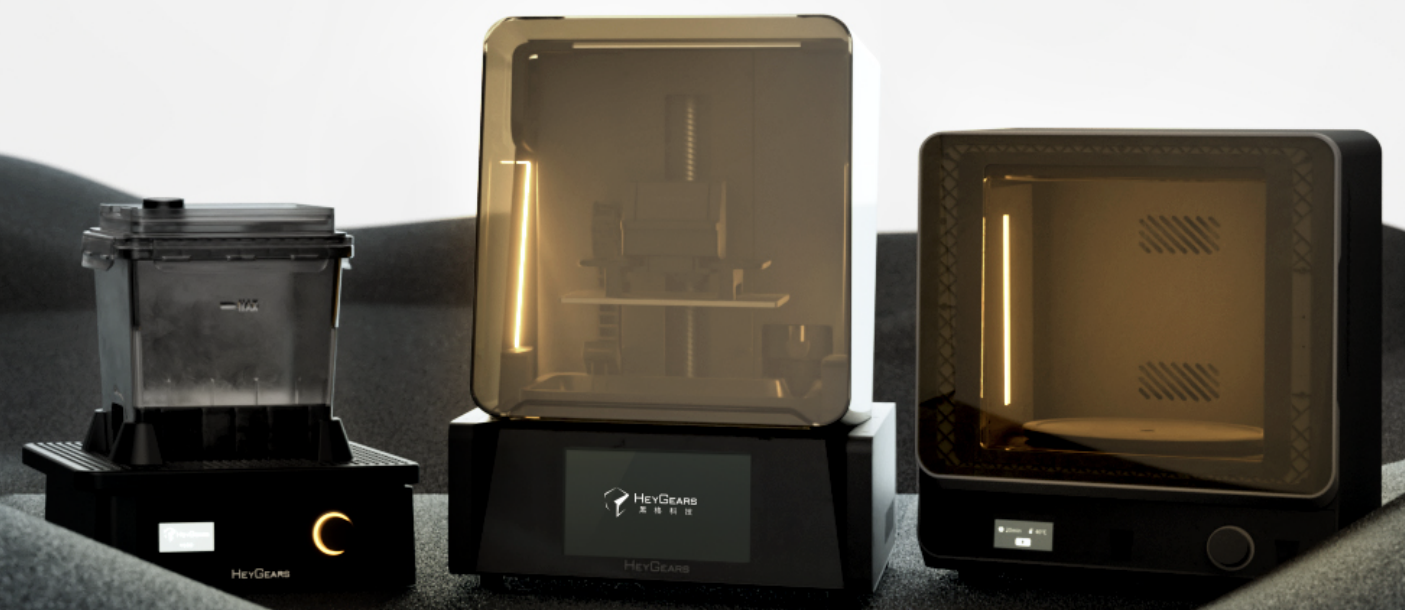




ULTRACRAFT Reflex


Shape Your Ideas with a One-stop Production Platform




HeyGears was founded in 2015 as an innovation-driven company, devoted to providing digital manufacturing solutions in various industries. The company bases its core competencies in 3D printing, software development, materials, and big-data handling. We have a global presence with teams across North America, Latin America, Europe, Middle East, and Asia Pacific.

HeyGears believes in a product development process rooted deeply into vertical applications, and our vision goes beyond just 3D printing technology. We strive to create vertically integrated solutions through the solid establishment of hardware, software, material, and service platforms, delivering our goal to bring advanced technology into daily life.

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HeyGear Reflex Online Store
<https://store.heygears.com/>



Follow us @HeyGears

ULTRACRAFT Reflex

Designed for a worry-free 3D printing process. Shape your ideas with a printer powered by AI algorithms and automated features to easily achieve commercial grade final results.

01 One-stop
Production Platform

03 Worry-free
& Easy Operation

05 Material Engineered to
Exceed Expectations

02 Delivering Injection
Molded-like Final Results

04 Maximized
Printing Success

06 End to End Intelligent
& Streamlined Production

07 Clean And Efficient Washing

09 Support & Services

08 Enhanced Curing for
Maximized Results

10 Specifications

C O N T E N T S

01 ONE-STOP PRODUCTION PLATFORM

The UltraCraft Reflex Combo is a complete results orientated 3D printing system that interconnects printing, washing and curing with an extensive material library to make creation simple.



