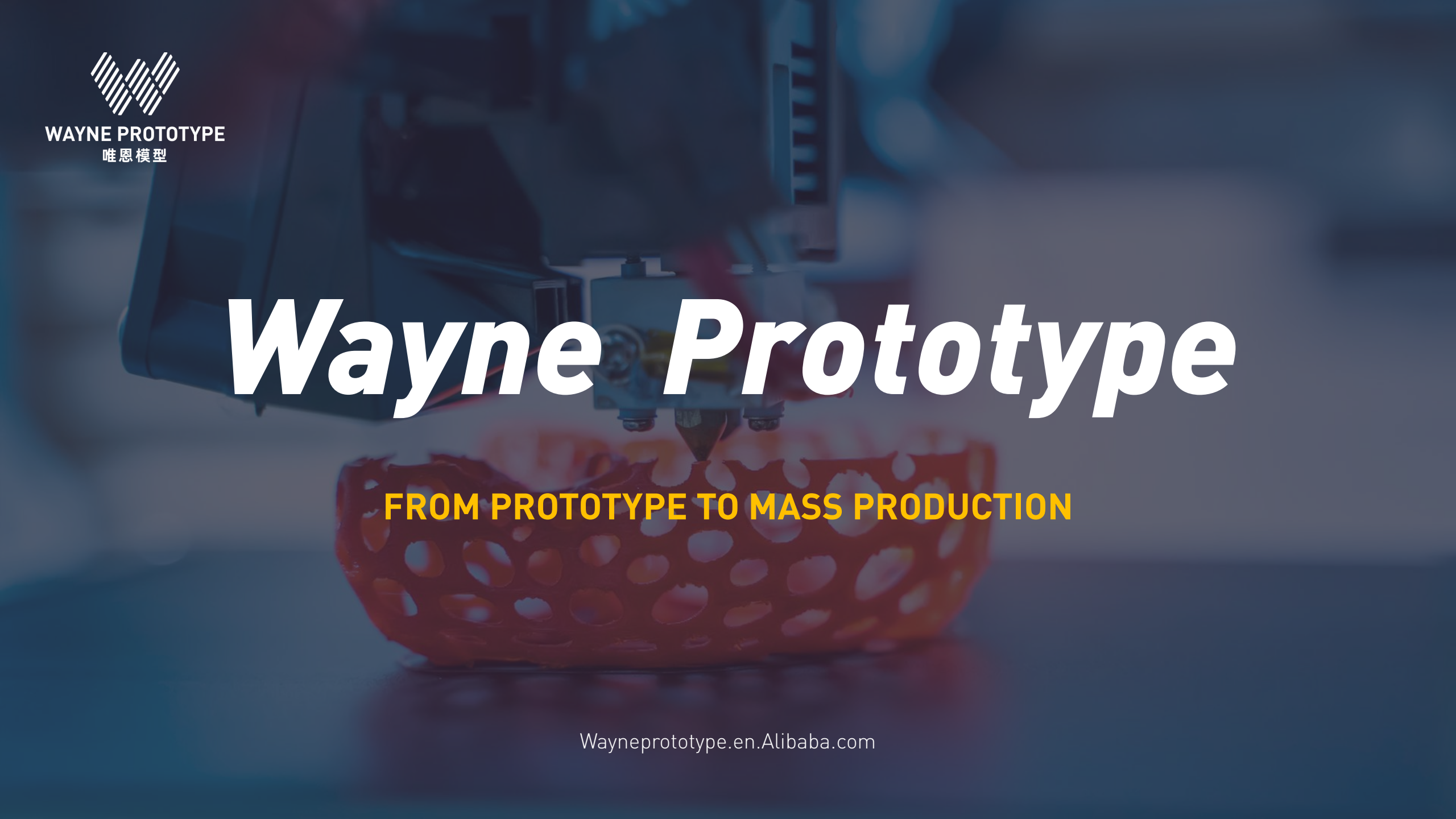
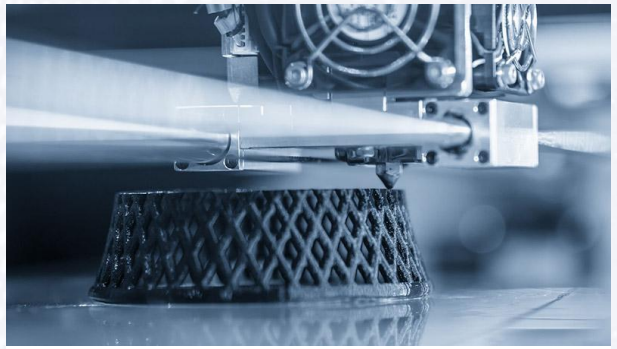

WAYNE PROTOTYPE
唯恩模型
Wayne Prototype
FROM PROTOTYPE TO MASS PRODUCTION
Wayneprototype.en.Alibaba.com

Wayne Prototype is a specialists at design and engineering company who support you from the concept stage to prototyping and fabrication of the completed product with plastic injection molding. Whether you need prototypes or production parts, we can make them for you on demand in as fast as a day. We are your one-stop manufacturer for accurate, precise, custom 3D printed parts at an affordable price. We print everything from single prototypes to thousands of production-grade parts.

