

# SANDRAW

THE PIONEER OF SILICONE 3D PRINTER



**2023**

**CATALOG**



@961pjivz



+886 921 424 831



info@sandraw.com

## FAM Technology

FAM™ stands for Fluid Additive Manufacturing, and it is an additive manufacturing process specially designed for one-part silicone and two-part silicone.

It's the world's first silicone 3D printing technology and has been patented in many countries.



### **Multiple Silicone Selections**

We develop silicones with different features to apply to your versatile applications, including high elasticity, life-like touch, high strength, and high rigidity.



### **Bio-compatibility**

All of our silicones are certified by ISO10993, making them suitable for medical devices, medical simulators, wearables, and prostheses.

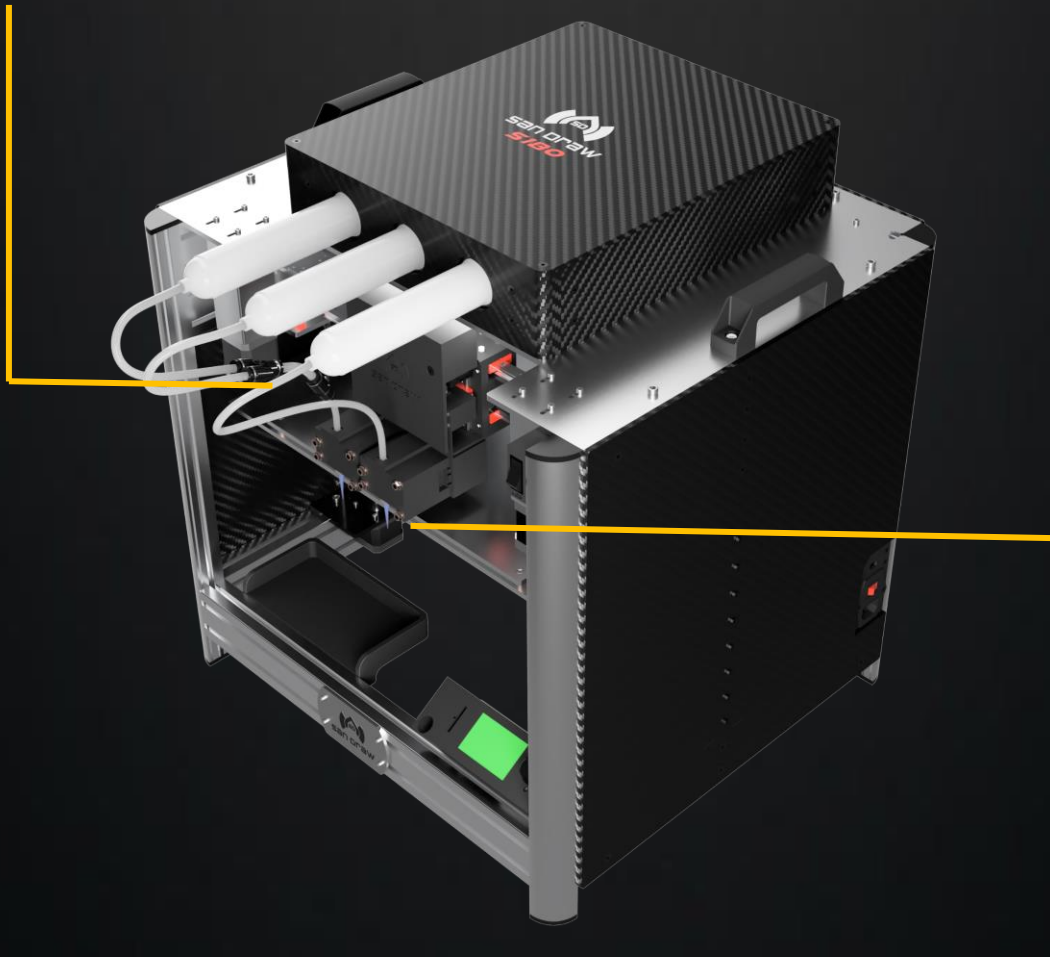


### **Bridging prototyping & mass production**

We develop a series of 3D printing silicones with similar mechanical properties to mass-production silicones, enabling a seamless transition from prototyping with Silicone 3D Printer to mass production with a molding machine.