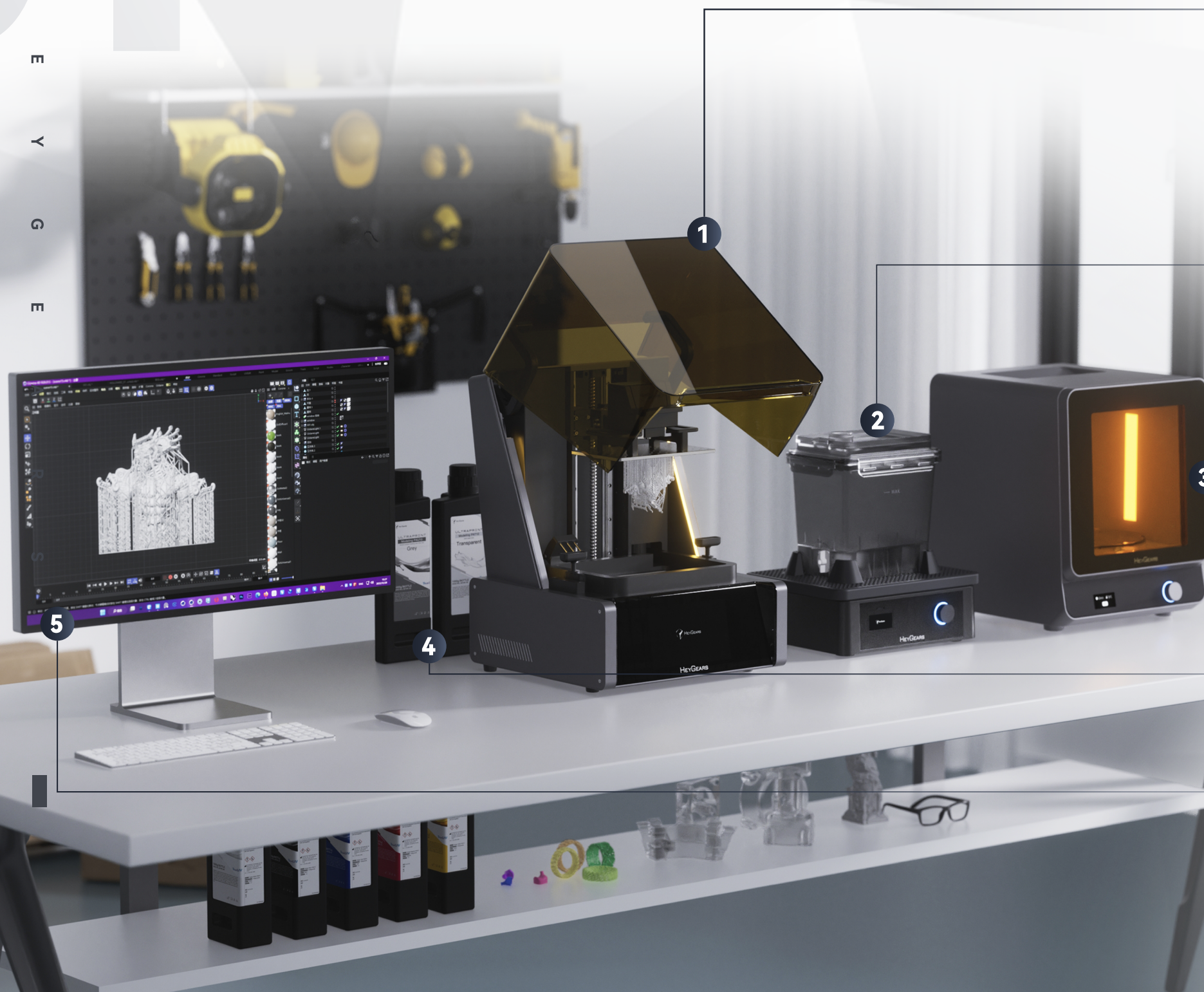
Easy to Use

An intelligent process from print, to wash, to cure, using interconnected print strategies, makes it easy bring your ideas to reality.



High-quality Printed Results

Get the results you want through convenient user focused software, industrial grade hardware and high performance materials.



1 ULTRACRAFT Reflex

3D printer with an easy and automated setup with integrated TrueUV technology to get the best results for your print.

Build Volume: 192 x 121 x 220 mm (7.55 x 4.76 x 8.66 in)

LCD Screen: 5760 x 3600 (6K)

XY Native Pixel: 33 μ m

Layer Height: 25-150 μ m

Print Speed : 27 mm/h (with a layer height of 50 μ m)

2 ULTRACRAFT Wash

Unique vibration based washing for deep cleaning while minimizing physical contact with the resin.

Washing Volume: 198 x 123 x 150 mm (7.79 x 4.84 x 5.9 in)

Washing Agent: Ethanol ($\geq 95\%$)

Washing Time: ≤ 4 min

3 ULTRACRAFT Cure

Dual wavelength curing for enhanced strength and long term stability.

Curing Volume: 198 x 124 x 220 mm (7.79 x 4.88 x 8.66 in)

Curing Time: ≤ 60 min

Dimensions: 370 x 387 x 456 mm (14.56 x 15.23 x 17.95 in)

4 ULTRAPRINT

Materials designed to meet the performance needs of multiple usage scenarios including professional, creative, and commercial projects.

5 Blueprint

Intelligent pre-processing and print management tool for all of your 3D printing needs.

02 DELIVERING INJECTION MOLDED-LIKE FINAL RESULTS

Precise & accurate, from prototyping to final product. Achieve results with **90.6%** restoration accuracy.

- Next-level Surface Quality
- Reliable & Consistent Productivity



Industrial-grade Hardware

Precise Z-axis Ball Screw

- Smooth movement with low resistance
- Repeated position accuracy within ± 0.05 mm

TrueUV Light Source

- High-energy UV wavelength light
- Higher polymer cross linking rate*
- Unique customized lens for balanced light distribution

6K Screen

- XY Native Pixel Resolution: 33 μ m
- Size: 198 × 124 mm
- Resolution: 5760 × 3600