We use the latest additive manufacturing technology to build affordable functional parts in over 20 metals and plastics. WayNe Prototype offers four high-quality 3D printing processes including stereolithography (SLA), direct metal laser sintering (DMLS), HP Multi Jet Fusion (MJF) and selective laser sintering (SLS). Our main goal is to help companies to turn their dream projects into reality. We work very closely with our clients and strive to give them the best services at all times., We use industrial-grade printers such as hp printer, Union-Tech SLA printer, EOS printer and DMLS and more. We make all projects possible and get your idea valued, designed, tested, prototyped and manufactured in a fast, reliable, easy and supportive way.

You think it, we make it !

OUR SERVICES



3D Printing
SLA | MJF | DMLS / SLM | FDM

CNC Machining
Milling | Turning

Injection Molding
Plastic | Rubber

Vacuum Casting
ABS | PP | PC | PMMA | POM | Rubber | etc.

Sheet Metal
Cutting | Bending | Welding

FRP Crafts
Sculpture | Artwork | Cartoon | etc.

Jewelry
Ring | Earrings | Necklace | Keychains

Reverse Engineering
STEP | STP | STL | DWG | IGES | etc.

About
SLA 3D Printing

Printing bed size: 800*800*500mm / 1400*800*500mm | Tolerance: ±0.1mm

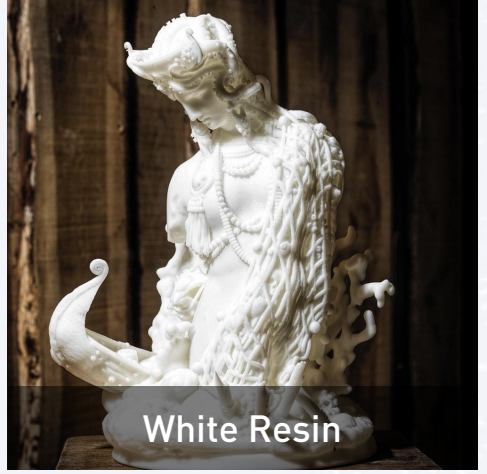
- **Concept Models:** The speed, accuracy, and great surface finish of SLA parts lets product developers create physical snapshots of their designs through the iterative process.

- **Rapid Prototyping:** SLA prototyping is a fully-functional prototype, with materials that can simulate polypropylene, polycarbonate, ABS, and rigid composites.

- **Direct Digital Manufacturing:** The high accuracy and consistency of SLA makes it an ideal way to build large quantities of discrete or customized parts.

Material Examples for *SLA* 3D Printing

Material Name	Description	Flexural Strength (MPa/KSI)	Elongation at Break (%)	HDT@0.46 MPa (°C)
Accura 25	White, PP-like	58 MPa/KSI	20%	63 °C
Accura ClearVue	Clear/Translucent, PC-like	67 MPa/KSI	7%	46 °C
Somos Watershed Black	Black/Dark-Grey, ABS-like	69 MPa/KSI	15%	50 °C
Somos WaterShed XC 11122	Clear/Translucent, ABS-like	69 MPa/KSI	15%	50 °C
Somos EvoLVe 128	White, ABS-like	70 MPa/KSI	11%	52 °C
Accura Xtreme Grey	Grey, ABS-like	71 MPa/KSI	22%	62 °C
Somos NeXt	White, PP-like	71 MPa/KSI	10%	57 °C
Somos ProtoGen 18420	White, ABS-like	71 MPa/KSI	16%	47 °C
Somos Taurus	Dark Gray, ABS-like	74 MPa/KSI	24%	62 °C

