

# MD-400D

Faster High Temperature **IDEX** 3D Printer

« Ideal choice for 2 colors, 2 materials, and mass production printing »





# Ten Advantages

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5X Faster  
Print Speed



400\*400\*400mm  
Large Build Volume



IDEX System



Dual Colors &  
Dual Materials Mode



Duplication  
& Mirror Mode



350 degrees High  
Temperature  
Hot End



New Cooling  
System Design



Camera & WIFI



Free Leveling



Input Shaper



# 5X Speed, Breakthrough in Printing Efficiency Once Again

MD-400D printing speed up to 300mm/s, 10000mm/s<sup>2</sup> Peak acceleration, only 0.02s speed up from 0 to 300mm/s, achieving ultra-high efficiency printing.

**500mm/s**

Travel speed

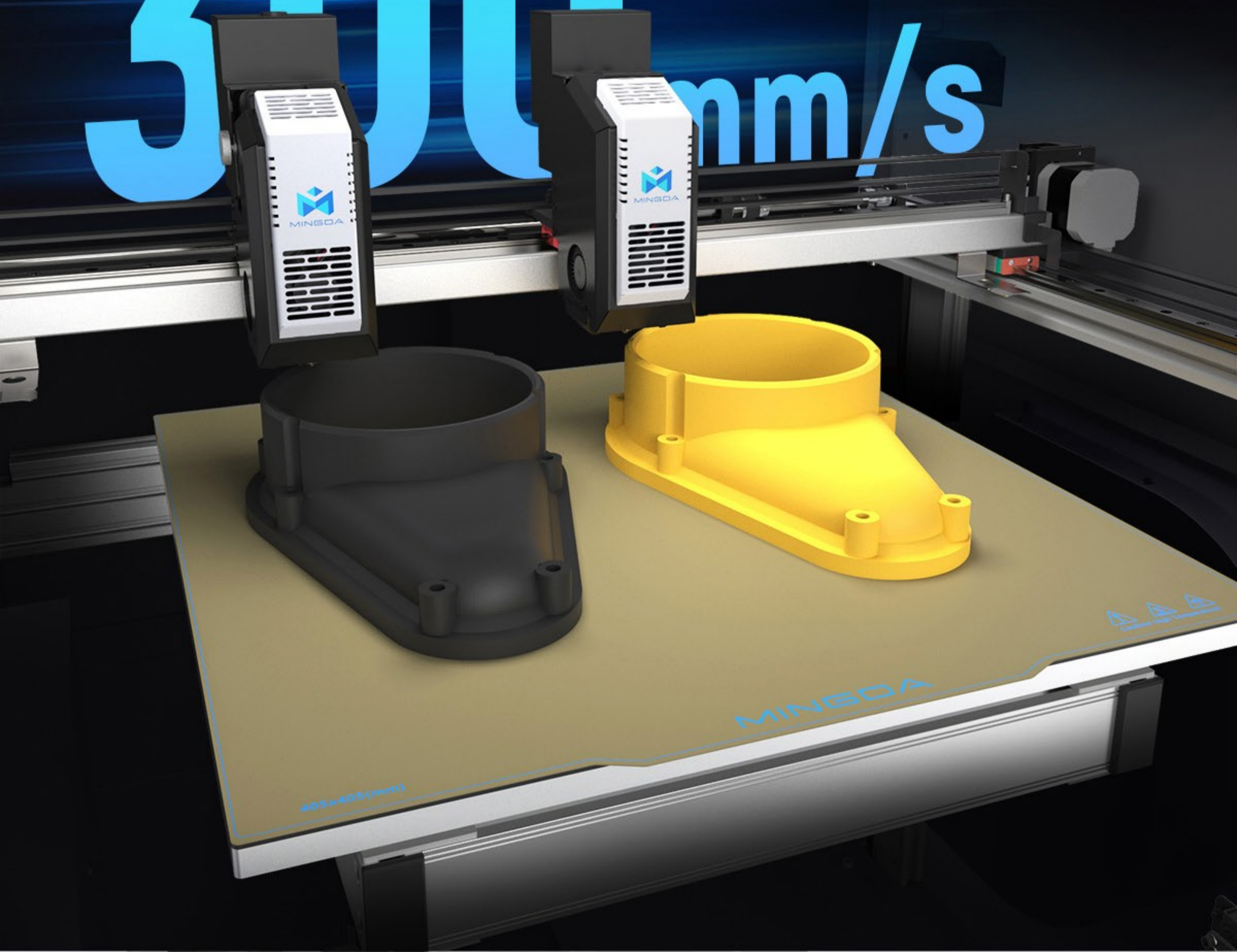
**300mm/s**

High-Speed

**40mm<sup>3</sup>/s**

Max Flow

# 300 mm/s







# Dual Extruders Working Independently

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The dual extruders on the MD-400D work independently and are not bundled, allowing for flexible and precise control. When using only one extruder, the other extruder is moved away from the print area to prevent unwanted filament overflow onto the printed object. However, the extruders can also work simultaneously and independently if higher productivity is required.