## INPA (Independent Nozzle Position Adjustment)

INPA allows independent movement of the two nozzles in the Z direction, ensuring that the nozzle avoids interfering with the printed part during the printing process.



## IMSS (Instant Material Stop System)

When material extrusion is not required, the automatic valve positioned above the nozzle can instantly shut off, preventing any material dripping from affecting the printed part.



## **S300**

- Large-sized dual-nozzle
- Water Soluble support
- Ultrahigh precision
- FAM & INPA & IMSS

***NEW RELEASE!!***



## **S053**

- Medium-sized one-nozzle
- Two-part silicone
- FAM & IMSS



## **S180**

- Medium-sized dual-nozzle
- Water Soluble support
- FAM & INPA & IMSS



san draw

***SILICONE SPEC***



Silicone	SIL 30	SIL 50	SIL 70
<b>Type</b>	2-part Heat Curing	2-part Heat Curing	2-part Heat Curing
<b>Color</b>	White	White	Transparent
<b>Hardness</b>	Shore A 30	Shore A 50	Shore A 70
<b>Tensile Strength</b>	1,400 psi	1,750 psi	1,550 psi
<b>Tear Strength</b>	26 N/mm	40 N/mm	25 N/mm
<b>Elongation</b>	900 %	700 %	460 %
<b>Certification</b>	ISO 10993	ISO 10993	ISO 10993
<b>Temperature Range</b>	-50 ~ 250 °C	-50 ~ 250 °C	-50 ~ 250 °C
<b>Comparable Properties to mass-production silicone</b>	Yes	Yes	Yes

Silicone	SIL 65
<b>Type</b>	2-part Heat Curing
<b>Color</b>	Transparent. White
<b>Hardness</b>	Shore A 65
<b>Tensile Strength</b>	650 psi
<b>Tear Strength</b>	10 N/mm
<b>Elongation</b>	100 %
<b>Certification</b>	ISO 10993
<b>Temperature Range</b>	-50 ~ 250 °C
<b>Comparable Properties to mass-production silicone</b>	Yes
<b>Support Material</b>	SP65, Water soluble support material

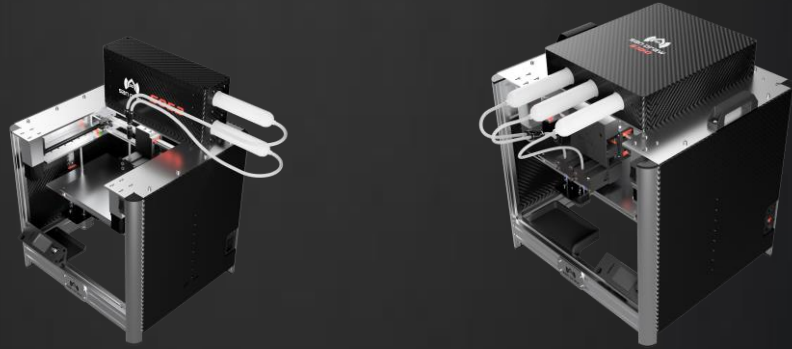


san draw

# ***3D PRINTER SPEC***







Model	S053	S180
Print Technology	FAM, IMSS	FAM, INPA, IMSS
Software	FAMufacture	FAMufacture
File Type	STL	STL
Connectivity	USB cable, SD card	USB cable, SD card
Operating System	Windows 10, 11	Windows 10, 11
Print Volume	X200 x Y150 x Z100 mm	X150 x Y200 x Z100 mm
Printer Dimension	X490 x Y470 x Z630 mm	X530 x Y490 x Z590 mm
Curb Weight	Approx. 20kg	Approx. 30kg
Barrel Number	2 for silicone	2 for silicone, 1 for water-soluble support material
Nozzle Number	1 for silicone	1 for silicone, 1 for water-soluble support material
Z axis motion	Stepper Motor w/ screw	Stepper Motor w/ screw
Z axis Positioning Accuracy	±0.04 mm	±0.04 mm

