Photocuring Printing Principle

Photosensitive resin is used as the printing material, which is liquid at room temperature and turns solid after UV irradiation. 3D models are printed by curing photosensitive resin layer by layer through superimposition.



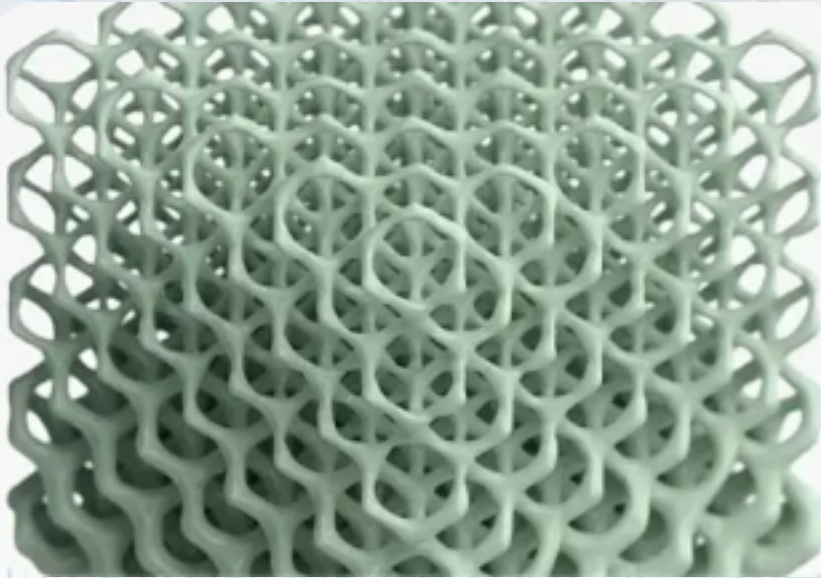
SLA 3D Printer



Ordinary Printer(FDM)

Photopolymerization curing molding, with smooth surface, very close to mass-produced injection-molded products, higher grade

Ordinary Printer (FDM) adopts thermal stacking principle, with poor precision and obvious stacking texture

