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TAPS Ultrafast 3D Printer

End Parts Productivity Tool

Open the era of
3D printing large-scale
Manufacturing 2.0

3DZ

Print the Future

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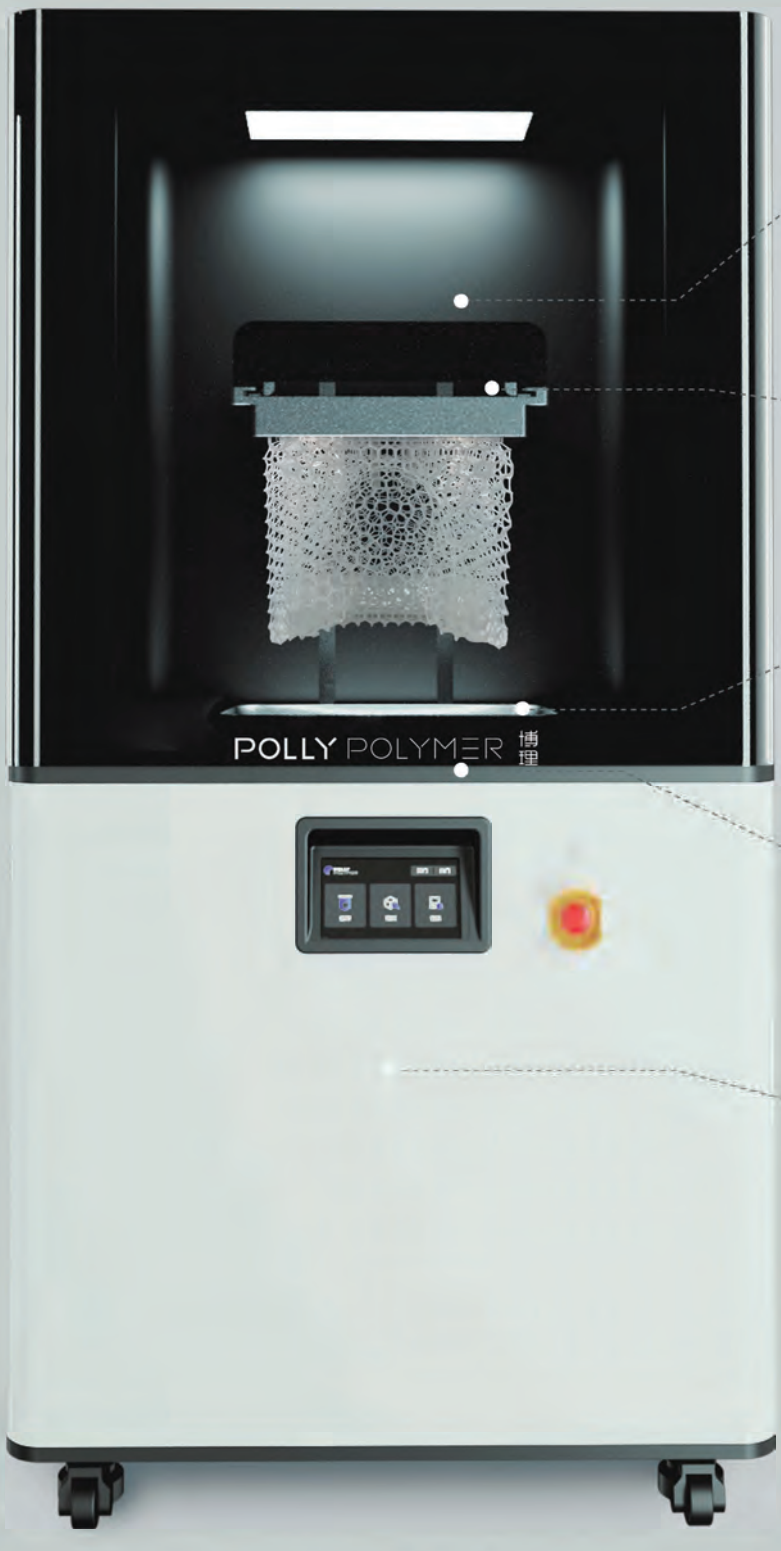