Model	S053	S180
XY Positioning Accuracy	±0.04 mm	±0.04 mm
Layer Thickness	0.01 ~ 0.2mm	0.01 ~ 0.2mm
Nozzle Diameter	0.4 mm, 0.25mm	0.4 mm, 0.25mm
Nozzle Valve	Yes	Yes
Calibration	Automatic	Automatic
Roller w/ brake	No	Yes
Silicone Compatibility	SIL30, SIL50, SIL70	SIL30, SIL50, SIL70, SIL65
Silicone Curing	Heat cure by oven	Heat cure by oven
Support Material	Silicone	Silicone/ SIL65 silicone prints with SP65 water-soluble support material.
Third-party Material Compatibility	Yes (silicone, hydrogel, ceramic gel, food gel, etc....)	Yes (silicone, hydrogel, ceramic gel, food gel, etc....)
Power	100-240 V AC, 50/60 Hz	100-240 V AC, 50/60 Hz



Model	S180	S300
Print Technology	FAM, INPA, IMSS	FAM, INPA, IMSS
Software	FAMufacture	FAMufacture
File Type	STL	STL
Connectivity	USB cable, SD card	USB cable, SD card
Operating System	Windows 10, 11	Windows 10, 11
Print Volume	X150 x Y200 x Z100 mm	X235 x Y270 x Z150 mm
Printer Dimension	X530 x Y490 x Z590 mm	X720 x Y670 x Z710 mm
Curb Weight	Approx. 30kg	Approx. 60kg
Barrel Number	2 for silicone, 1 for water-soluble support material	2 for silicone, 1 for water-soluble support material
Nozzle Number	1 for silicone, 1 for water-soluble support material	1 for silicone, 1 for water-soluble support material
Z axis motion	Stepper Motor w/ screw	Linear Actuator w/ ball screw
Z axis Positioning Accuracy	±0.04 mm	±0.02 mm

Model	S180	S300
XY Positioning Accuracy	±0.04 mm	±0.02 mm
Layer Thickness	0.01 ~ 0.2mm	0.01 ~ 0.2mm
Nozzle Diameter	0.4 mm, 0.25mm	0.4 mm, 0.25mm
Nozzle Valve	Yes	Yes
Calibration	Automatic	Automatic
Roller w/ brake	Yes	Yes
Silicone Compatibility	SIL30, SIL50, SIL70, SIL65	SIL30, SIL50, SIL70, SIL65
Silicone Curing	Heat cure by oven	Heat cure by oven
Support Material	Silicone/ SIL65 silicone prints with SP65 water-soluble support material.	Silicone/ SIL65 silicone prints with SP65 water-soluble support material.
Third-party Material Compatibility	Yes (silicone, hydrogel, ceramic gel, food gel, etc....)	Yes (silicone, hydrogel, ceramic gel, food gel, etc....)
Power	100-240 V AC, 50/60 Hz	100-240 V AC, 50/60 Hz



san draw

***APPLICATIONS***



The tooth positioners are printed by S300 printer with SIL65 silicone and SP65 soluble support material. After post-processed, the printed parts can deliver a smooth and glossy surface finish.