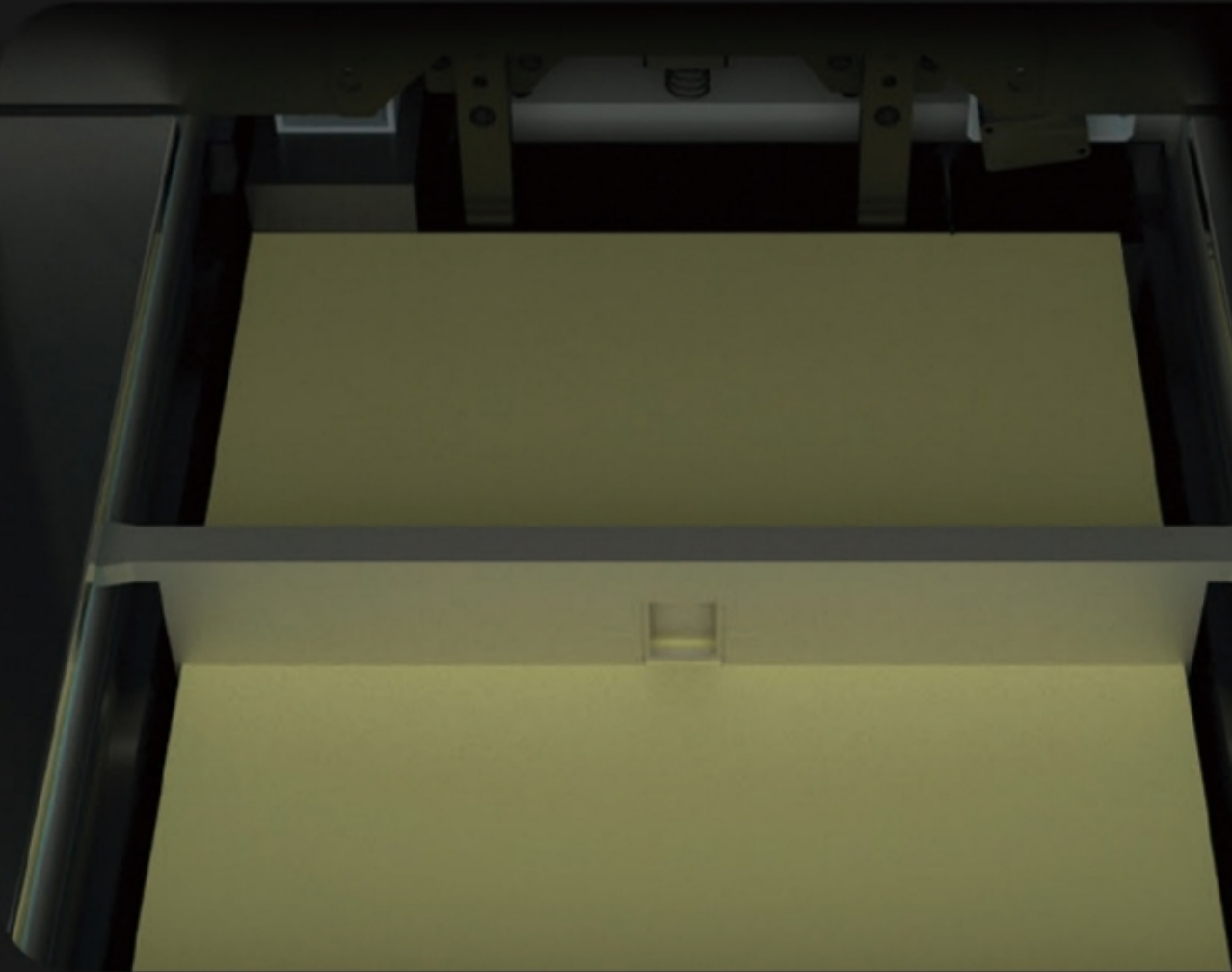


1. Photopolymerization curing molding, fast printing speed and high precision
2. Smooth printing, with smooth surface of finished products
3. The printed products have natural luster and are more exquisite
4. Simple mechanical structure, easy maintenance and low cost
5. High printing success rate, avoiding FDM problems
6. No exposed high-temperature working parts in the whole machine
7. Long service life
8. Printed parts can be both hard and soft, more solid, with diverse materials

1. Thermal stacking printing, with obvious stacking texture and unnatural transition
2. Unnatural surface luster
3. Low printing precision
4. Complex mechanical structure, very high calibration and maintenance costs
5. May have faults such as wire drawing, detachment from the base, layer separation, and nozzle blockage
6. The print head works at high temperature, with certain dangers
7. Short service life of the whole machine
8. Few materials, one model cannot be applied to different materials

High Configuration Craftsmanship Manufacturing

High
configuration



Liquid Level Detection Technology
Improves printing precision and efficiency



Variable Spot Technology
Reduces print time while improving productivity



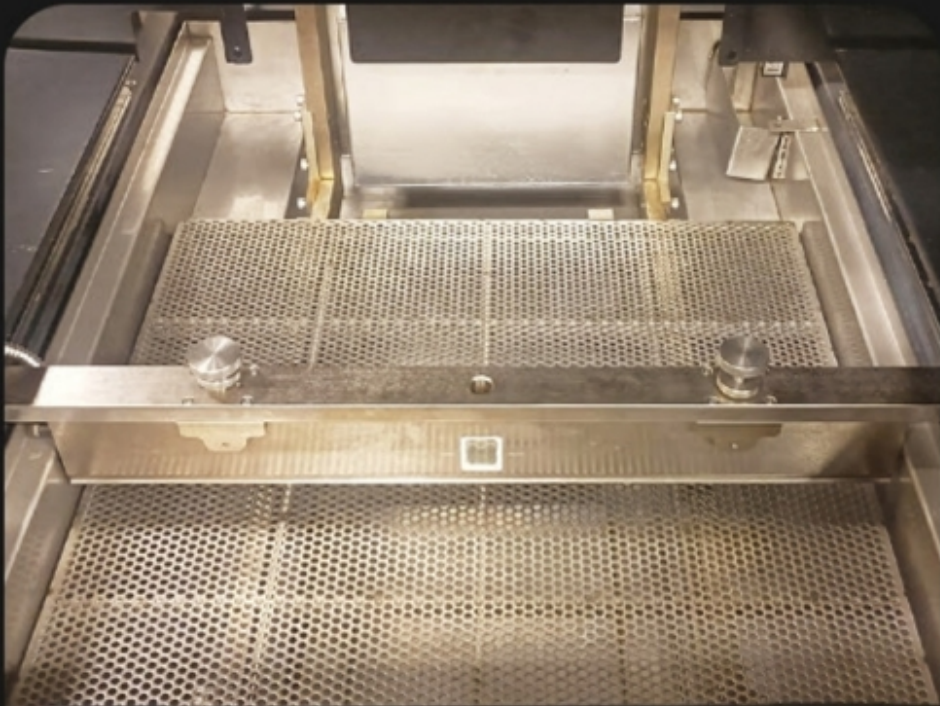
Industrial Laser Galvanometer
Quickly scans resin to achieve high-speed printing