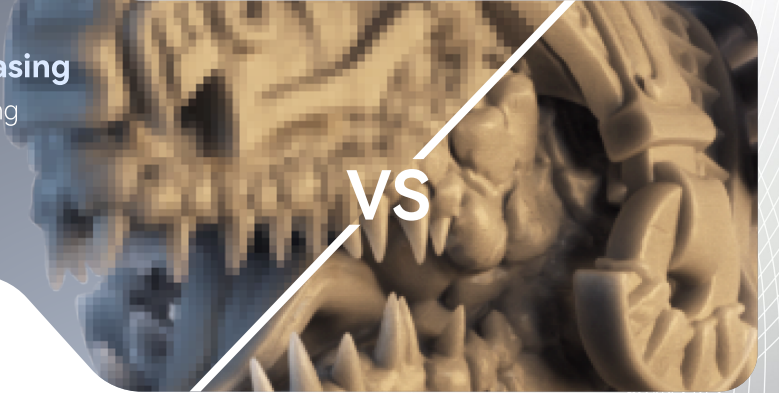
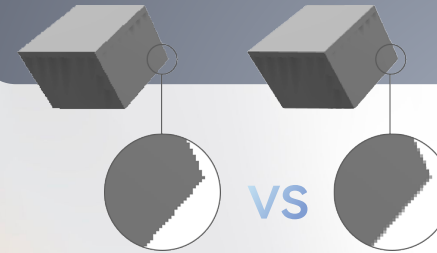


Algorithm Enhanced Results

1

Three-dimensional Anti-aliasing

Print layer image & z-axis anti-aliasing for smoother print texture



2

WDR fusion+

Multi-layer analysis and compensation reduces peeling force. Balanced exposure maintains model details and increases printing success.



3

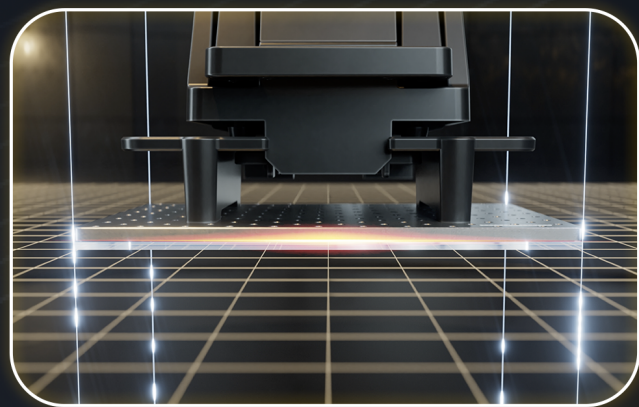
PICK Recognition

PICK identifies the specific areas of each layer that belong to the print model or support structures. It optimizes the exposure levels for stronger, thinner supports and easier removal.



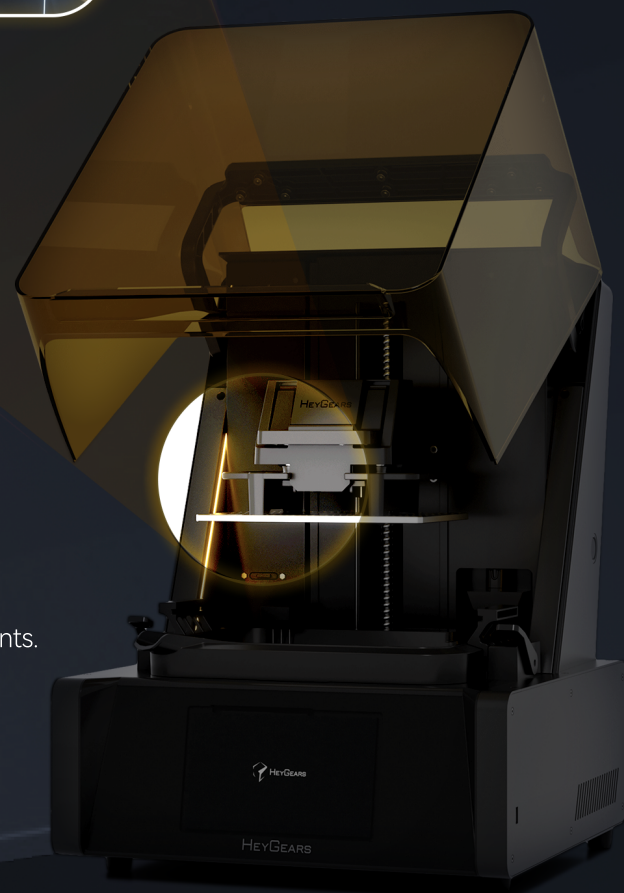
03 WORRY-FREE & EASY OPERATION

Ready to print within minutes.



Easy & Accurate Printing Setup

- **Auto-zeroing:**
Start from the right position.
- **Intelligent Assisted Leveling:**
Get precise feedback for correct adjustments.

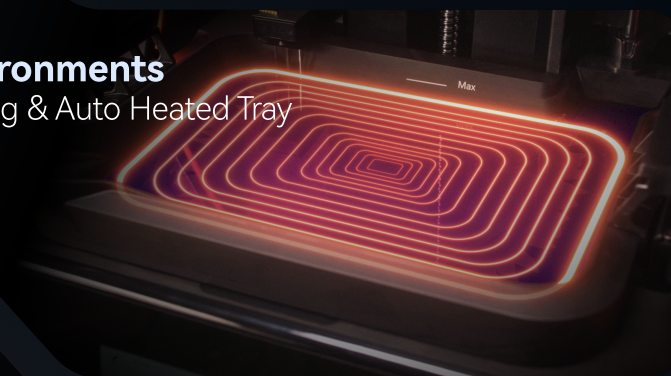


Real-time monitoring the printing process and notifications

1

Print in Cold Environments

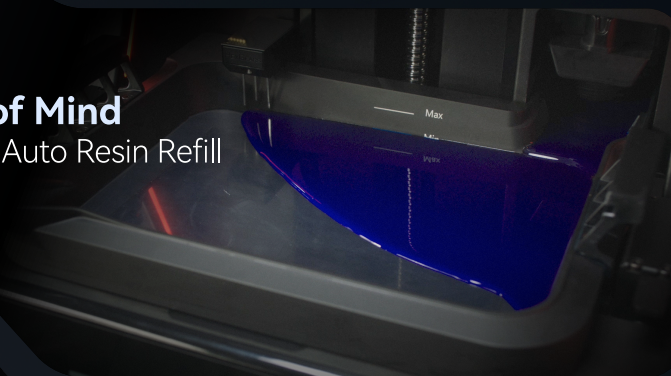
Temperature Monitoring & Auto Heated Tray