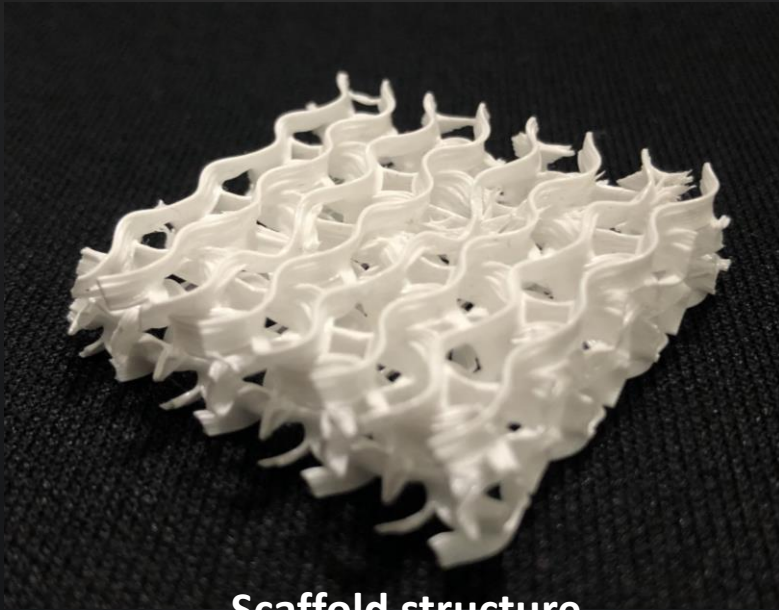
**Mouthguard**

**Sleep Appliance**

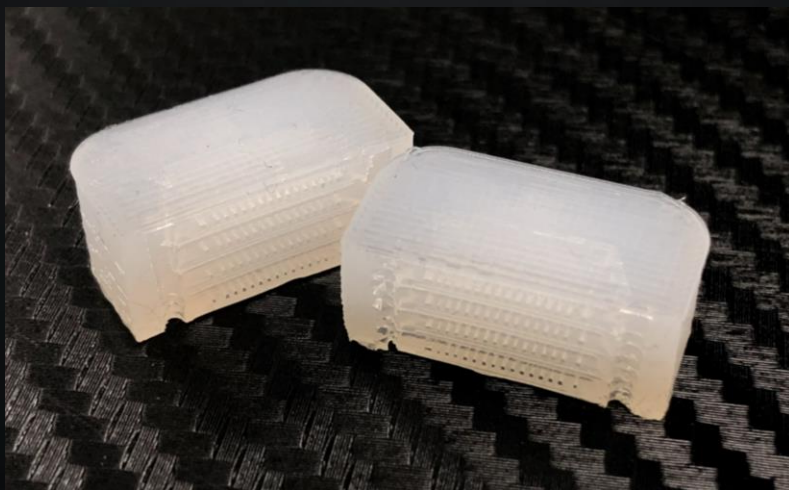




San Draw silicones are known for their stackability. Also available in various hardness and high plasticity properties, making them suitable for printing high-precision biomechanical applications.