Linear Guide + Ball Screw
More stable printing and higher precision



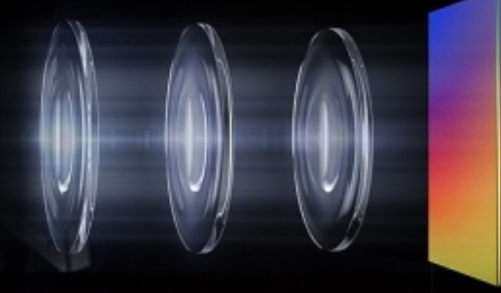
Resin Storage Tank
Adopts premium thickened stainless steel tank



Vacuum Adsorption System
More stable printing and higher precision



Built-in Computer Operating System
Easy to operate and user-friendly



Low-pressure Stereolithography Technology
Lower printing pressure, more stable performance

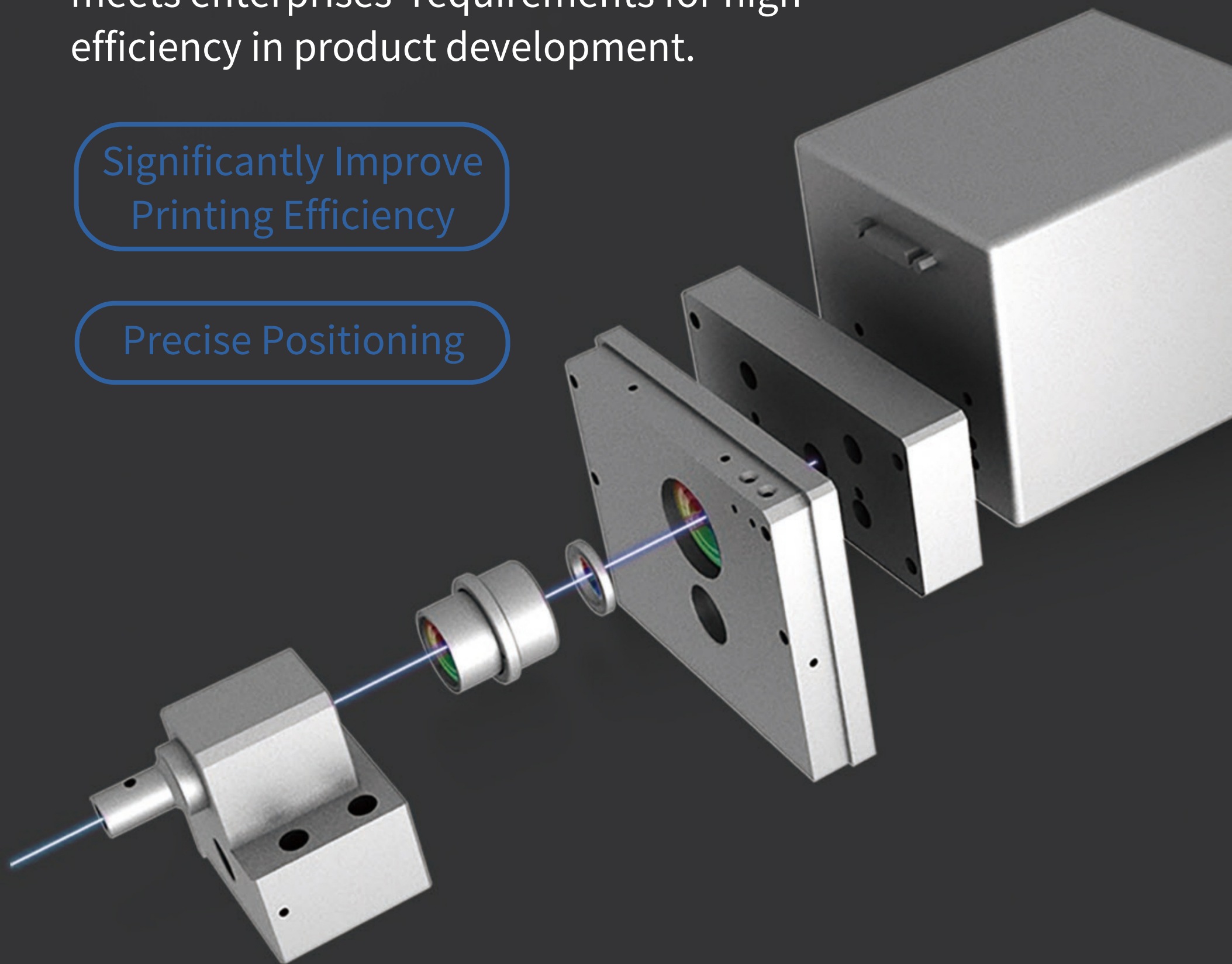
SLA Laser Technology

SLA laser
technology

With professional technical core control components and 355nm wavelength laser, it features high printing precision and wide resin compatibility. It better meets enterprises' requirements for high efficiency in product development.

Significantly Improve
Printing Efficiency