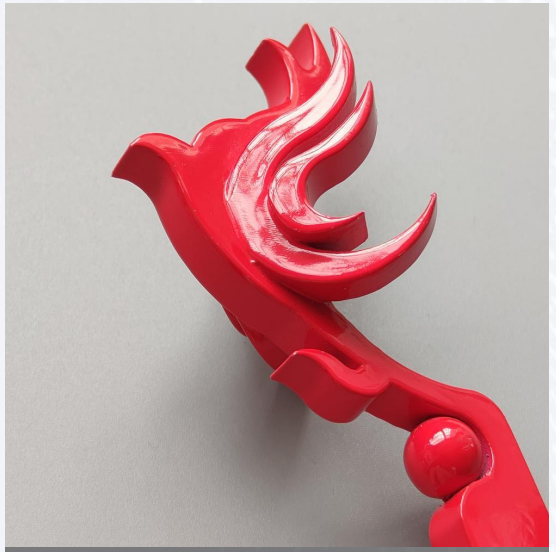


Surface Finish for
SLA 3D Printing

Standard

Chrome Plating

Silk Screen



Spray Painting

About
HP MJF 3D Printing

Maximum size: 380*285*380mm | Tolerance: ±0.1mm

Multi Jet Fusion (MJF) is HP's proprietary 3D printing process.

HP Multi Jet Fusion (MJF) is a powerful 3D printing technology that produces highly accurate and durable parts at fast speeds, especially compared to other powder bed fusion technologies like selective laser sintering (SLS) or direct metal laser sintering (DMLS).

Due to their affordability, speed, and high resolution, multi jet fusion technology can be used for end-use, low-volume production, rapid prototyping, or as a bridge process to injection molding. MJF allows engineers to get a feel for how parts will perform with minimal upfront costs.

Material Examples for *HP MJF* 3D Printing

Material Name	Description	Shore Hardness	Elongation at Break (XY, ZX %)	Elongation at Break (XY, ZX %)
Nylon PA11	HP 3D High Reusability PA11	80D	55%, 40%	6 kJ/m², 5 kJ/m²
Nylon PA12	HP 3D High Reusability PA12	80D	20%,15%	3.6 kJ/m², 3.5 kJ/m²
Nylon PA12 Glass Filled	HP 3D High Reusability PA 12 Glass Beads (40% GB)	82D	10%	3 kJ/m²

- Nylon PA12 is a robust thermoplastic with all-around excellent physical properties and chemical resistance, ideal for functional prototypes and end-use applications.
- Glass-filled nylon is reinforced with glass bead and creates parts with higher stiffness and thermal stability than standard nylon.


Nylon PA11


Nylon PA12


PA12 + Glass Filled

Surface Finish for
HP MJF 3D Printing

Standard-Gray

Dyeing (Gray to Black)

Spray Painting

About
DMLS/SLM 3D Printing

Maximum size: 420*420*450mm | Tolerance: ±0.1mm

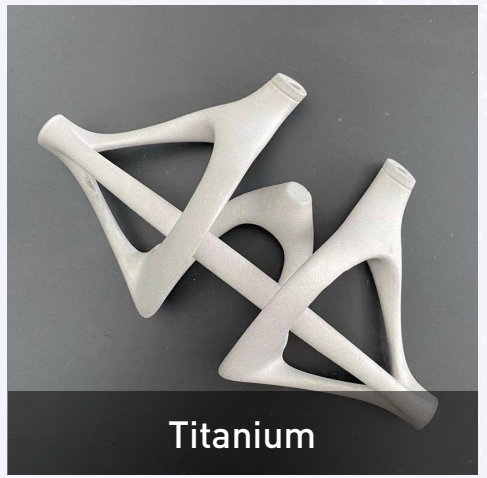
- **Rapid Tooling:** Because DMLS parts are strong yet lightweight, they are widely used for rapid tooling, fixtures, and jigs.
- **Rapid Prototyping:** DMLS metal laser printing is typically affordable and fast, and therefore is often used to make proof-of-concept models and fully functional late-stage prototypes.
- **Production:** Cast-quality finish (fully dense) and durable materials make DMLS printing a favorite technology for end-use products.

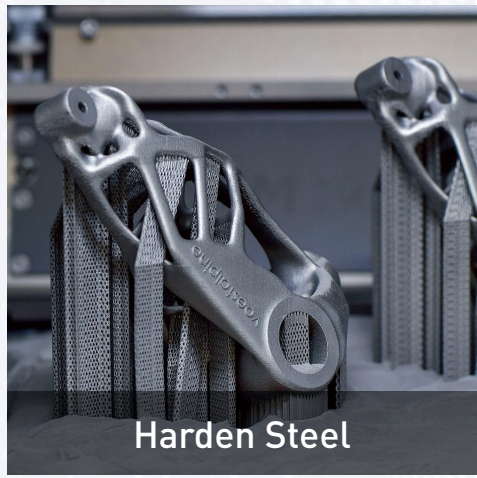
Material Examples for
DMLS/SLM 3D Printing