**Scaffold structure**



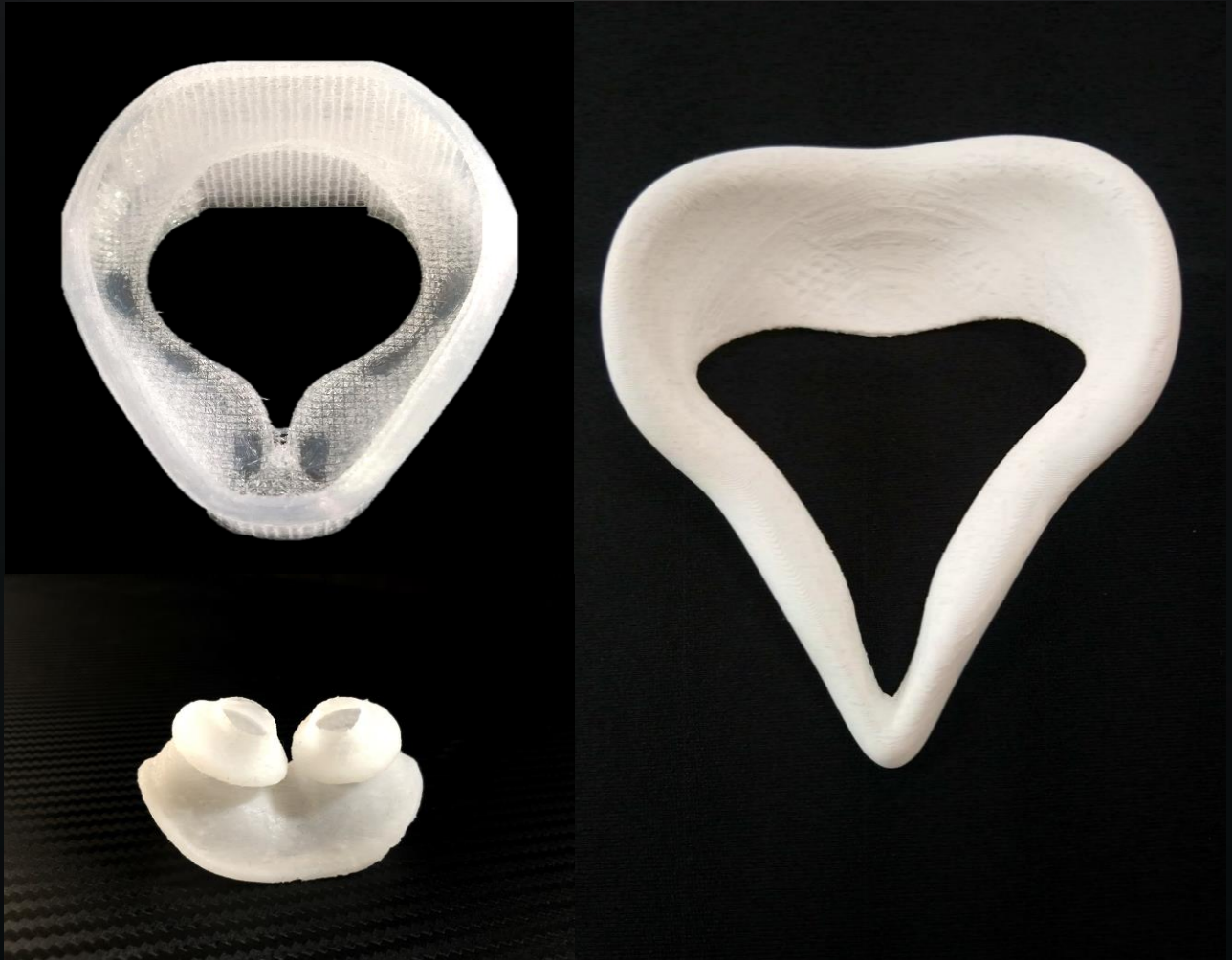
**Microfluidic channel**

San Draw silicones are known for their softness and flexibility. Also available in various hardness and high plasticity properties, making them suitable for automation equipment. The silicone gripper is easy to bend and has good friction to increase the gripping performance.