Precise Positioning



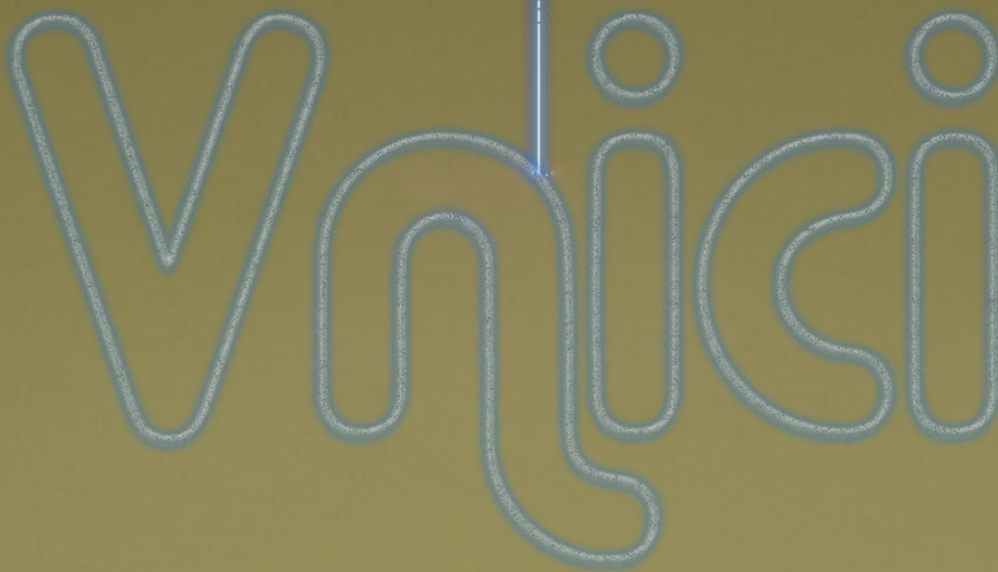
Variable Spot Technology

Variable spot
technology

The spot diameter ranges from 0.06mm to 1.2mm, and the variable spot mode can be freely switched. It greatly improves the printing efficiency and better meets the requirements of enterprises for high - efficiency product development.

Freely Switch Variable Spots

Spot Diameter: 0.06 - 1.2mm



Light Touch Support Easy To Remove Smooth Surface

Light Touch Support
Easy To Remove
Smooth Surface

The sunken model support is very easy to remove, leaving little residue. The new light - touch support structure has small and flat contact points between the model and the support. Most of the surfaces are smooth and do not need polishing.