# Bike Helmet Case Sharing

Filament

**PLA-HF + PVA**

Model size

**266\*210\*130mm**

Speed

**250mm/s**

Printing time

**34 hours**



Compare other regular FDM large format printers on the market

Filament: **Ordinary PLA**

Printing Speed: **50mm/s**

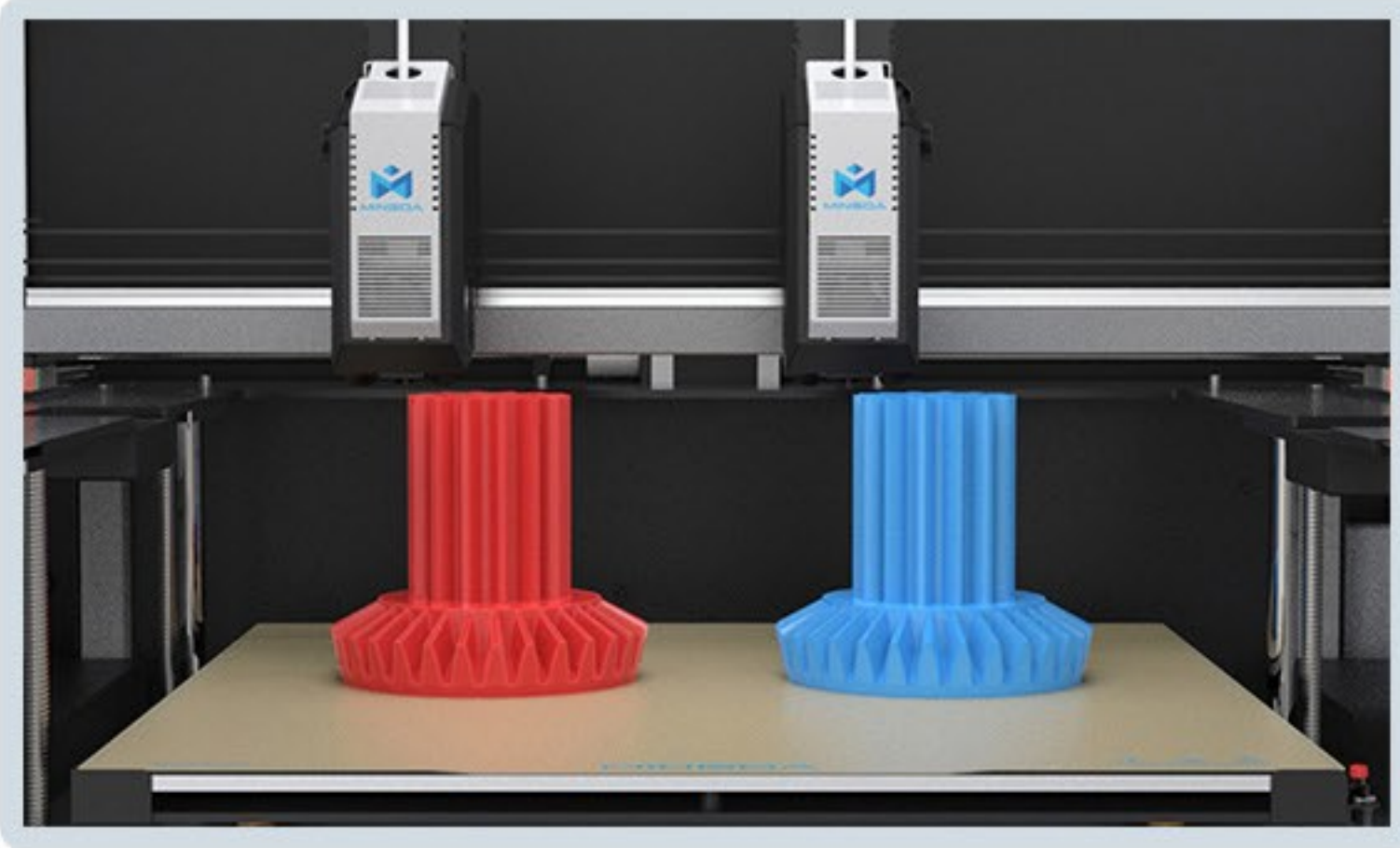
Printing Time: **4 days**

\* The experimental data is for reference only



# Four Printing Modes

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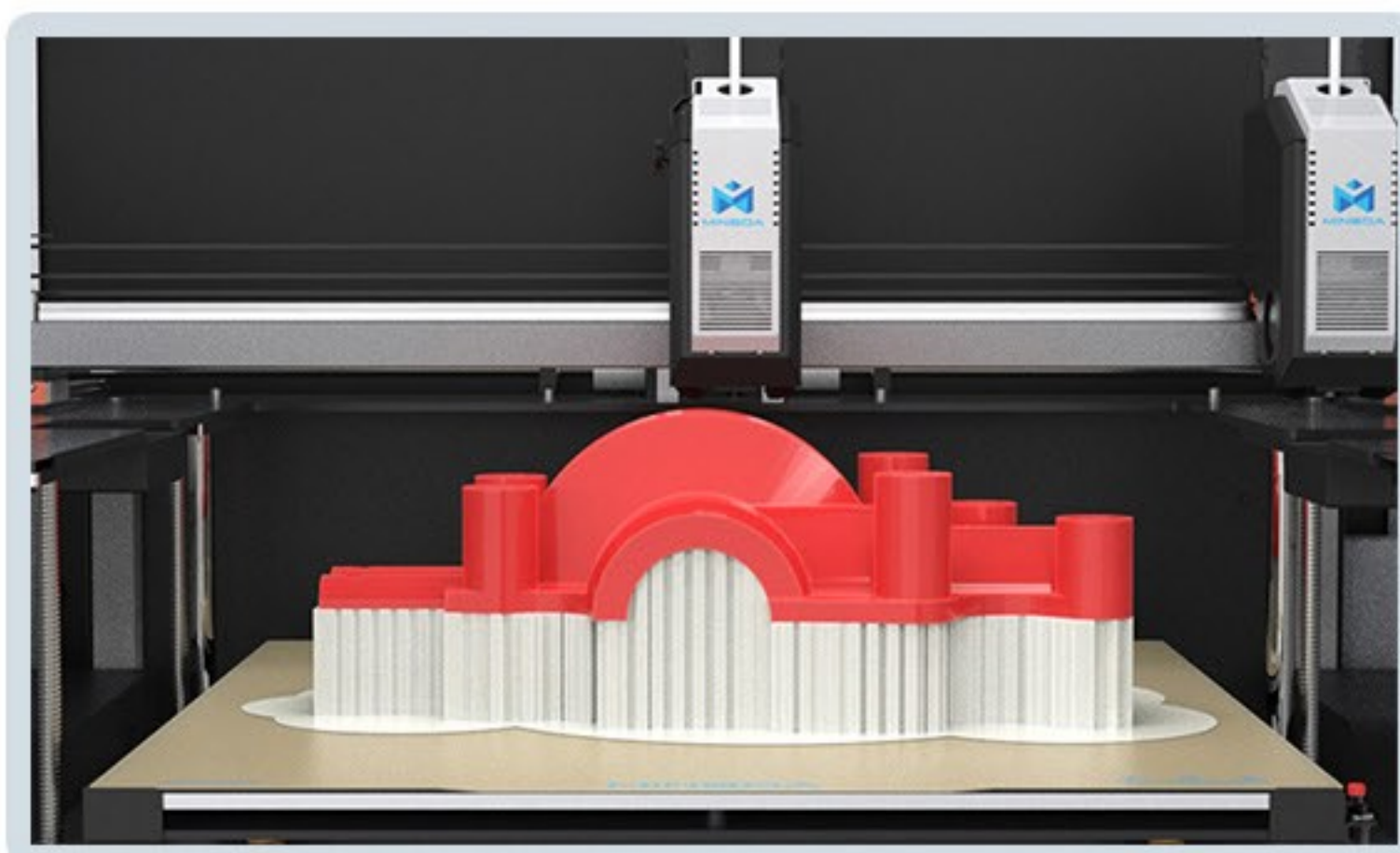
## Duplicate Mode