Material Name	Layer Thickness	Apparent Density	Tensile Strength	Yield Strength
Stainless Stell (316L)	15-53μm	3.9g/cm3	⩾560Mpa	⩾480Mpa
Stainless Stell (17-4PH)	15-53μm	4.0g/cm3	⩾1100Mpa	⩾1050Mpa
Harden Steel (18NI300)	15-53μm	4.3g/cm3	⩾1090Mpa	⩾1000Mpa
Titanium (TC4)	15-53μm	2.5g/cm3	⩾600Mpa	⩾540Mpa
Aluminum (AlSi10Mg)	15-53μm	1.45g/cm3	⩾330Mpa	⩾245Mpa
Aluminum (6061)	15-53μm	1.07g/cm3	⩾280Mpa	⩾230Mpa
Nickel Alloy (GH3625)	15-53μm	4.2g/cm3	⩾1000Mpa	⩾730Mpa
Nickel Alloy (GH4169)	15-53μm	4.4g/cm3	⩾980Mpa	⩾700Mpa


Stainless Steel


Aluminum


Titanium


Harden Steel


Nickel Alloy

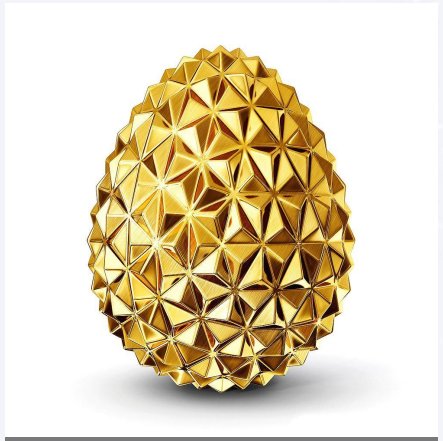
No More

Surface Finish for ***DMLS/SLM*** 3D Printing

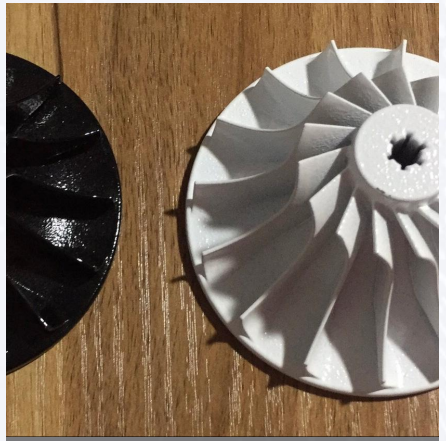
Standard
Sand Blasting

Polishing

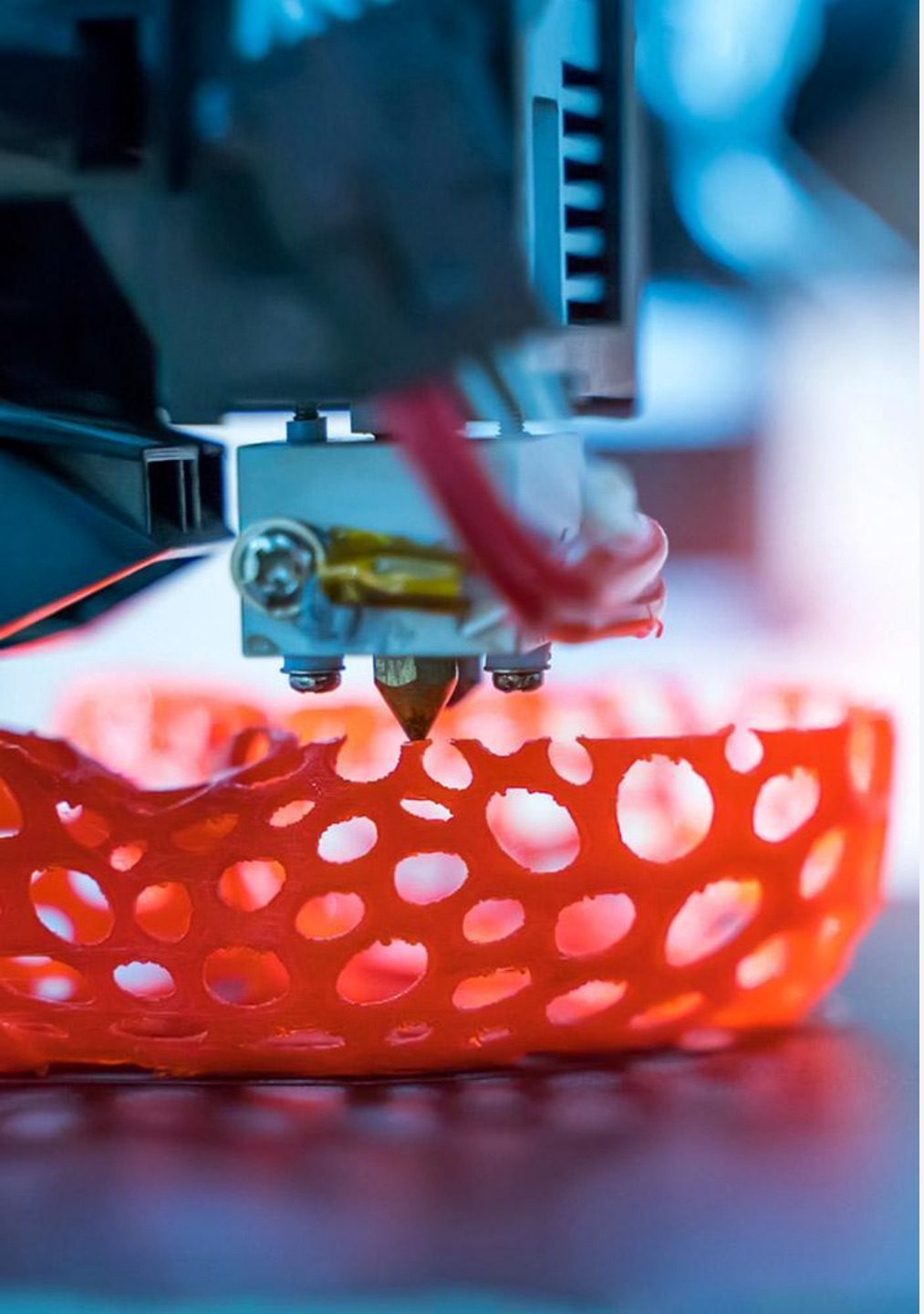
Anodizing



Chrome Plating



Spray Painting



About
FDM 3D Printing

Maximum size: 500*500*600mm / 350*400*500mm | Tolerance: ±0.2mm

- Fused deposition modeling (FDM) is among the most easily accessible and recognizable additive manufacturing technologies worldwide. Available to both 3D printing hobbyists and large-volume manufacturers alike, it is known for its speed and precision in generating three-dimensional polymeric structures using a choice of feedstock materials.

- The range of filaments available for fused deposition modeling include: Acrylonitrile butadiene styrene (ABS-M30, ABS-M30i, ABSi) Acrylonitrile styrene acrylate (ASA) Polycarbonates (PC, PC-ABS and PC-ISO) High-performance plastics (PPSF, Ultem 1010, Ultem 9085, and Nylon-12).