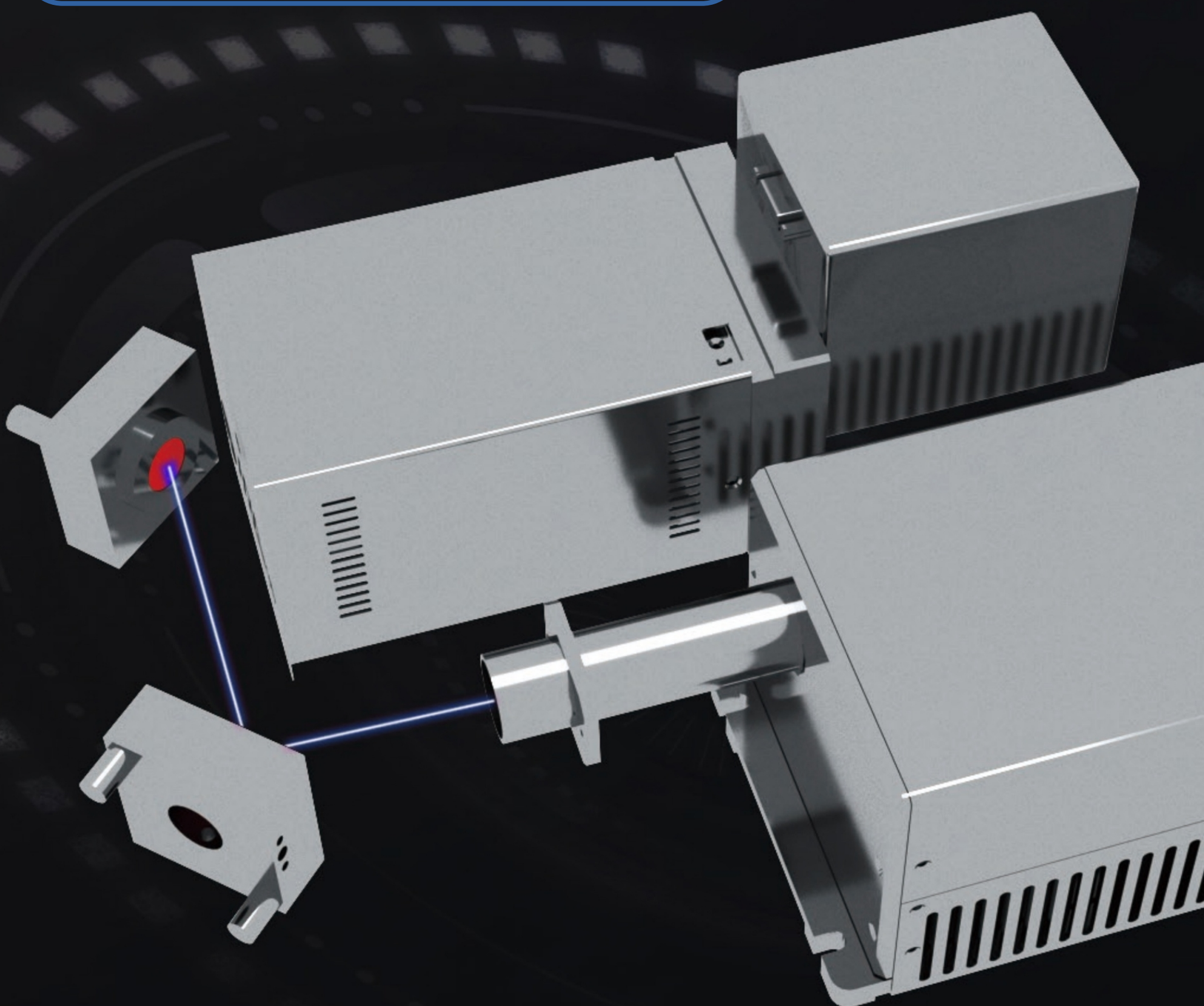


Stereolithography

Stereolithography

By leveraging the advanced low - pressure stereolithography (SLA) technology, 3D printing based on resin is completely redefined, thus greatly reducing the pressure during the printing process.

Low - pressure Stereolithography



Breakthrough Print Quality

Breakthrough
print quality

The printing precision is improved by more than 40% compared with LCD light curing. The deformation degree of the submerged - type molding method is smaller than that of the upward - pulling one, and the dimensions are more accurate, saving assembly time. It meets the customized requirements for large - scale prototype samples in industries such as automotive, aerospace, etc.