Equivalent to 2 printers working, achieve double productivity



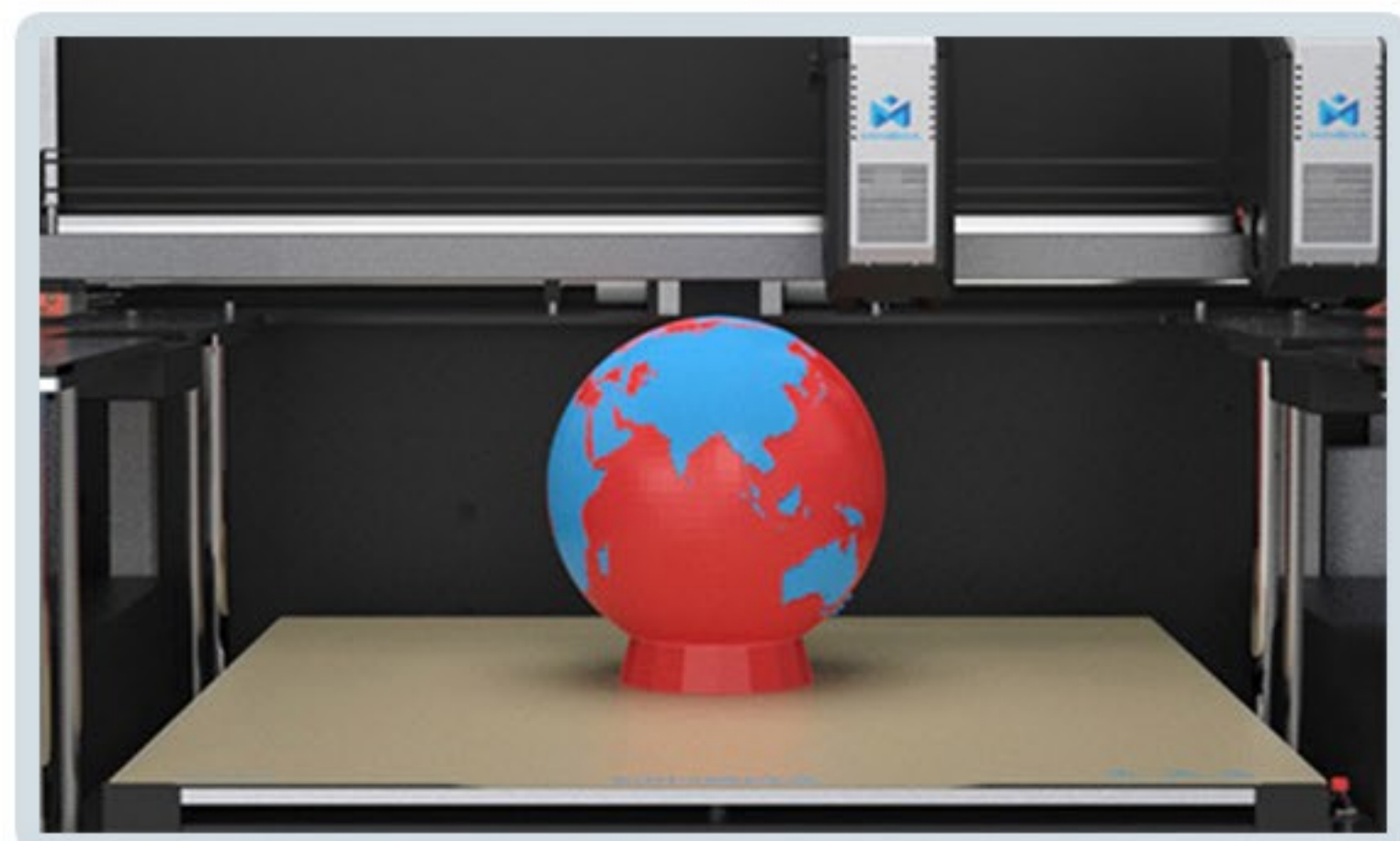
## Mirror Mode

Support printing symmetrical models while saving half the time



## Support Mode

Print complex structural models, complex models can also be printed smoothly and with high precision



## Dual-Color Mode

Allows printing different parts of a model in 2 colors



# 350°C High Temp Printing

All Metal Hotend and Excellent material Hardened Steel Nozzle printing temperature up to 350 degrees. With constant accuracy, it can print carbon fiber and engineering filaments for a long time. No need to replace the hot end when printing PLA, PETG and other filaments.

## HT

Higher than 250 degrees  
(High Temperature filaments)