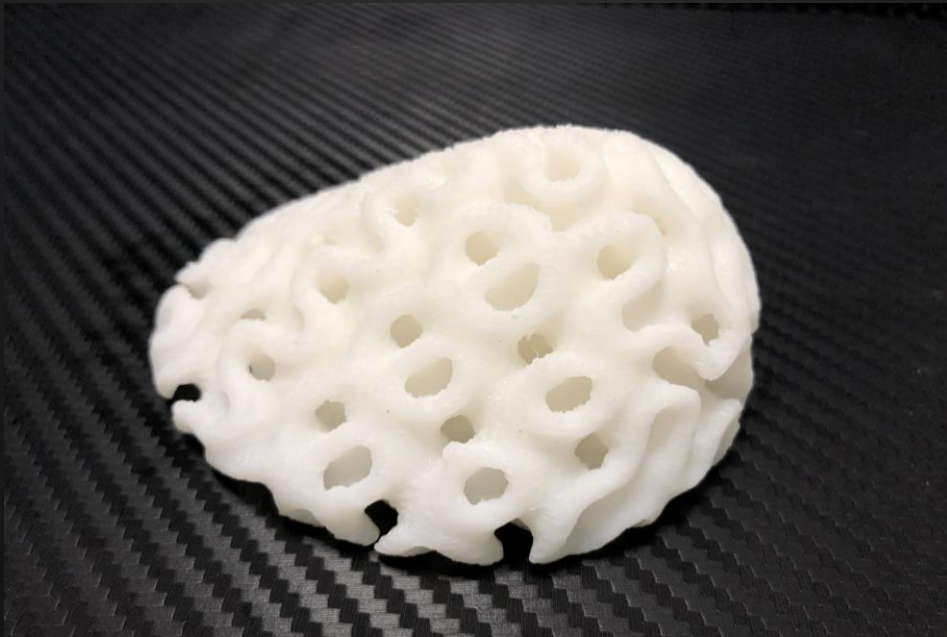




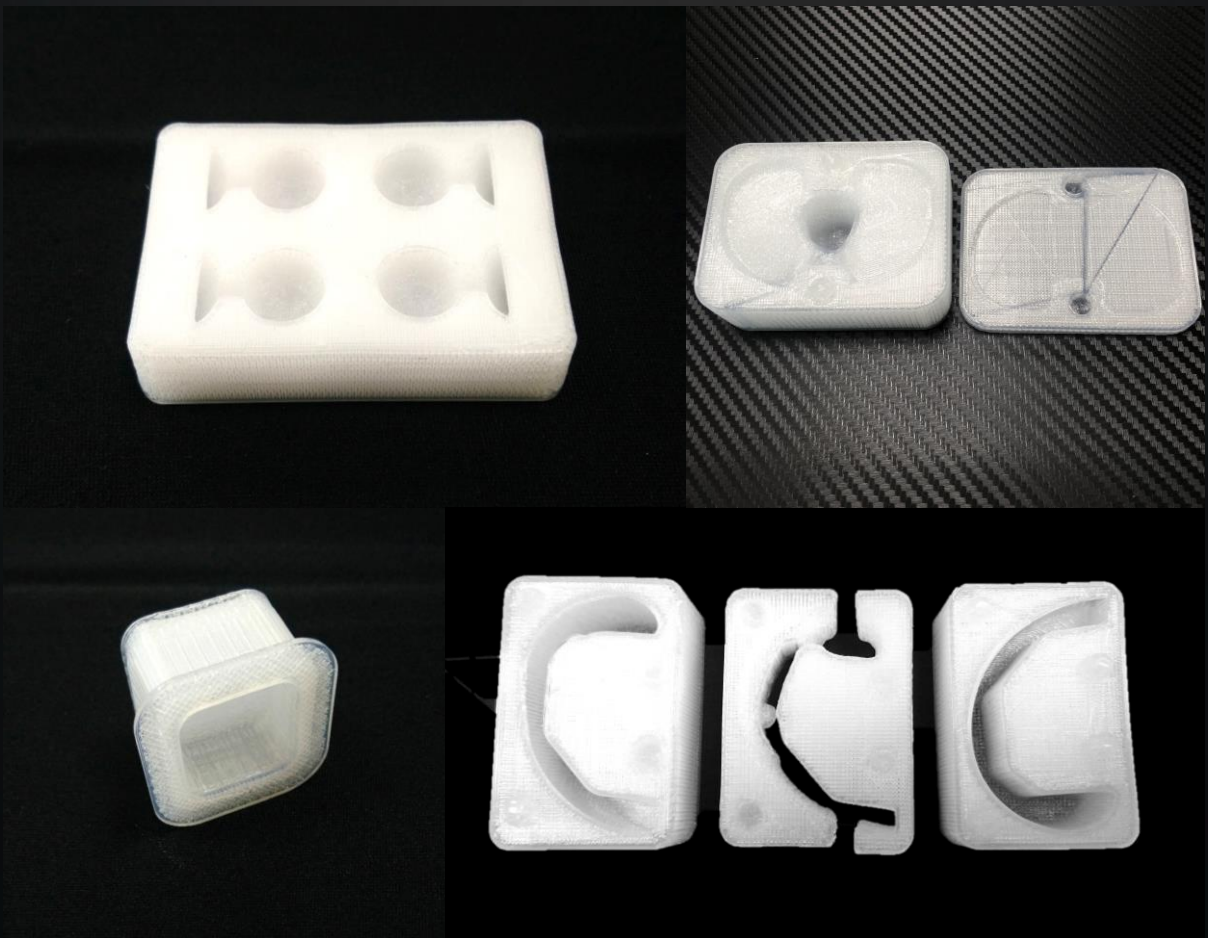
San Draw silicones are known for their excellent strength, flexible touch, and bio-compatible properties, all of our silicones are certified by ISO10993, making them suitable for medical facial masks.