Amazing Printing Speed

High - precision Printing

Industrial SLA
Printing Technology

600*600*400mm

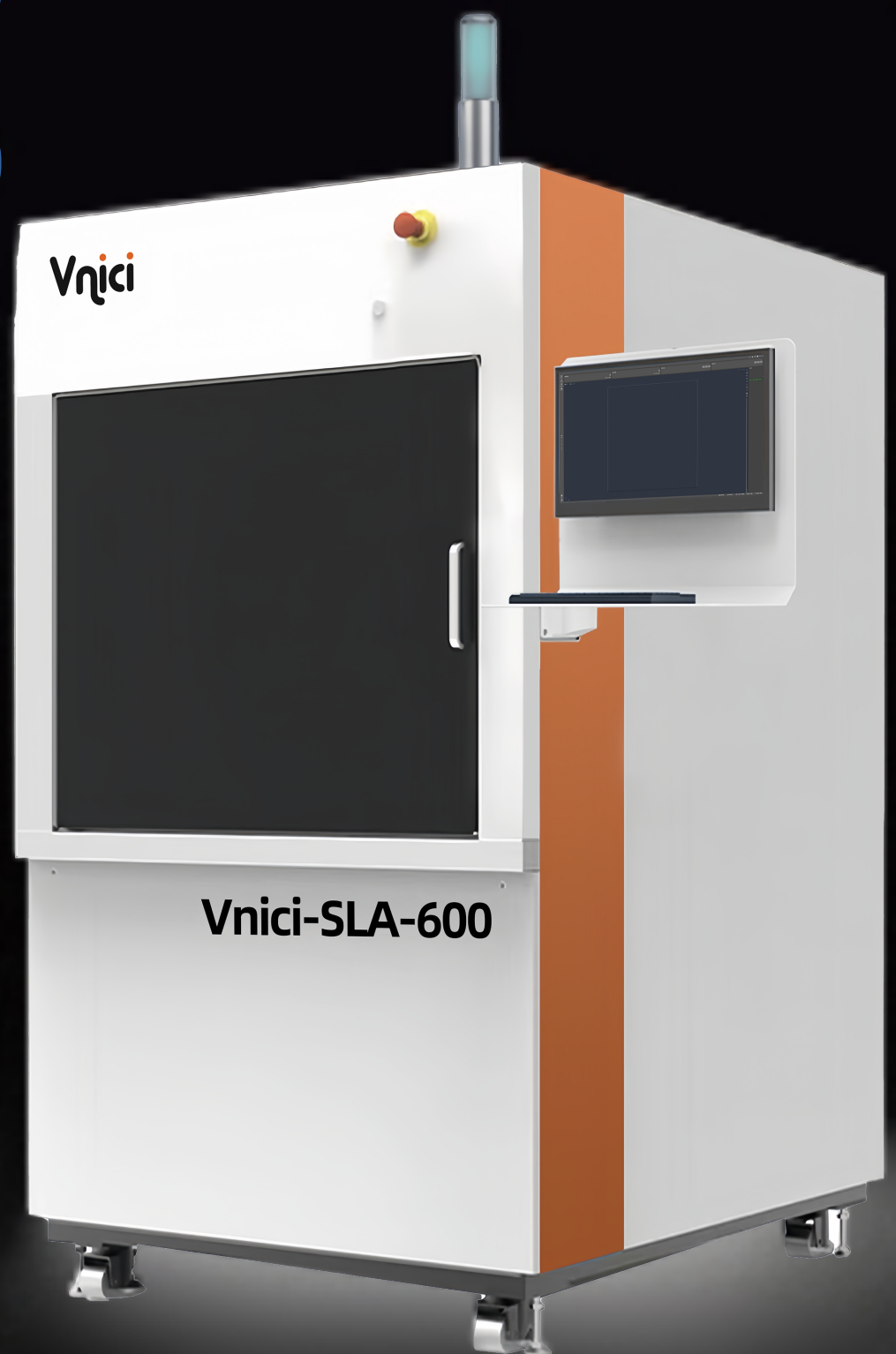
Print Size

0.05 - 0.15mm

Print Layer Thickness

6 - 10m/s