2

Print with Peace of Mind

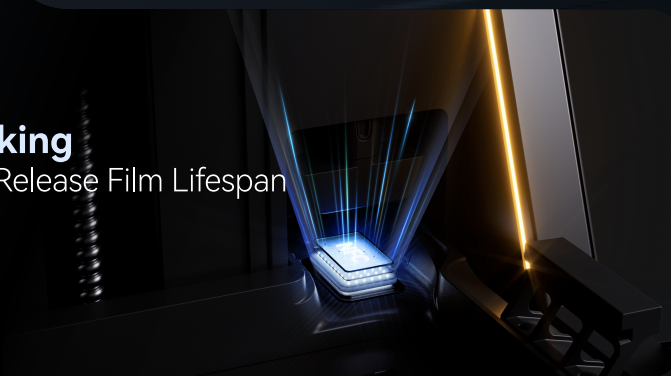
Resin Level Detector & Auto Resin Refill



3

Smart Usage Tracking

NFC Detector to Track Release Film Lifespan

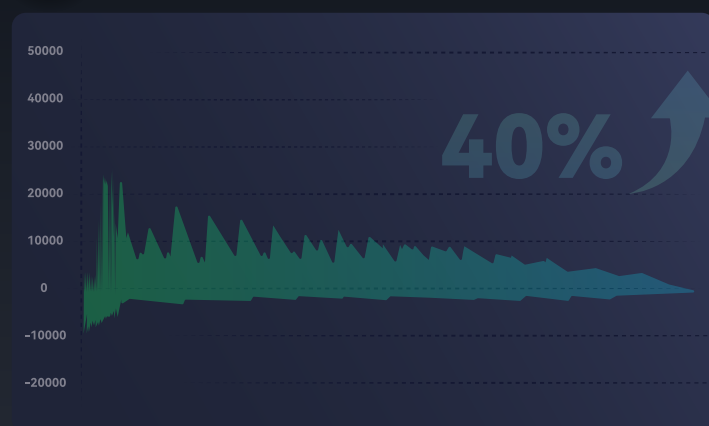


04 MAXIMIZED PRINTING SUCCESS

- Layer by layer peeling force analysis
- SmartAI peeling force monitoring and management optimizes the peeling Force required for each layer and allows accelerated printing by up to 40%*
- Whilst also increasing print success rates

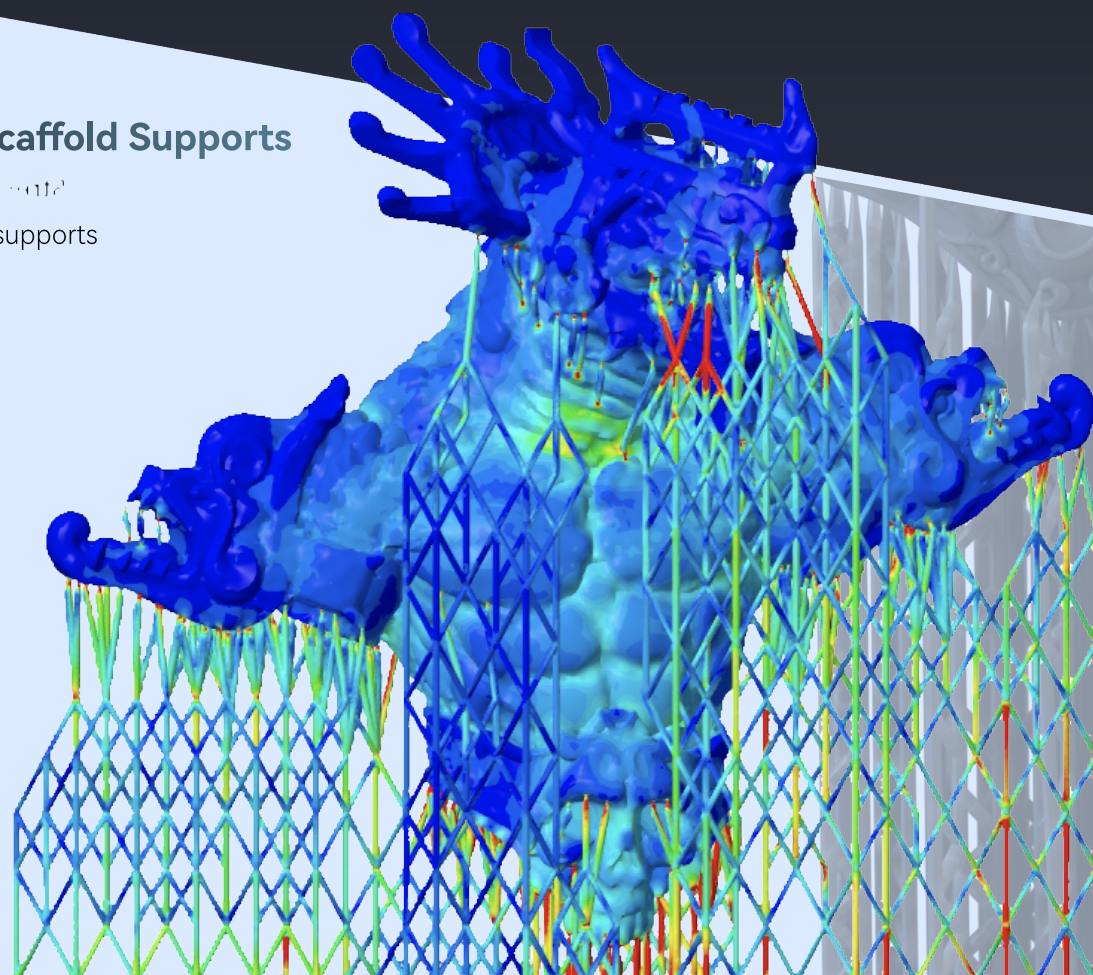
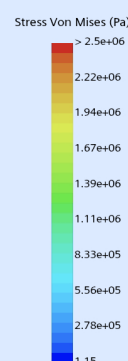