Material List for FDM 3D Printing

PLA	PLA-Silk	PLA-Wood	PLA-CF	ASA
ABS	ABS-PLUS	PETG	PETG-ESD	PETG-CF
PVA	PA11-CF	PA12	PA12-CF	Ultra PA12-CF
PC	PC-ABS	PC-FR	PET-CF	PET-GF
TPU	TPU-Foam	MMLA	PEEK	more...

About

Injection Molding Service

Size: Customized size | Tolerance: ±0.2mm | Color: Pantone / RAL

- **Efficient high production:** Once you have developed the moulds, the process is extremely fast with cycle times as short as 10 seconds. It is excellent for medium and high-volume production runs for anything from 10,000 parts to well over 100,000 depending on what moulds you use.
- **Low cost per part:** For high output production runs the cost per part is very low.
- **Repeatability:** You can manufacturer identical products over and over again. This is ideal when you need to have parts with high tolerances and reliability across high volumes.
- **Large material choice:** There is a huge range of plastic materials that you can select from depending on what properties you need from your final part.
- **Low waste:** The moulding process produces very little waste when compared to many other manufacturing processes. Even if there is any unused or waste plastic, you can recycle it for future use.
- **High detail:** The process involves injecting molten plastic into the mould under very high pressure. This presses the plastic hard up against the moulds allowing complex and intricate shapes plus a lot of detail.
- **Little or no post processing:** Generally, you will need very little post production as the parts usually have good aesthetics post production.