San Draw silicones are known for their excellent strength, flexible touch, and bio-compatible properties, all of our silicones are certified by ISO10993, making them suitable for medical facial masks.

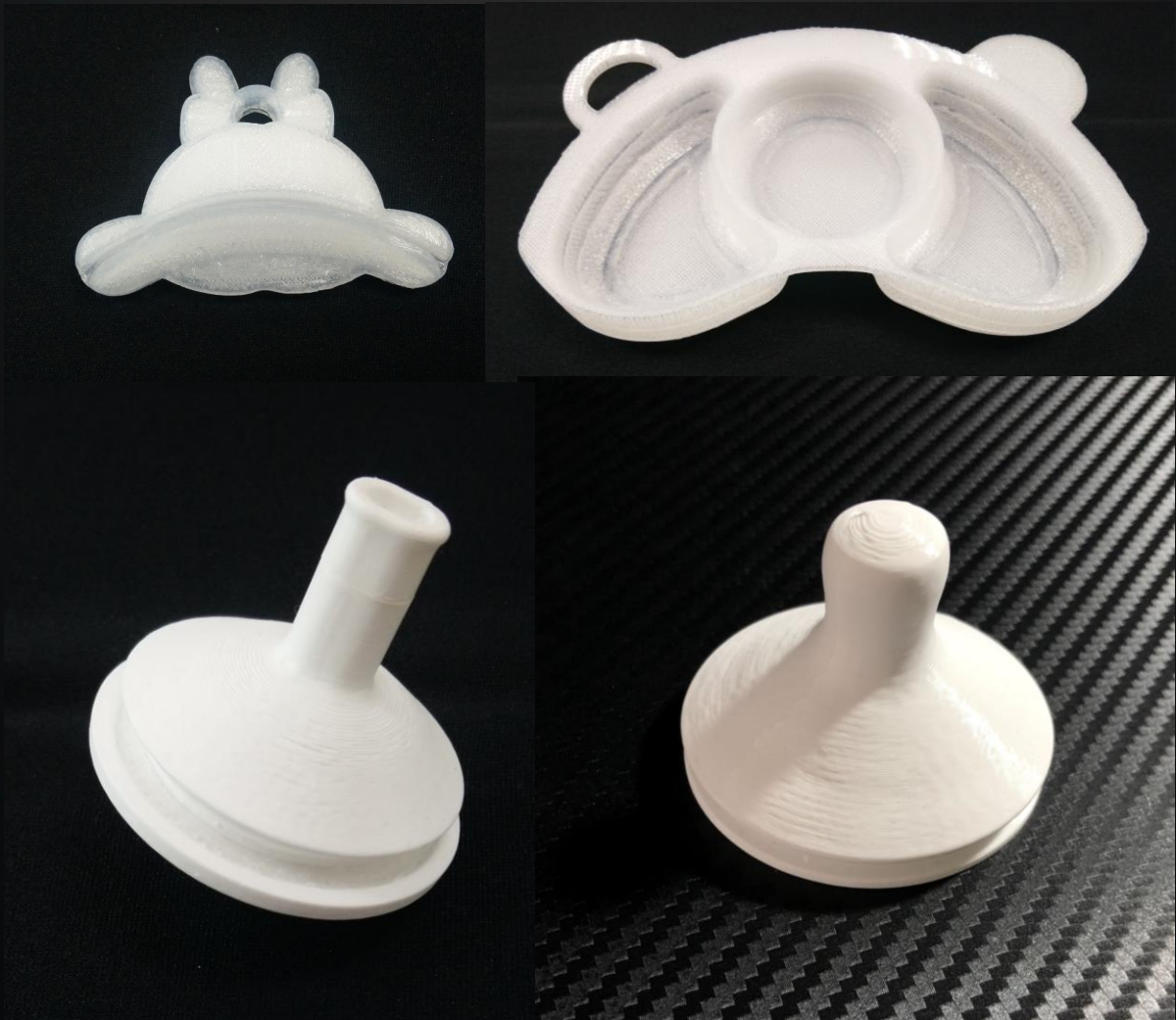


San Draw silicones are known for their excellent strength, flexible touch, and bio-compatible properties, our silicone is also available in a wide range of hardness for fast and efficient production. Silicone molds can be baked, sterilized by autoclaves, and reused.