Accelerated Printing by Up to 40%



Easy-to-use Scaffold Supports

- Reinforced stronger supports
- Easy to remove
- Large model friendly



Zero Parameter Settings Required

- New level of 3D printing strategies based on printing simulations across multiple project types
- Pre-set and ready to go
- Low learning curve makes 3D printing a breeze

L3 PRINTING STRATEGY

L3 printing process based on the resin, printer, layer thickness, environment, structure, model, and application parameters

L2 PRINTING STRATEGY

L2 printing process regarding the resin, printer and layer thickness parameters

L1 PRINTING STRATEGY

L1 printing process regarding to the resin properties only

*When compared with other resin 3D printers without this technology.

05 MATERIALS ENGINEERED TO EXCEED EXPECTATIONS

HeyGears self-developed UltraPrint 3D printing resins are designed to meet high performance needs across multiple usage scenarios and print types.



Material Toughness Test

6 Month Aging Test

ULTRAPRINT-MODELING PAU10

ABS-like long lasting strength, toughness and flexibility



Model printed using other transparent resin

Model printed using HeyGears PAT10 (transparent resin)

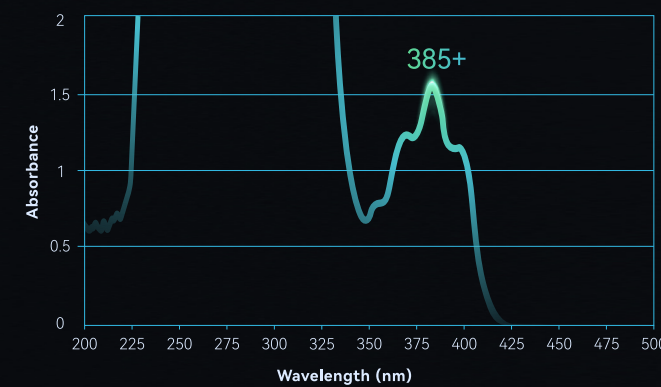
ULTRAPRINT-MODELING PAT10

88% transparency & yellowing resistant



ULTRAPRINT-DESIGN CMYK

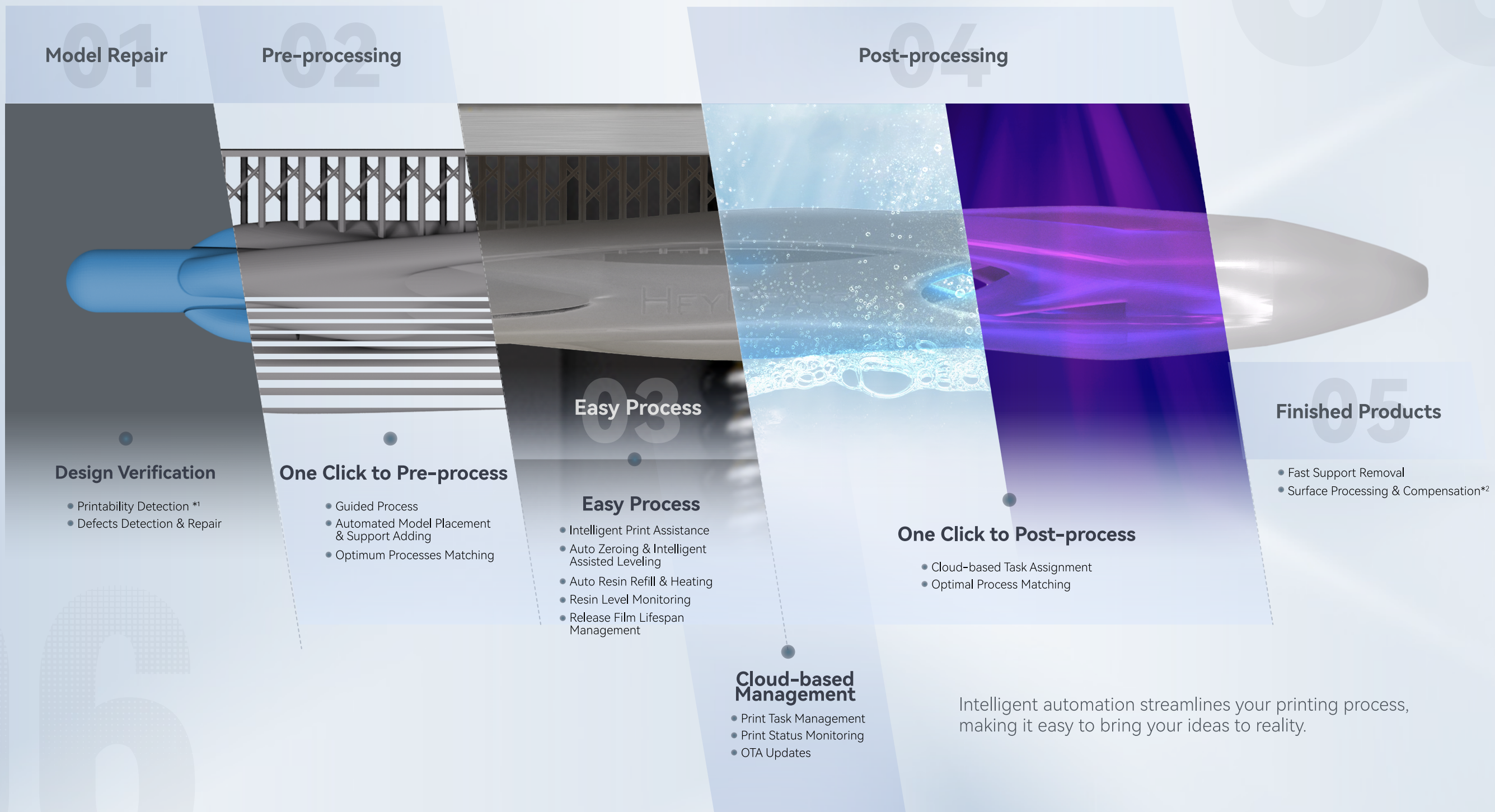
Mixable materials for a full color spectrum