Material Examples for *Injection Molding* Service

About

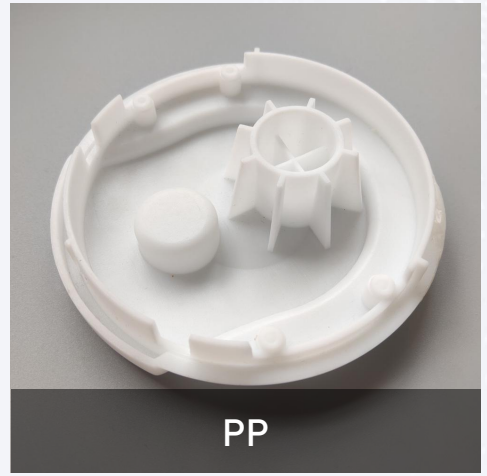
Vacuum Casting Service

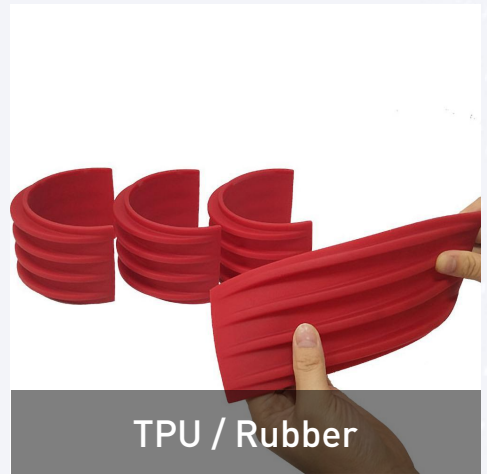
Size: Customized size | Tolerance: ±0.2mm | Color: Pantone / RAL

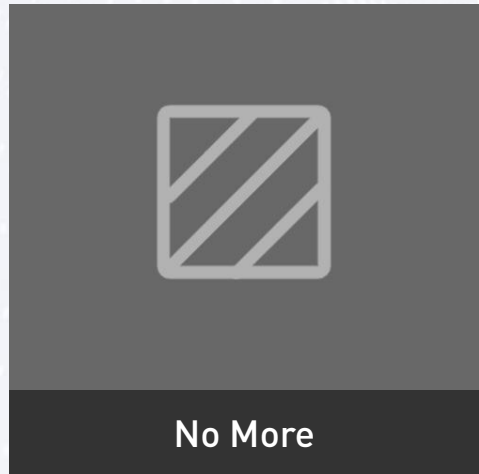
- **Low-Volume Production:** Urethane cast parts are perfect for low-quantity production—when volumes do not justify investment in injection mold tooling—as well as for first run production parts, which can be completed weeks before production tooling is ready.
- **Advanced Prototyping:** The urethane casting process and relatively inexpensive tooling involved makes it easy and economical make any necessary design changes. Additionally, different materials can be used with the same mold, making it possible to test designs with a variety of materials.
- **Market Testing:** End-user functionality and a high-quality finish makes urethane cast parts ideal for consumer testing, user evaluati on and concept models. Using the cast urethane process means that changes can be incorporated quickly for either further testing or market launch.
- **Fast turnaround:** We can provide up to 20 parts in 1 week or less, depending on part specification and volume.
- **Affordability:** Silicone molds are less expensive than the tooling used for injection molding, resulting in low prices.
- **Capable of producing large parts:** Depending on the type of equipment used, vacuum casting can to create very large parts.
- **Superior surface finish to injection molding:** The vacuum process removes air bubbles and allows the material to capture fine details.
- **Color options:** Coloring pigments can be added to the resin for a variety of color options.
- **Repeatability:** Silicone molds can be used around 15 times before they need replacing.

Material Examples for *Vacuum Casting* Service

Material Name	Shore Hardness	Description	Technical Information
ABS-Like	Shore D 78-82	A tough Shore 80D flame retardant material that is UL Listed with a flammability rating at 1/16" (1.6 mm).	TC-891-FR or equivalent
Polycarbonate-Like	Shore D 82-86	A stiff, high impact, high HDT, material with a wide variety of uses. Simulates polycarbonate (non-clear), Shore 84D.	TC-854 or equivalent
Glass-Filled Nylon-Like	Shore D 85	A stiff, USP Class VI, high-performance urethane with high impact strength and a HDT of 190°F (88°C).	PT8902 or PT8952 (FR)
Rubber-Like Polyurethane	Shore A 25-95	A Shore A elastomer with a high elongation to break.	F-130 to F-190 or equivalent
Clear Rubber-Like Polyurethane	Shore A 40-95	A colorless Shore A elastomer with a high elongation to break. Matte finish will give a frosted appearance, and higher gloss will increase its transparency.	WC-540 to WC-595 or equivalent







Surface Finish for
Vacuum Casting Service

Silk Screen

Chrome Plating

Clear colorless

Spray Painting

Matte / Frosted

Sanding

About
Sheet Metal Service

Cutting | Bending | Welding

- Some sheet metal materials are better for bending than others. Generally, the best bending materials are malleable and not brittle.

- Popular materials for sheet metal bending include:
- * Mild steel: Can be bent at any temperature.
- * Spring steel: Bendable after annealing.
- * Alloy steel 4140: Bendable after annealing.
- * Aluminum 5052: Highly bendable compared to other aluminum alloys.
- * Copper: Highly bendable.

- Materials that are more difficult (though not impossible) to bend include aluminum 6061, titanium, brass, and bronze.