## 350°C

PET -CF	PA -CF25
PET -GF	PA -GF25
ABS -GF25	HtPA -CF
ABS -CF20	HtPA -GF
PA -CF	S-Mulit
PA -GF	S-HtPA

## N

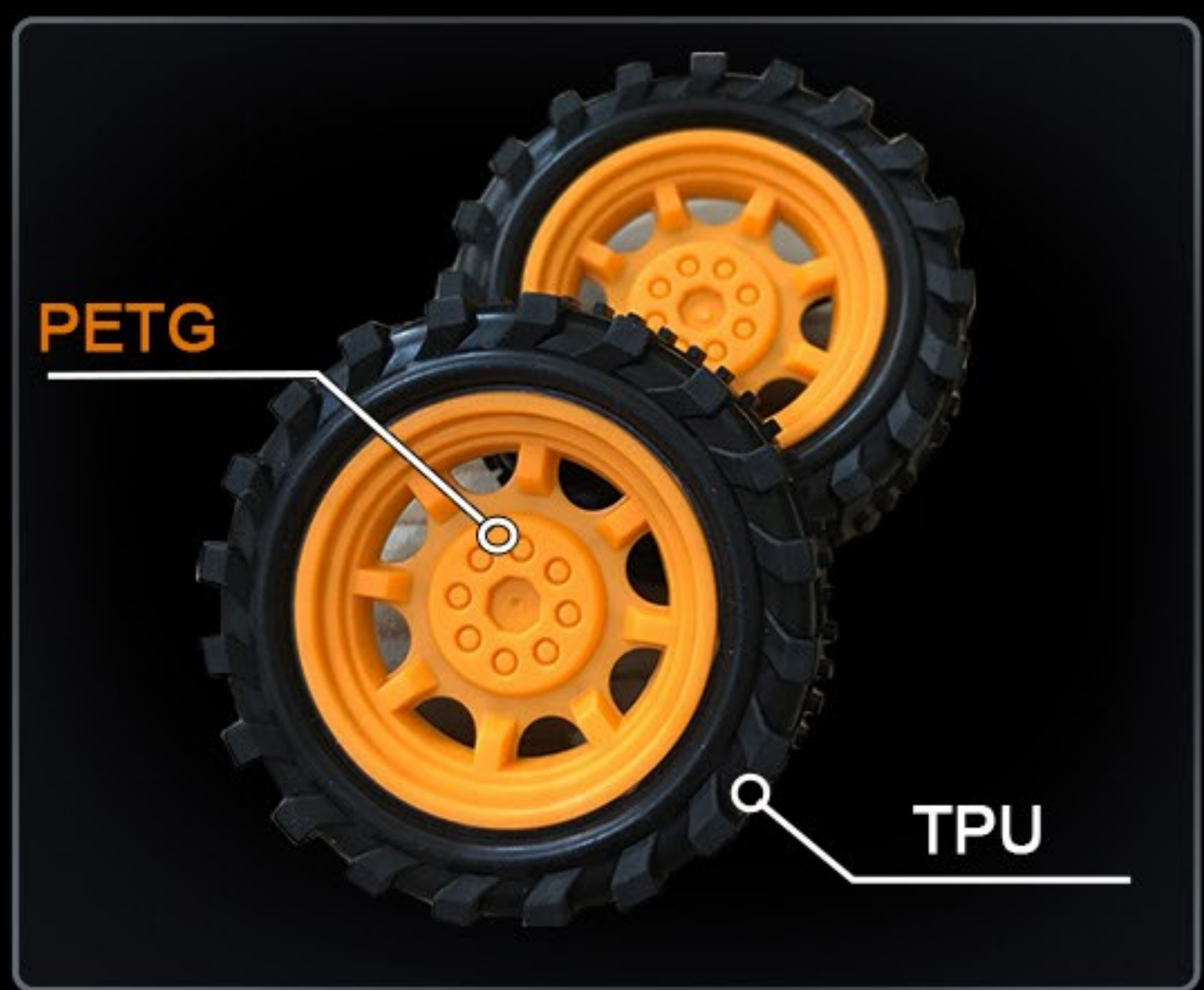
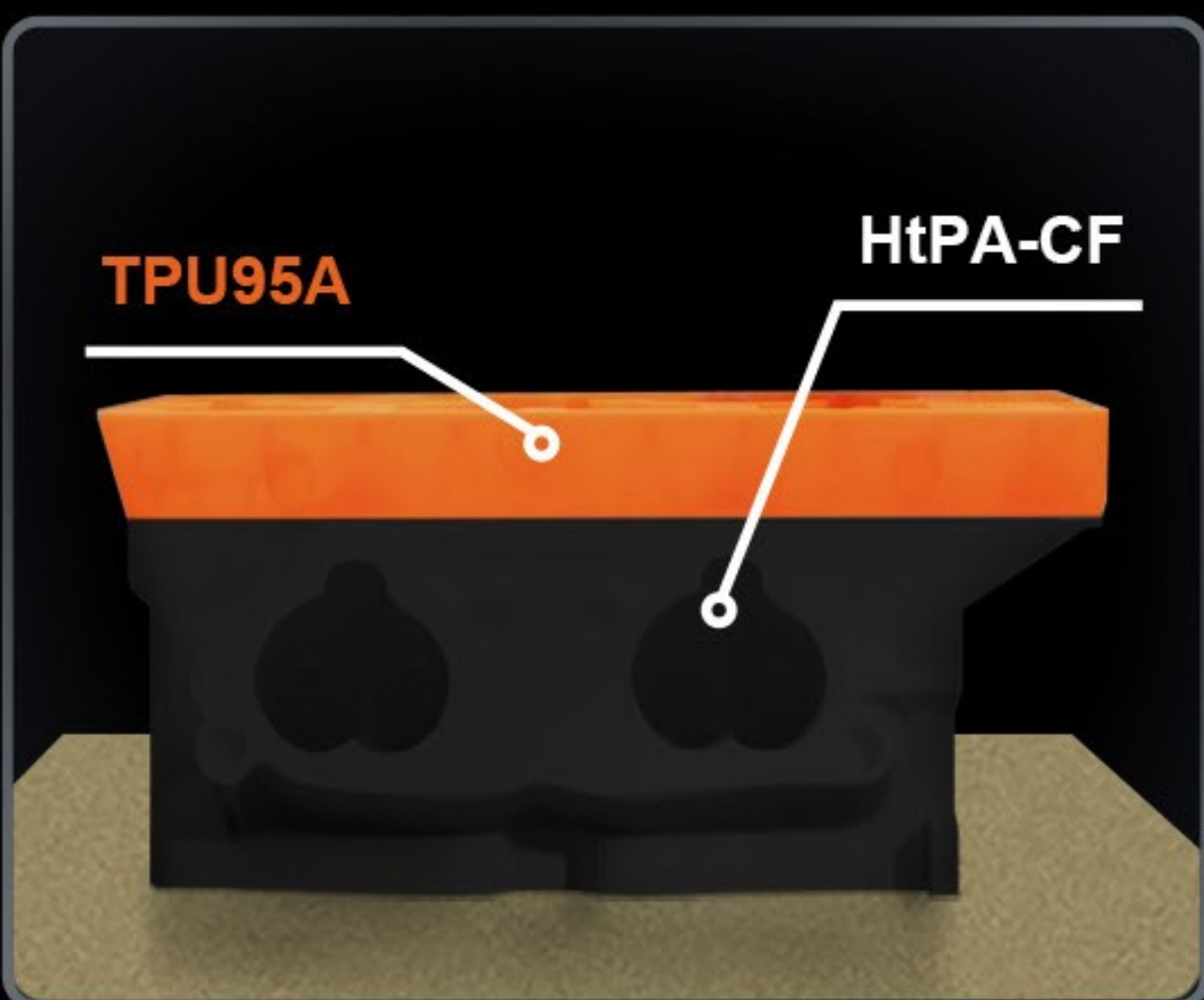
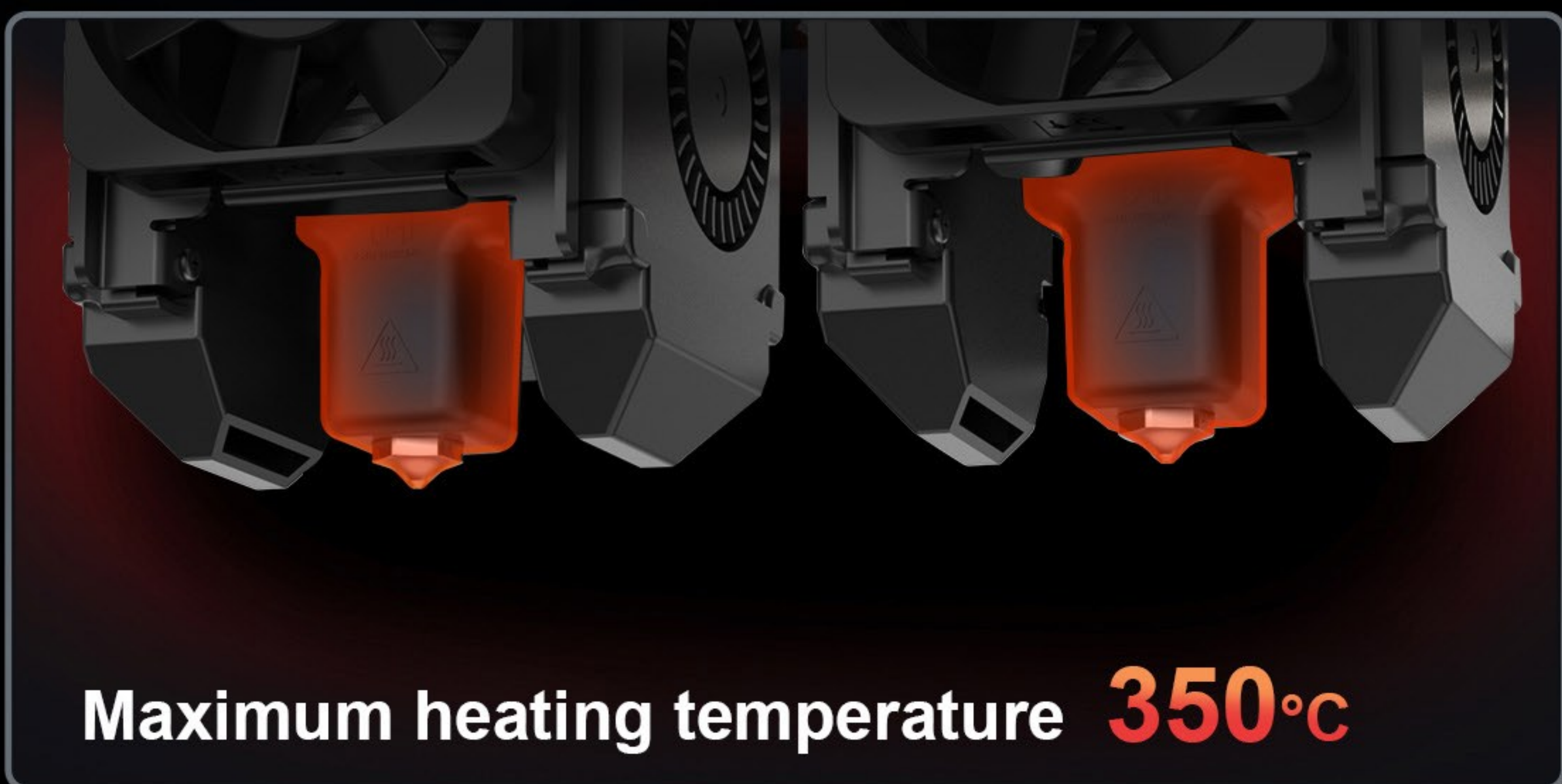
Below 250 degrees  
(Normal filaments)