TRUE UV

UltraPrint resins are formulated to maximize their material properties when used with the TrueUV light source of the UltraCraft Reflex. The high energy UV wavelengths cure the resin material more effectively due to greater energy transmission.

06 END-to-END INTELLIGENT AND STREAMLINED PRODUCTION



^{*1} Detects the printability of structures such as inverse fillet and thin walls.
^{*2} This feature will be available after you purchase on HeyGears Blueprint.

07 CLEAN AND EFFICIENT WASHING

15% More Cleaning Efficiency*¹

Every liter of cleaning agent can wash up to 0.4m² of printed surface area



ULTRACRAFT Wash

1.5 Times More Effective Washing*²

Unique vibration based deep cleaning

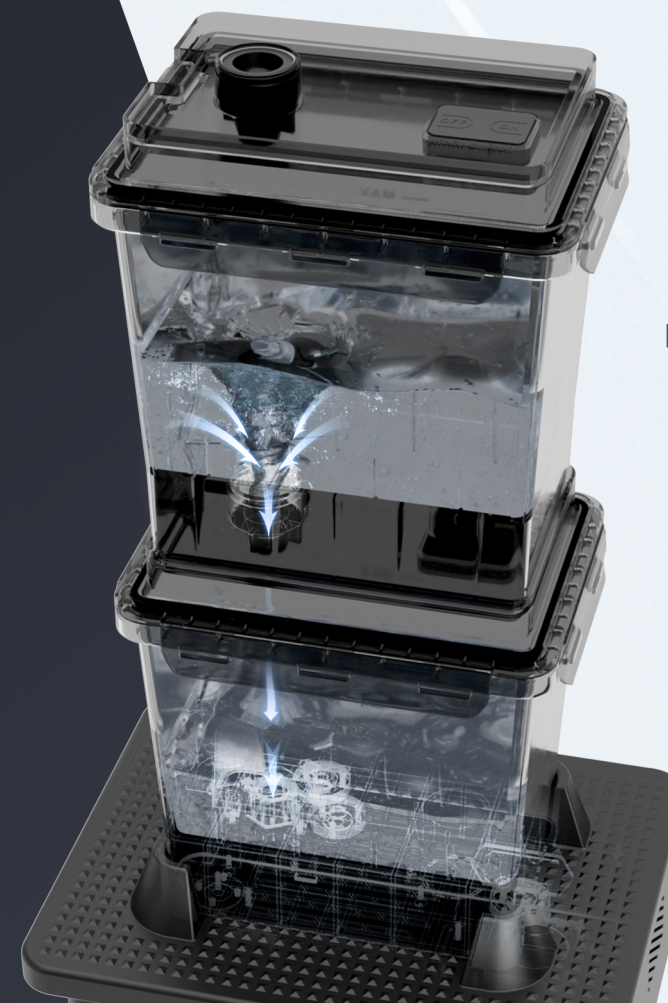
Linked with L3 Printing Strategy

Linked with L3 printing strategy for auto-adjusted timing settings
0 time adjustments needed



Minimal Contact with Resin

No need to touch unwashed prints, one step easy transfer of used cleaning agent to second wash box.



*Compared to manual washing

*²Compared to ultrasonic wash, cleaning agent efficiency increased by 15%. No need to fully cover the print.