COLLABORATIVE INTELLIGENT SENSOR NETWORK

AI INTELLIGENT ADAPTIVE CONTROL SYSTEM

TANK CONSTANT TEMPERATURE SYSTEM

HALS LOW RELEASE FORCE SEPARATION TECHNOLOGY

DISTORTION COMPENSATION AND DYNAMIC LIGHT INTENSITY CONTROL SYSTEM

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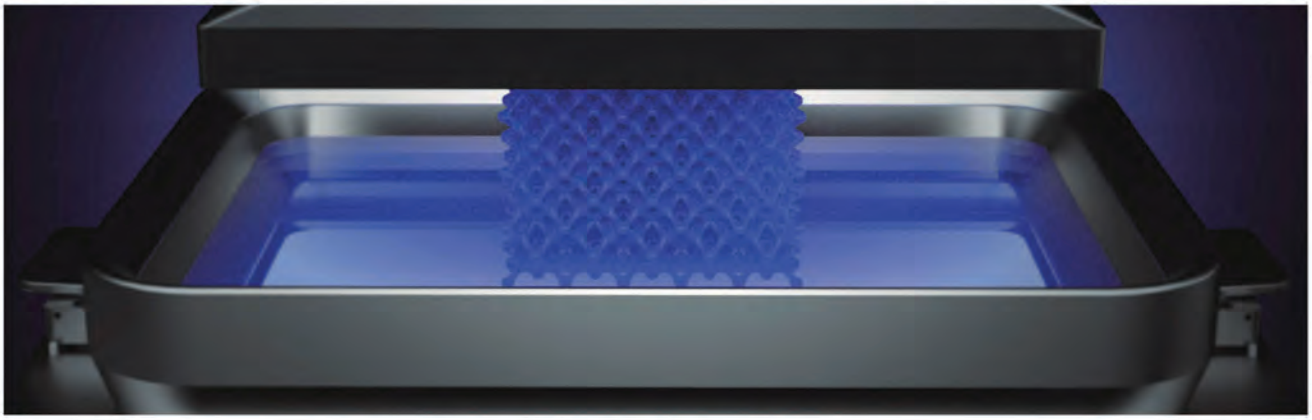
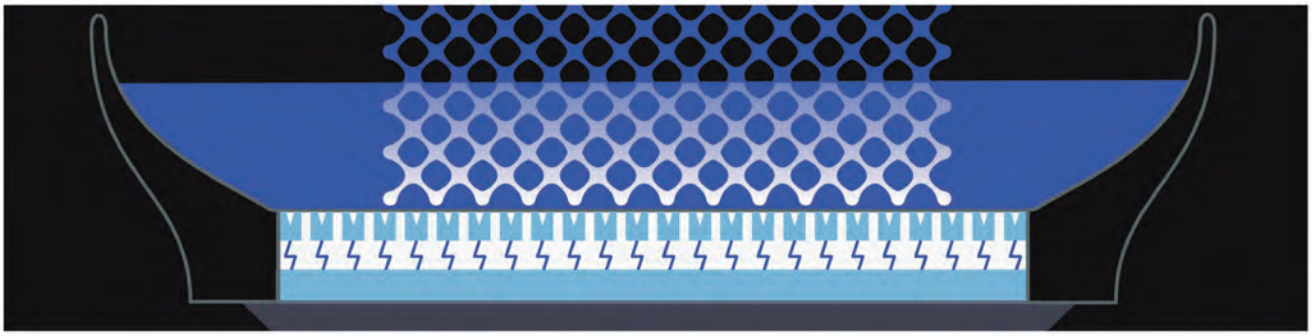
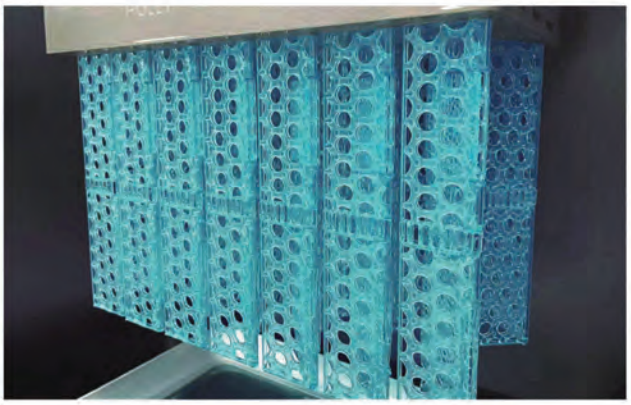
HALS LOW RELEASE FORCE SEPARATION TECHNOLOGY