## 250°C

PLA
PETG
TPU -95A
PVA





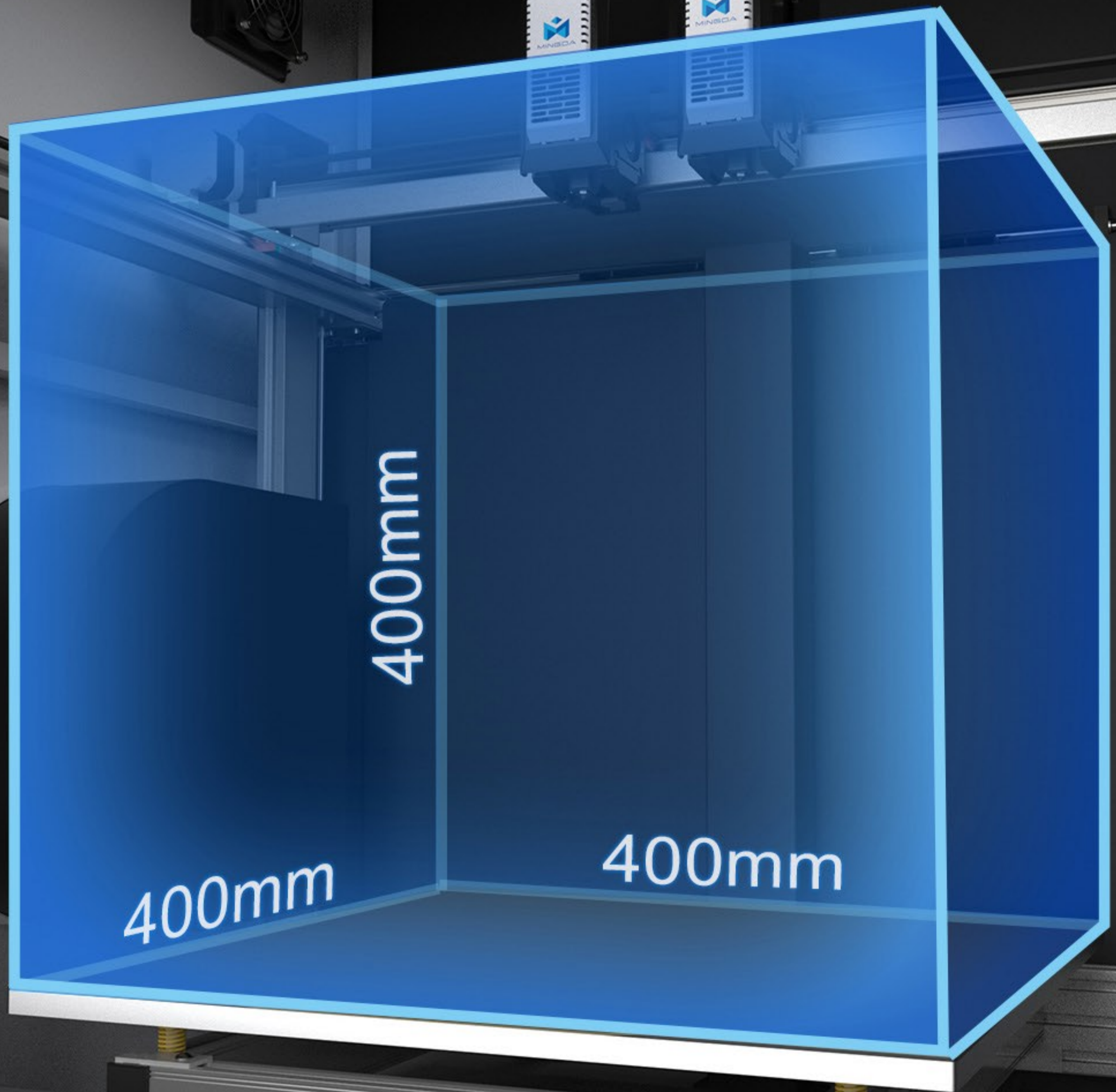


Supports **TPU95A** and **HtPA-CF**,  
while printing **TPU** and **PETG** simultaneously.