Applications of
Sheet Metal Fabrication

Rapid Tooling

Rapid Prototyping

End-Use Production

Materials for
Laser Cutting Service

Carbon fiber

Acrylic
(Plexiglass)

Metals

Wood

About
FRP Crafts

Size: Customized size | Color: Pantone / RAL

- Fiberglass crafts, made from materials such as resin and fiberglass, can be processed into different shapes and sizes. Due to its excellent properties including high strength, abrasion resistance, flame retardancy, and corrosion resistance, fiberglass is one of the preferred materials for making architectural decorations, furniture, outdoor sculptures, and artworks.
- They can be made very thin, with thicknesses reaching several millimeters, and are lightweight, making them easy to transport and handle.
- They have features such as corrosion resistance and high temperature resistance.
- They can be used for a long time at room temperature without the need for maintenance.
- They have good toughness and impact resistance, able to withstand significant external forces.
- They have a long lifespan compared to general metal materials.

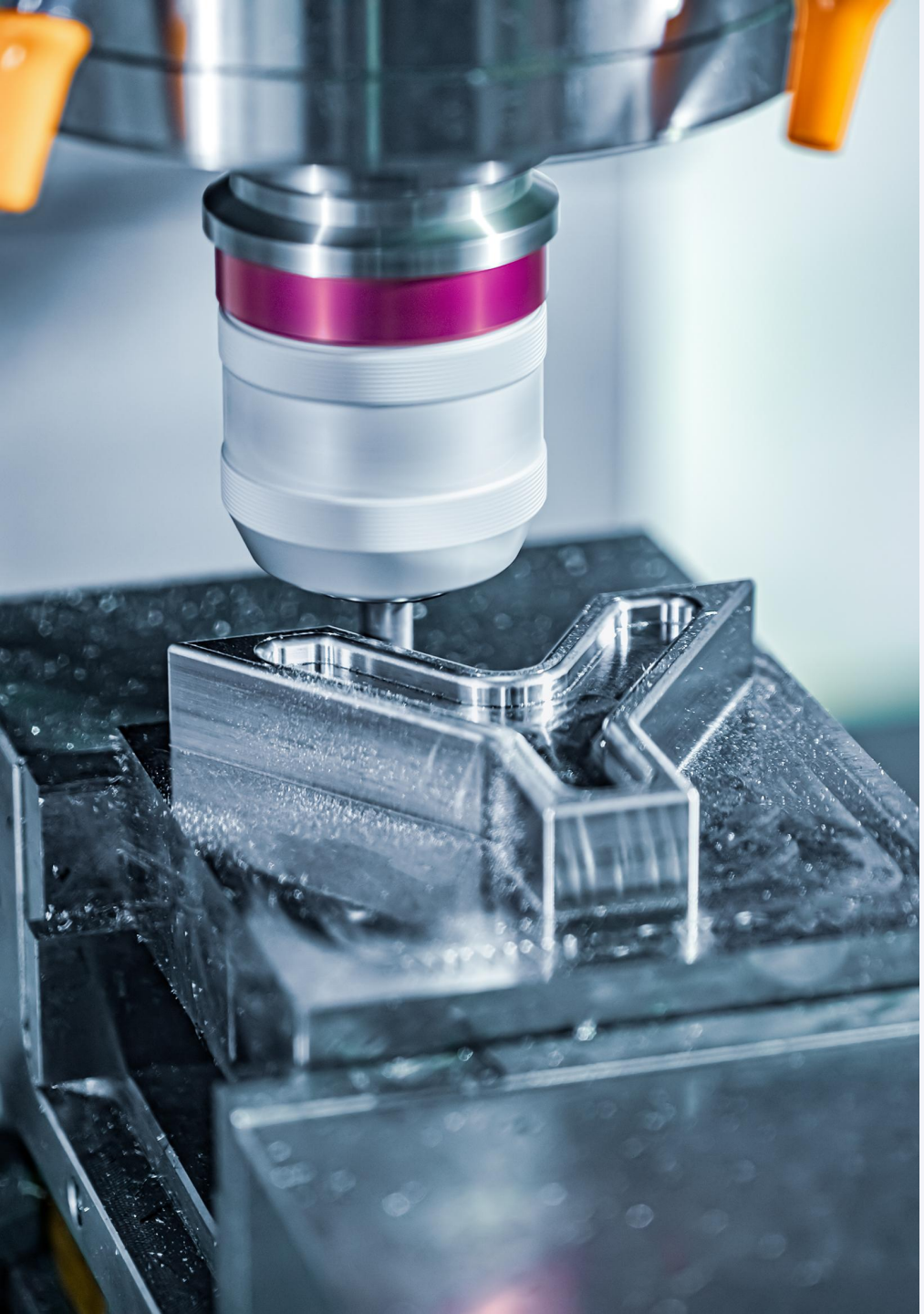
Applications of

FRP Crafts / *Outdoor Fiberglass Animal Sculpture*

Applications of
FRP Crafts / *Cartoon Image*

Applications of

FRP Crafts / *Artwork*



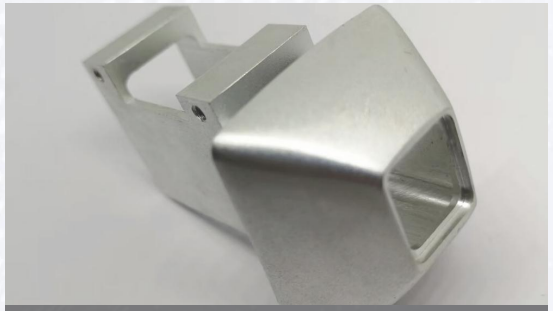
About
CNC Machining Service

Max-size: 3 meter

- A CNC (Computer Numerical Control) machinist operates and programs machine tools such as lathes, mills, and grinders that are controlled by a computer to produce precision metal or plastic parts. To produce high-quality parts, machinists set up machines, write and test programs, and make adjustments as needed. In addition, precision measuring instruments are used to ensure that completed parts meet specifications.

- CNC machinists work in various industries but are most commonly found working for industrial manufacturers and construction where high-quality custom parts and pieces are frequently needed.