Laser Scanning Speed



Accessible Building And Office

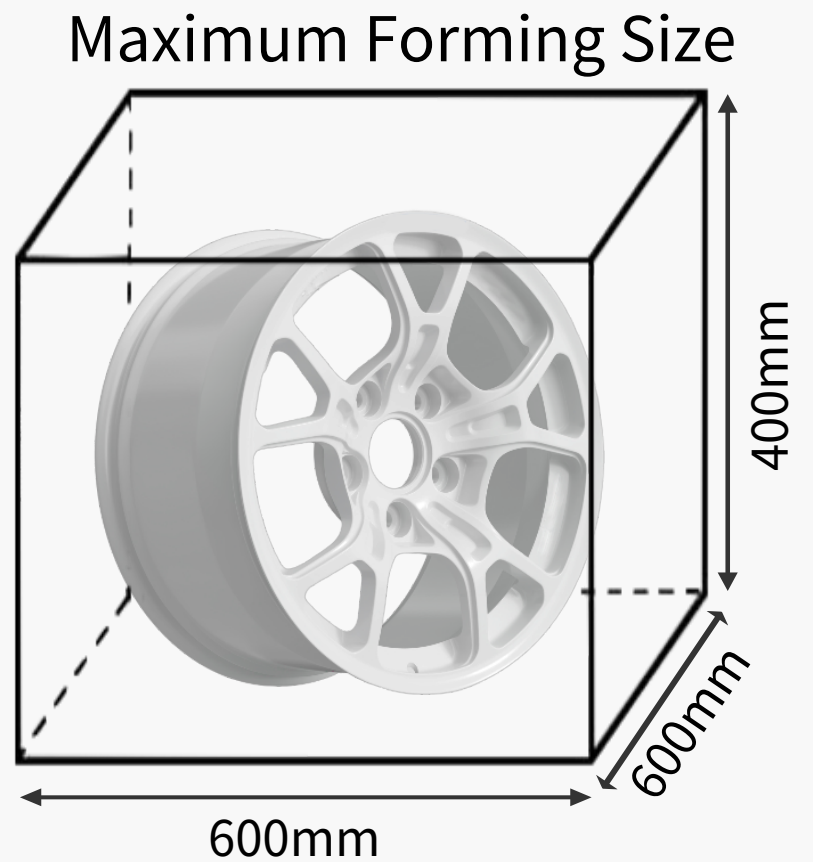
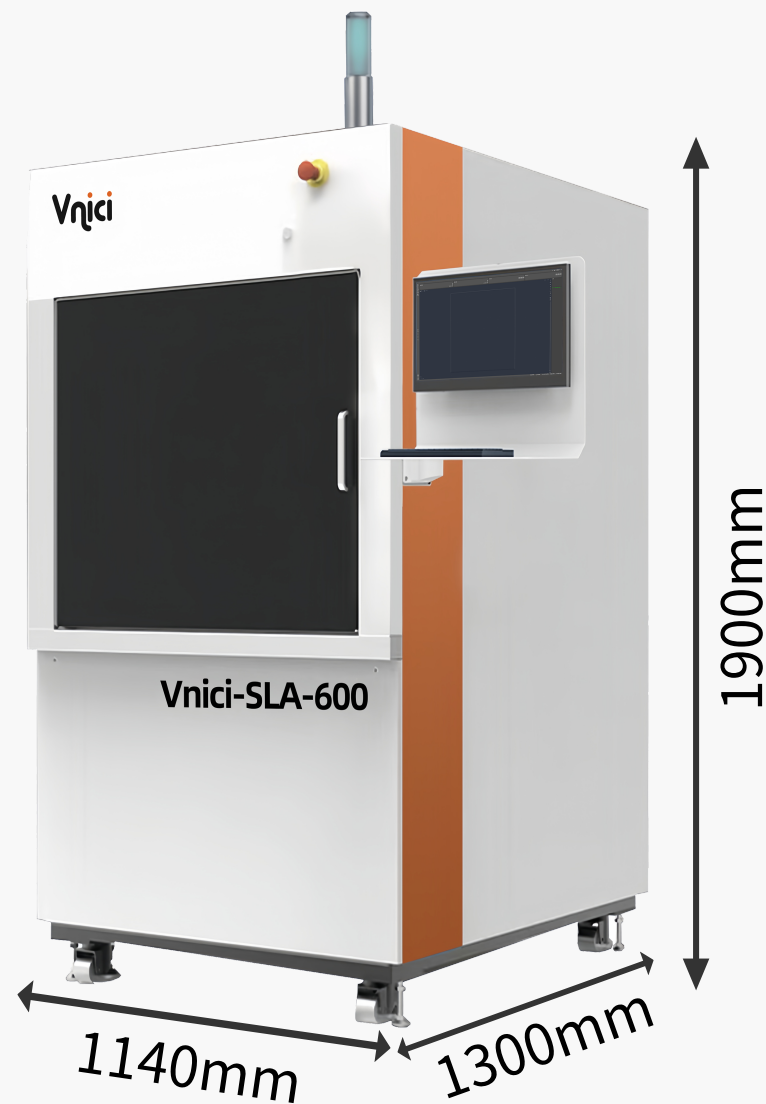
The dimensions of the machine body
are 1140*1300*1900mm.