# Large Build Volume

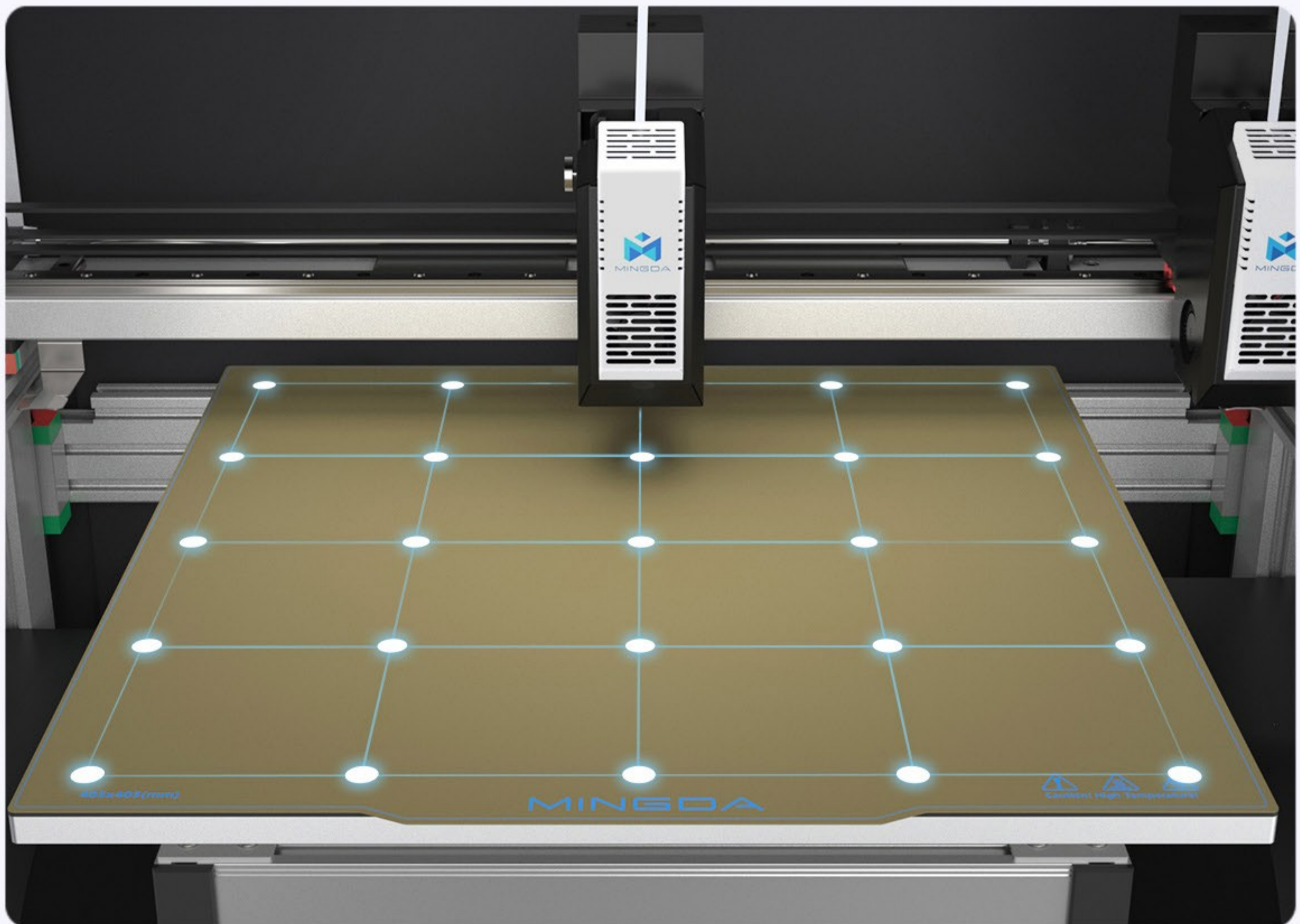
Printing size: 400mm\*400mm\*400mm;  
meets most prototype printing needs.





# Hands-free Auto Leveling

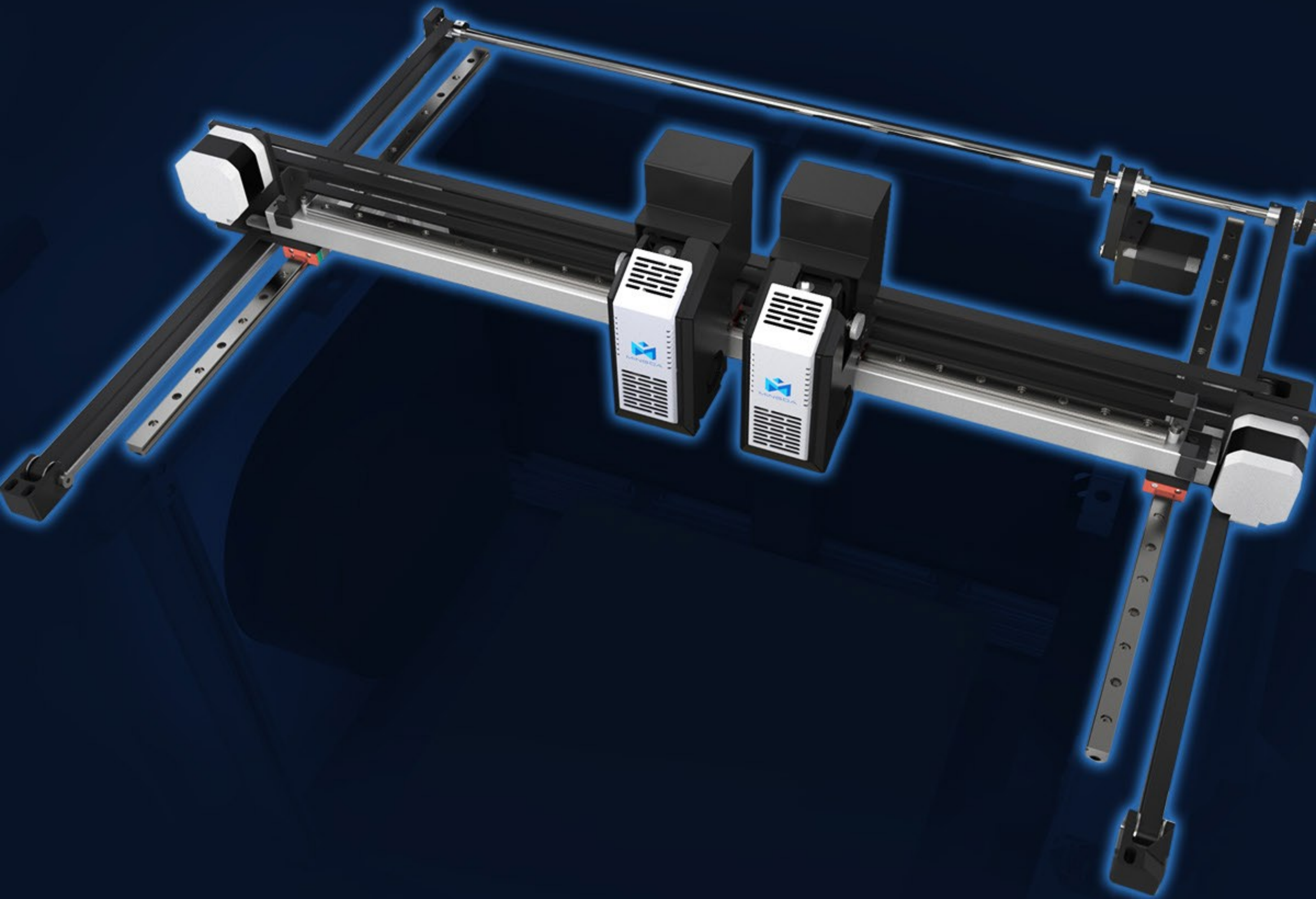
The automatic leveling system greatly improves printing efficiency and quality stability. It helps to reduce failed prints caused by an unlevelled build plate. The precise calibration of nozzle distance also enables 3D printers to print models with finer layer resolution.