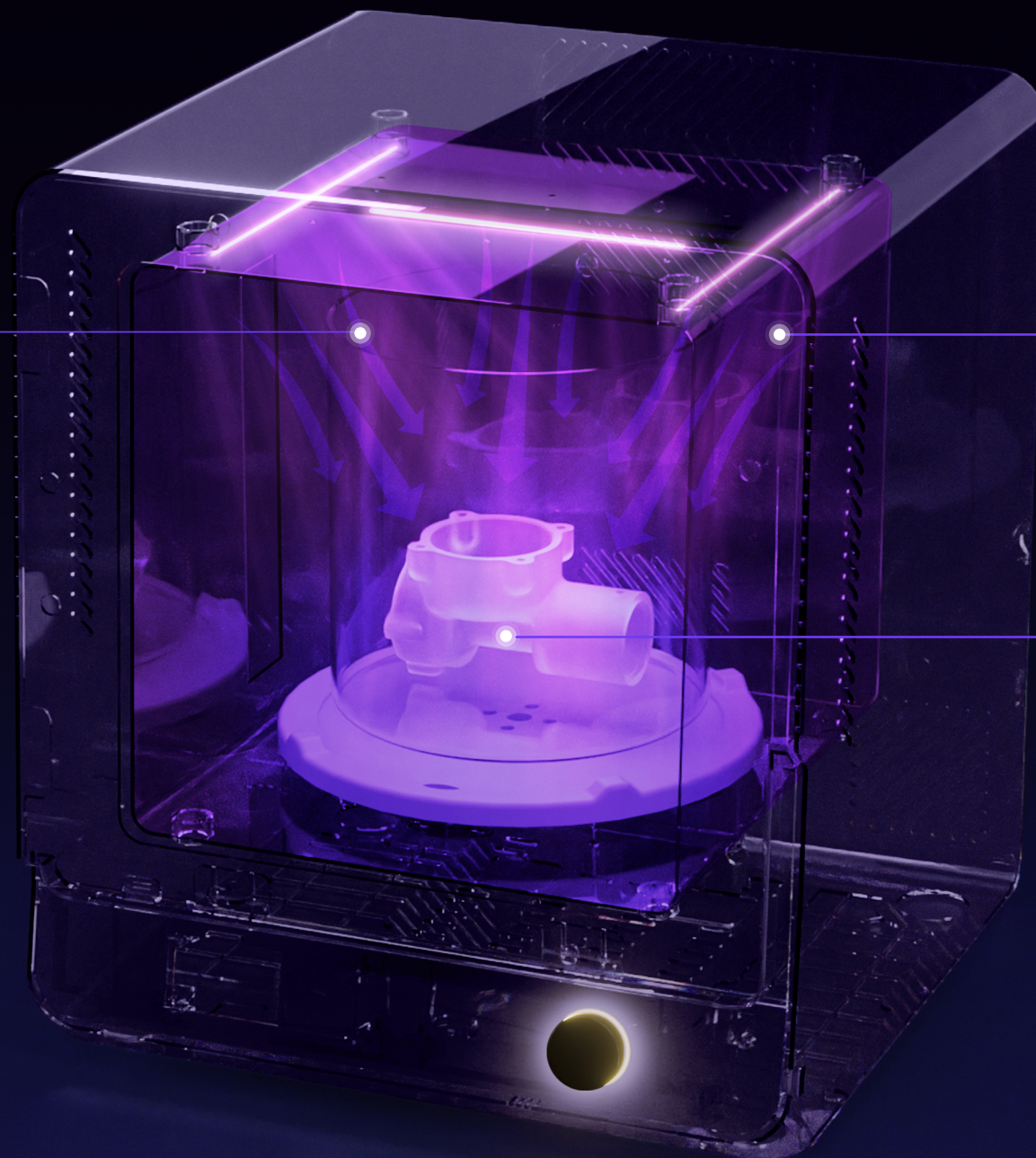
08 ENHANCED CURING FOR MAXIMIZED RESULTS

Fully Cured From Every Angle

- 360° even curing across the entire cabinet
- Ensures stable precision and surface details

Extra Heating Function

Speed up surface varnishing and paint finishing



Dual UV Wavelength Final Curing

- 365 nm for model surface curing
- 405 nm for model internal curing

Two Curing Types, Choose Based On Your Needs

- High Performance Cure: for greater strength
- Rapid Cure: for greater clarity of details