Common materials for
CNC Machining Service

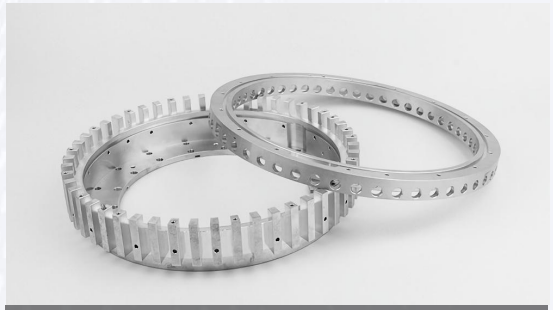


Aluminum

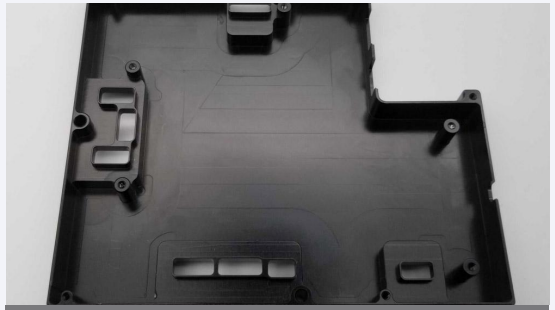
Stainless steel

#45 steel

Brass

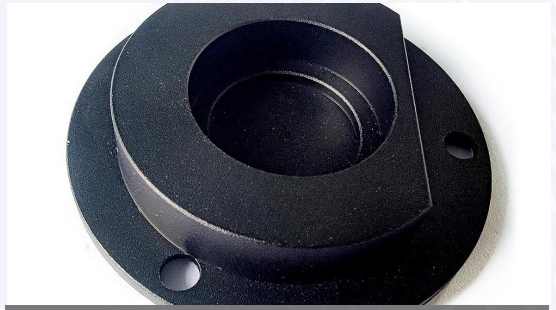


Titanium



ABS

PC



POM

Applications of
CNC Machining

About

Custom Jewelry service

Size: Customized size | Color: Pantone / RAL

- Wayne Jewelry is dedicated to the customized development and production of fashion jewelry. With extensive experience in producing jewelry for both domestic and international markets, our factory has established long-term partnerships with renowned brands including OEM, Disney, and Swarovski crystals. Adhering to the principle of "quality first," we maintain strict quality and cost controls throughout the manufacturing process. Each product is meticulously crafted to ensure that every piece of jewelry customized and produced by Wayne Jewelry embodies the essence of high-end fashion.
- Wayne Jewelry's unwavering commitment to superior quality has earned us the trust and loyalty of customers and consumers. With clients spanning across more than a dozen regions such as Russia, the United States, the United Kingdom, Mexico, Brazil, and the Middle East, our reputation continues to grow.
- Furthermore, Wayne Jewelry actively supports environmental protection. All of our products are nickel-free, lead-free, and cadmium-free, making them environmentally friendly and providing customers and consumers with peace of mind. We aim to provide high-end, fashion-forward, and customizable jewelry that exudes elegance and individuality. We invite all customers with customized jewelry needs to visit our factory for business discussions. Experience the difference of Wayne Jewelry and let us use our high-quality jewelry to meet your unique requirements.

Material Examples for
Custom Jewelry Service

Silver

Brass

Alloy

Stainless Steel

Applications of
Custom Jewelry

Surface Finishes Operation Site

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