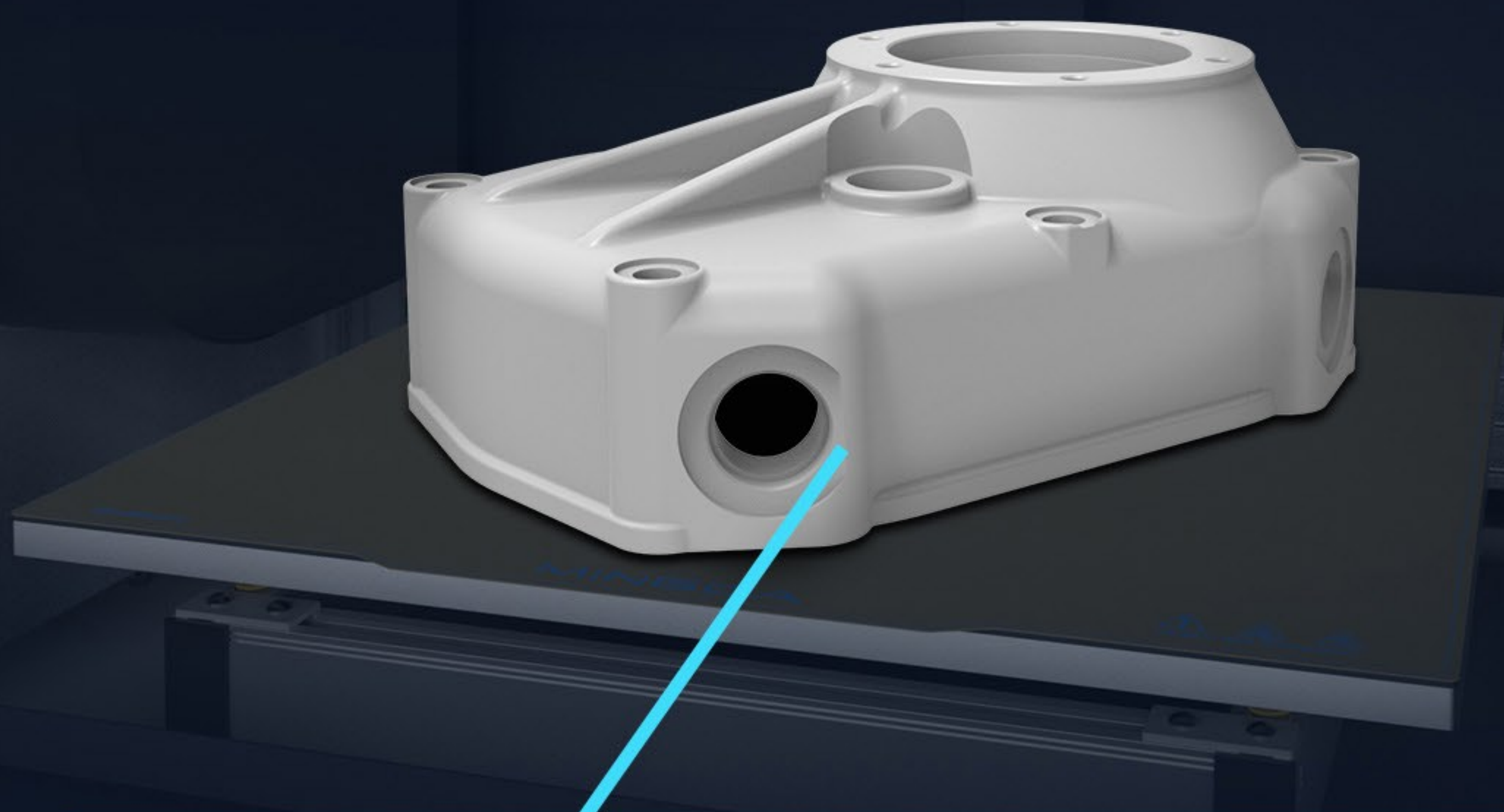
# ± 0.1mm High Precision

Using modular guide rail structure to ensure the stability and accuracy of the printing process