It can be easily moved into elevators,
buildings, and offices.



Print Size

Maximum Forming Size:600x600x400mm



Supporting Multiple Consumables

- Supports multiple performance consumables
- Meets the needs of different materials
- Comprehensively satisfies the needs of customers in various industries for material particularities

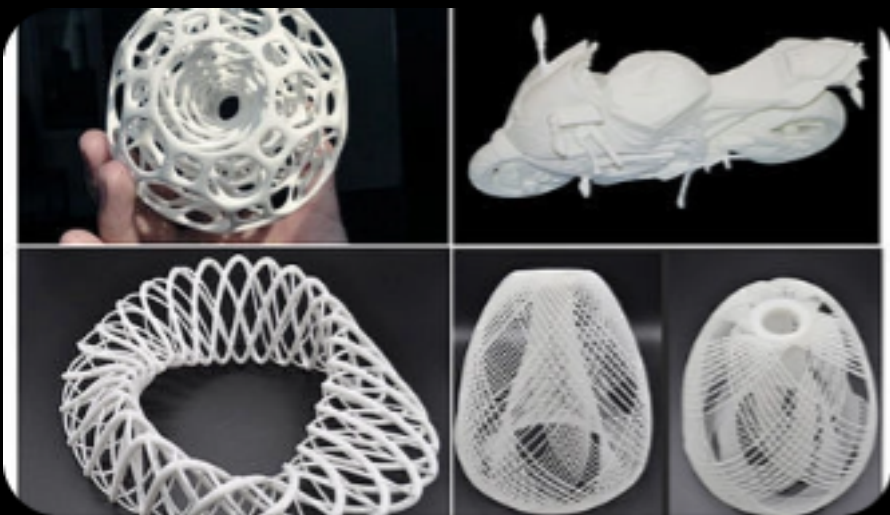


Engineering resin / high-temperature resistant resin / transparent resin / general-purpose resin / casting resin / tough resin / dental resin

Vnici Digital's high-performance photosensitive polymer composites can print exquisite details and achieve realism comparable to superior finished products. They can highly simulate materials and products with transparent, soft, and hard textures. Meanwhile, various forming materials and support materials are configured to realize printing of soft, hard, and transparent resin materials, providing more 3D printing solutions for various fields.

Support Various Fields Industry Application

SLA photosensitive resin 3D printing is a widely used 3D printing technology in industry, which is widely applied in many fields such as handboard models, prototype production, medical guides, and art figures. It effectively shortens the R&D cycle, improves work efficiency, and reduces R&D costs.



Product Design And Manufacturing Industry

SLA 3D printing technology is widely used to manufacture prototypes of complex shapes, which can be formed in one piece without assembly



Industrial Handboard Mold Design

Industrial product design can quickly detect the rationality of design through SLA 3D printing



Biomedical Industry

SLA printers can be used to manufacture customized surgical models for preoperative simulation training, or to manufacture personalized medical devices such as hearing aids



Dental Industry

SLA printers can print high-precision tooth models for preoperative model treatment to achieve precise positioning during surgery



Foundry Industry

It eliminates the mold opening process, and is a rapid prototyping technology that can meet the requirements of foundry industry for precision and surface quality, with high success rate and better environmental protection



Automotive Industry

SLA 3D printers are often used to manufacture prototypes of auto parts for function and performance testing, and composite molds can be made in a short time



Construction Industry

It helps architects and designers better understand designs and ideas, and can play an important role in display and marketing



Animation And Toy Industry

Whether it is animation characters, game figures or original shapes, 3D printing technology can accurately reproduce every detail, making toy models more unique



Aerospace And Military Industry

It is used to manufacture lightweight and complex parts, as well as parts and models of military equipment, to quickly verify the rationality of design through prototyping



Education Industry

It is used to manufacture various teaching models and experimental equipment, improve teaching efficiency, enrich teaching methods, and is widely used in colleges and research institutions

More Printing Cases

More printing cases