Equipped with the original HALS (Hindered Asynchronous Light Synthesis), an ultra-fast printing technology that accelerates model separation and improves printing speed. It addresses issues of model deformation and defects during the printing process, enhancing the precision and quality of printed models.

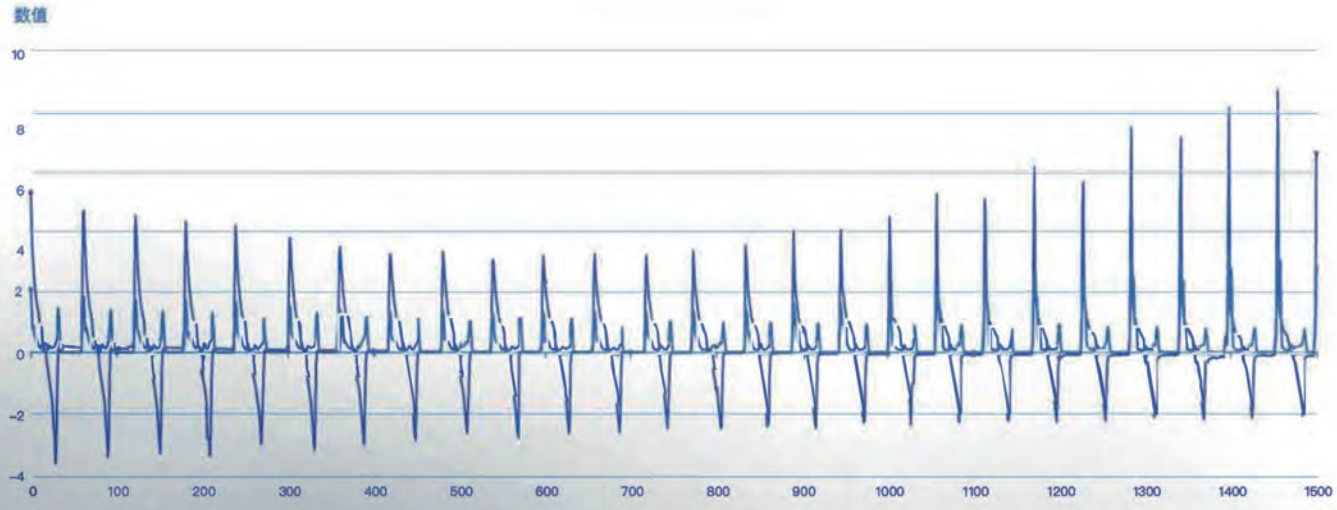






AI INTELLIGENT ADAPTIVE CONTROL SYSTEM

The deep neural network system built on the basis of mass reinforcement learning imitates the way of thinking of the human brain, and dynamically adjusts the material characteristics to achieve a balance between quality and speed.



DISTORTION COMPENSATION AND DYNAMIC LIGHT INTENSITY CONTROL SYSTEM

It adopts a professional ultra-high-resolution projection optical engine with a digital distortion compensation technology to clear optical distortion, and uses pixel-level static mask technology to ensure the uniformity of the engine. Uses the boundary gradient optimization to minimize the pixel texture in the XY direction and the step texture in the Z direction.