San Draw silicones are known for their excellent strength, flexible touch, and bio-compatible properties, making them suitable for baby accessories, safe and non-toxic.

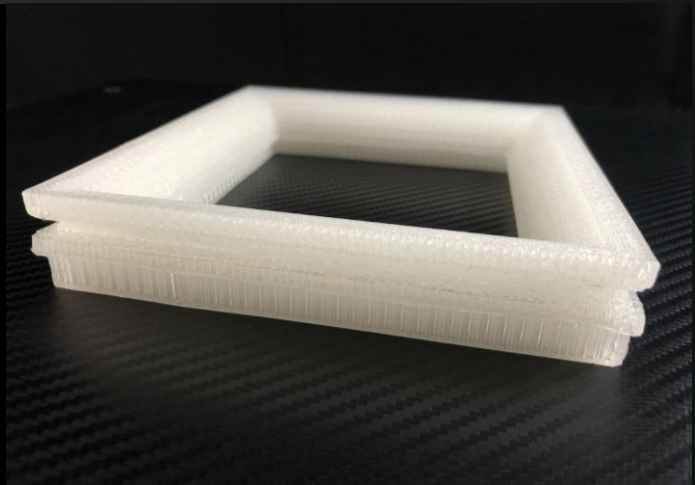


SanDraw's silicone with the high-precision printer can print fine engineering tools, suitable for sealing parts and industrial filters.

**Adapter**



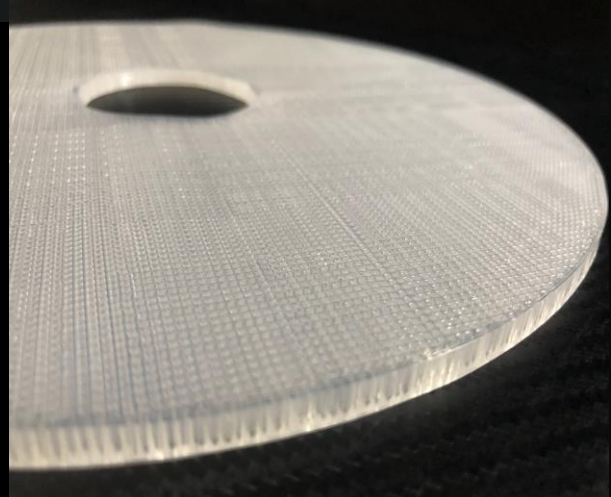
**Custom 6"\*6" seal**



**Water seal**



**Custom Filter**

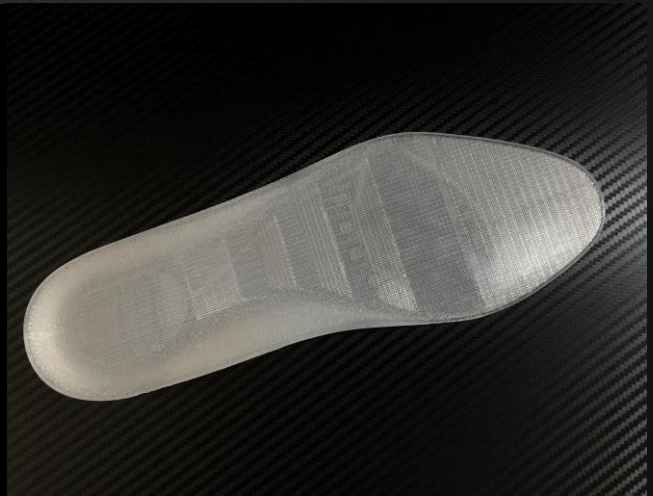


San Draw silicones are known for their excellent strength, flexible touch, and bio-compatible properties, with high flexibility, bringing more freedom of print experience.

**Textured Pad**



**Insole**



**Badge Cover**



**Eye mask**





[info@sandraw.com](mailto:info@sandraw.com)