Auto-calculated Curing

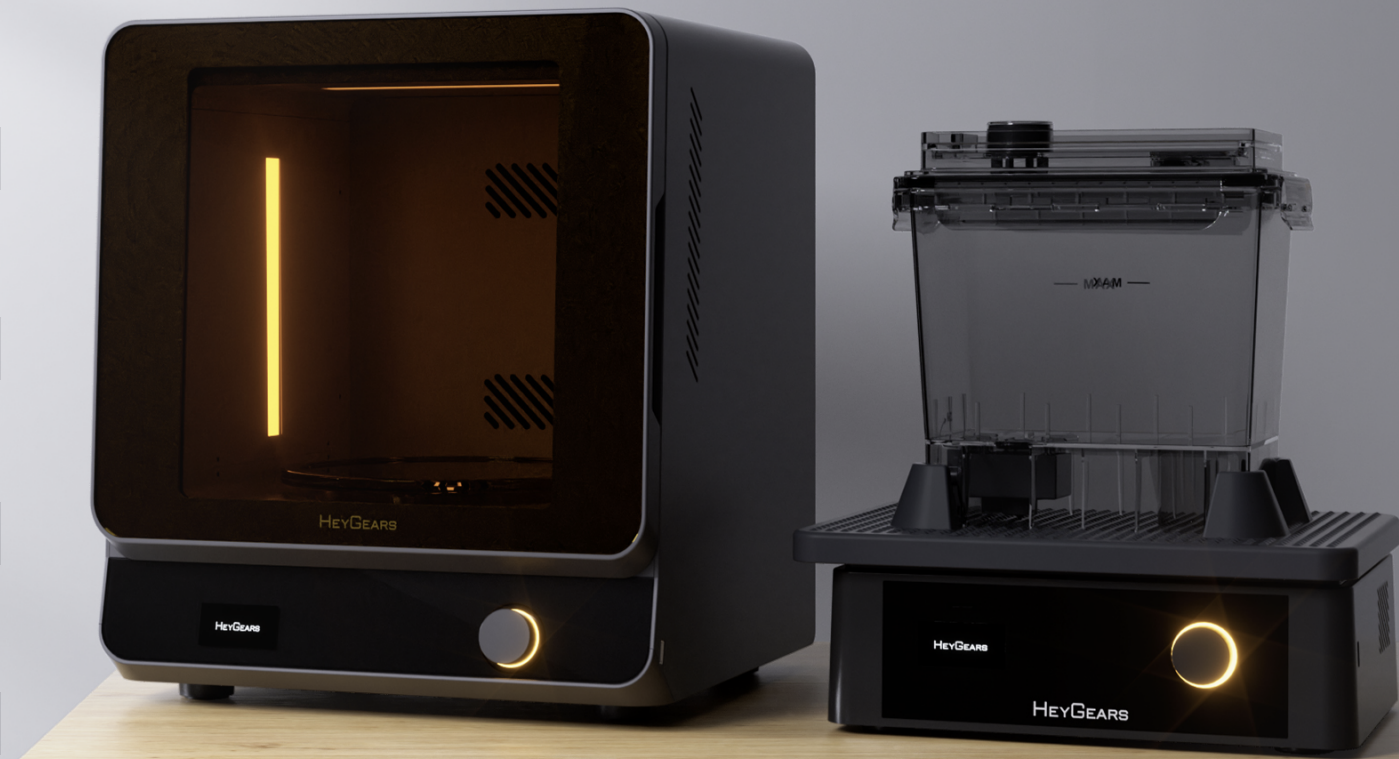
Linked with L3 printing strategy for auto-adjusted timing and temperature settings

ULTRACRAFT Cure

ULTRACRAFT

ULTRACRAFT CURE SPECS

Curing Time	≤60 min
Curing Volume	198 x 124 x 220 mm 7.79 x 4.88 x 8.66 in
UV Wavelength	405 + 365 nm
Max Curing Temperature	60-80 °C
Connectivity	USB Drive; Wi-Fi
Dimensions	370 x 387 x 456 mm 14.56 x 15.23 x 17.95 in
Curing Time	12 kg / 26.46 lb
Curing Volume	100-120 V AC; 200-240 V AC
UV Wavelength	350 W
UI Language	English; Chinese



ULTRACRAFT WASH SPECS

Washing Volume	198 x 123 x 150 mm 7.79 x 4.84 x 5.9 in
Washing Agent	Ethanol (≥95%)
Washing Time	≤4 min
Connectivity	USB Drive; Wi-Fi
Dimensions	351 x 272 x 168 mm 13.8 x 10.7 x 6.61 in
Weight	8 kg / 17.6 lb
Voltage	100-240 V AC
Rated Power	80 W
UI Language	English; Chinese

09 SUPPORT & SERVICES



Equipment Usage Guidance

Quick Installation Guide
Technical Customer Service



Help Center

Technical Support
User Community



OTA Updates

Online updates software, firmware, and processes which improve the print quality and speed and enable compatibility with new print materials.



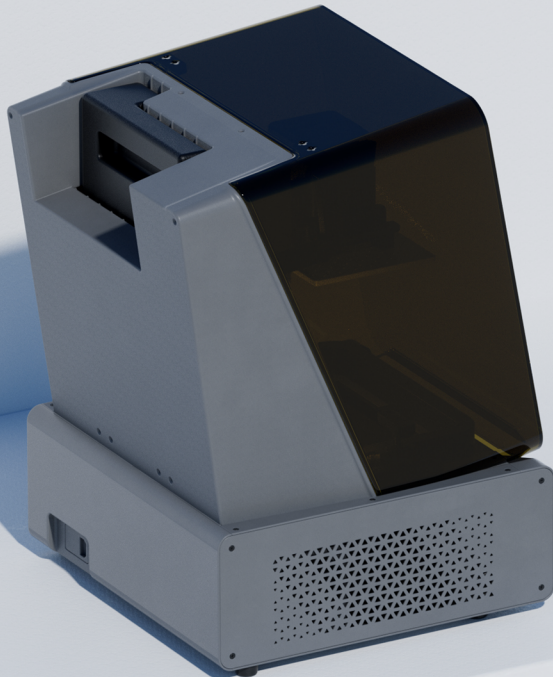
1-year

Warranty Period



Fast Response

Customer Service



10 SPECIFICATIONS

ULTRACRAFT REFLEX SPECS

Printing Technology	LCD
Build Volume	192 x 121 x 220 mm 7.22 x 4.76 x 8.66 in
Build Height	220 mm / 8.66 in
XY Native Pixel	33 μm
Layer Height	25 – 150 μm
Accuracy	±16 μm
Print Speed	27 mm/h (with a layer height of 50 μm)
Dimensions	400 x 420 x 573 mm / 15.7 x 16.5 x 22.5 in
Connectivity	USB Drive; Wi-Fi; Ethernet
Voltage	100-240 V AC, 50/60 Hz
Rated Power	350 W
UI Language	English; Chinese