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TAPS TECHNICAL PARAMETER

Device parameters	TAPS400/400P
Build Volume	384*216*400mm
Resolution Accuracy	100μm
separation technology	HALS Ultrafast
pixel size	4K
Resin	photosensitive resin
Light System	UV
Size	995*745*2102mm
Supported file formats	stl,obj,tps
Supported Software	PollyPrint

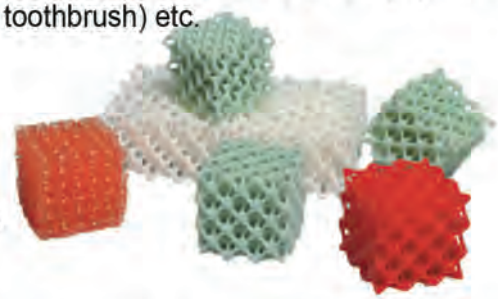
HIGH-PERFORMANCE 3D PRINTING MATERIALS

According to the scope of material application, it is mainly divided into general materials, engineering materials, medical special and casting materials, etc., and the application fields cover industry, automobile, cultural and creative, dental, sports protection (neck protector, ski equipment safety protection firmware, etc.), consumer goods (shoes , toothbrush) etc.

General Purpose

SP10/MD10/MD20/MD30/MC10

Various models of general materials are often used in 3D printing of transparent models, hard shoe molds, try-on shoes, hand-made, crystal handicrafts, etc., and the materials have passed relevant safety tests.



Product No.	Tensile strength	Tensile modulus	Elongation at break	Impact strength	Heat distortion temperature
SP10	3 MPa	--	120%	--	--
MD10	46 MPa	1800 MPa	15%	48 J/M	55 ℃
MD20	44 MPa	1700 MPa	5%	20 J/M	60 ℃
MD30	45 MPa	1600 MPa	10%	30 J/M	58 ℃
MC10	50 MPa	2100 MPa	15%	46 J/M	55 ℃
EP10	52 MPa	2100 MPa	15%	50 J/M	50 ℃
EP20	46 MPa	2200 MPa	13%	45 J/M	53 ℃
EP30	40 MPa	1500 MPa	50%	50 J/M	55 ℃
ESD10	50 MPa	2100 MPa	10%	52 J/M	52 ℃

Casting Material

CAST 10

The material has good precision and surface smoothness, whith guarantee the molding quality of the product, and is suitable for various dipping operations. The materiai con be 100% vaporized, and it Is widely used in precision casting of jewelry, industrial Qarts, etc. Effectively shorten the construction period, improve efficiency, and reduce product manufacturing costs.

Product No.	Tensile strength	Tensile modulus	Elongation at break	Impact strength	Heat distortion temperature
GAST10	10 MPa	800 MPa	1.5%	20 J/M	--

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HIGH-PERFORMANCE 3D PRINTING MATERIALS

Engineering Resins

RP10/REM70

Various models of general materials are often used in 3D printing of transparent models, hard shoe molds, try-on shoes, hand-made, crystal handcrafts, etc., and the materials have passed relevant safety tests.

Product No.	Tensile strength	Tensile modulus	Elongation at break	Impact strength	Heat distortion temperature
RP10	30 MPa	1300 MPa	60%	80 J/M	55 °C
REM70	40 MPa	1500 MPa	100%	50 J/M	70 °C

Dental Resins

MT10/DG10/DT10

Medical special series materials have higher molding precision and strength, and meet the relevant safety standards of medical treatment.

Product No.	Tensile strength	Tensile modulus	Elongation at break	Impact strength	Heat distortion temperature
DG20	40 MPa	2000 MPa	15%	50 J/M	46 °C
HD80	53 MPa	2200 MPa	3 %	25 J/M	73 °C
MT10	--	--	150%	--	--

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