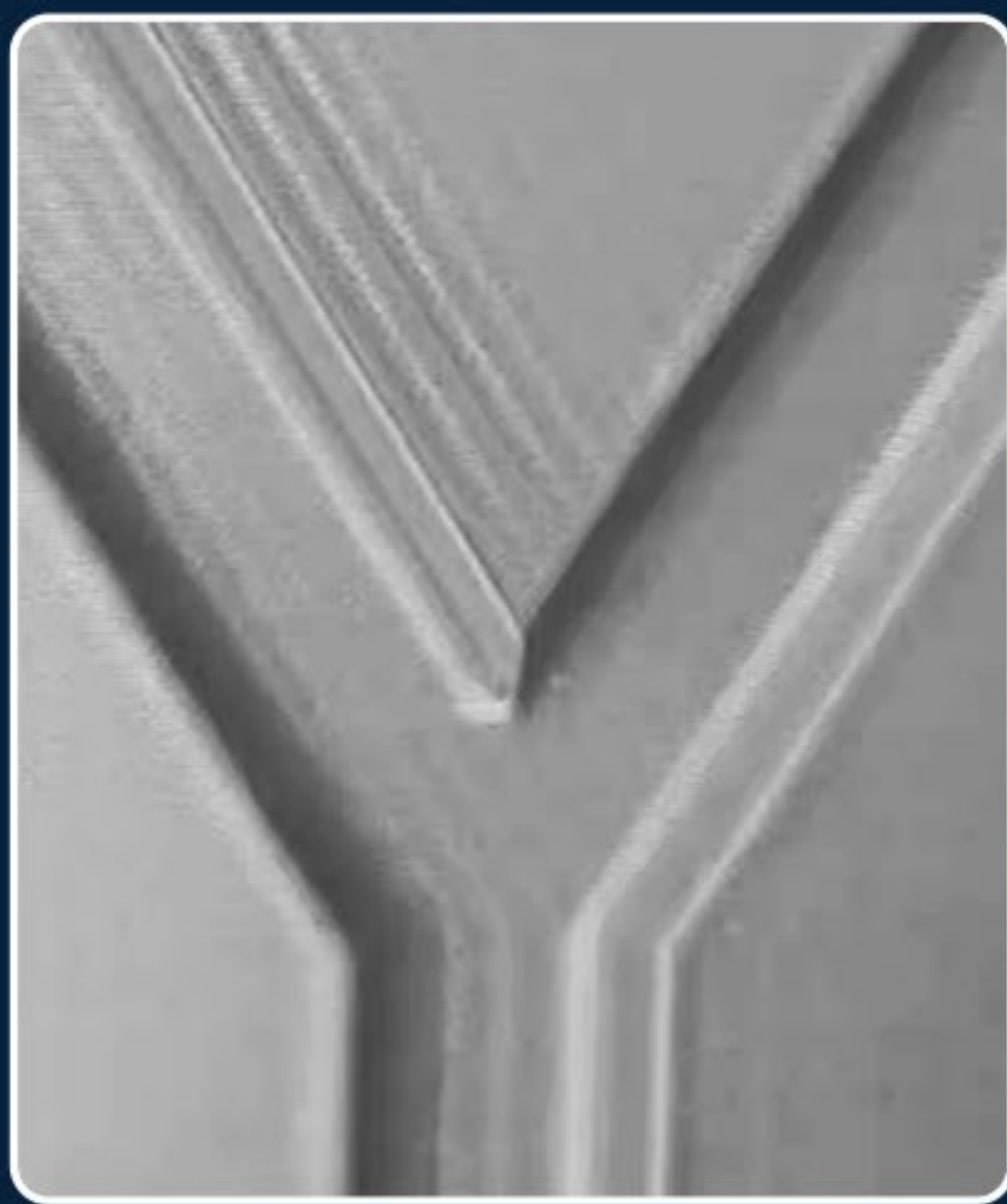


# Excellent in Detail

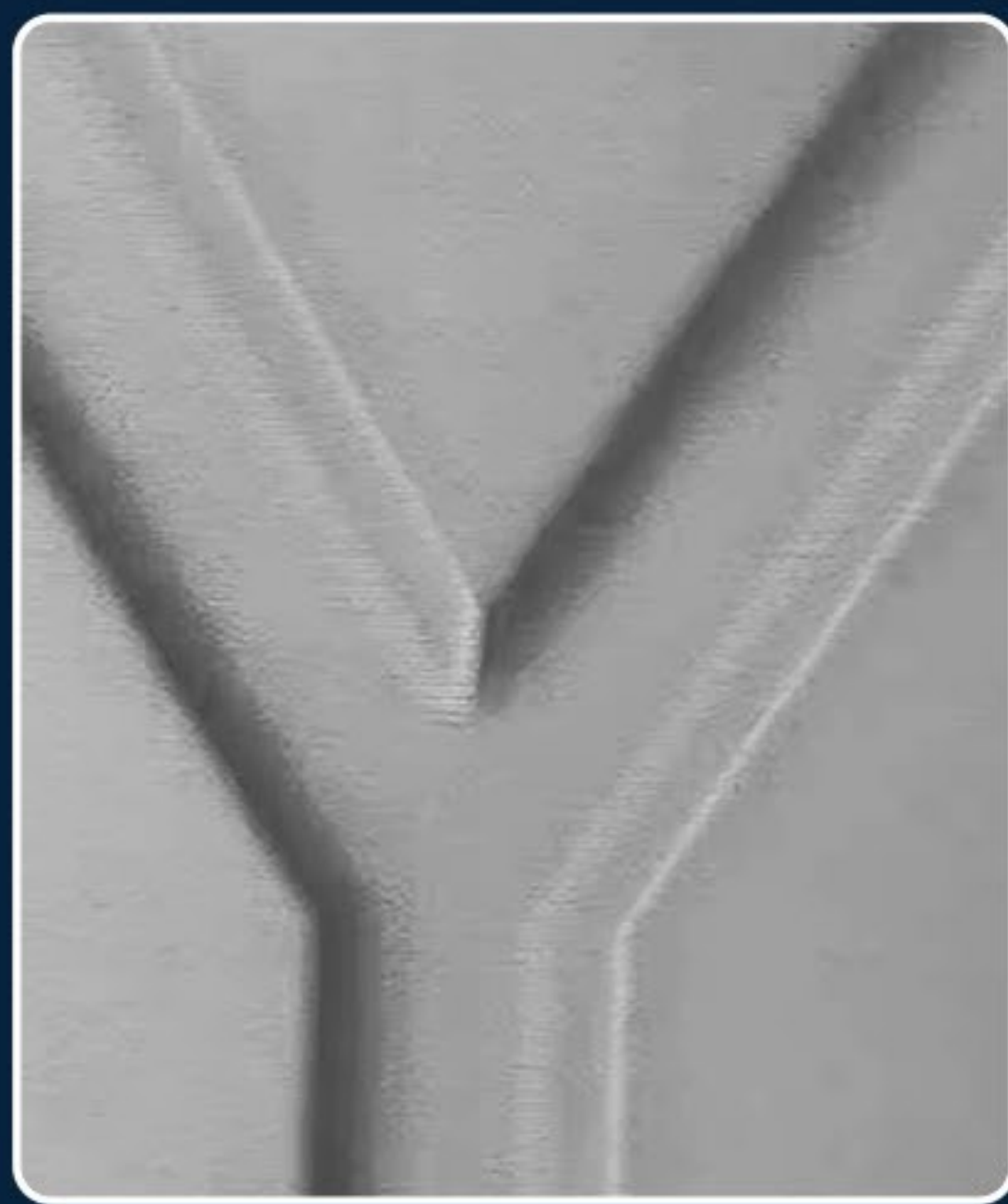


## Input Shaper

Reduce vibration patterns and make the surface smoother



OFF



ON

## Flow Control

Improved print quality and accuracy. Flow control allows precise management of the amount of filament being extruded, reducing errors like under/over-extrusion. This leads to smoother prints with sharper details.



OFF



ON



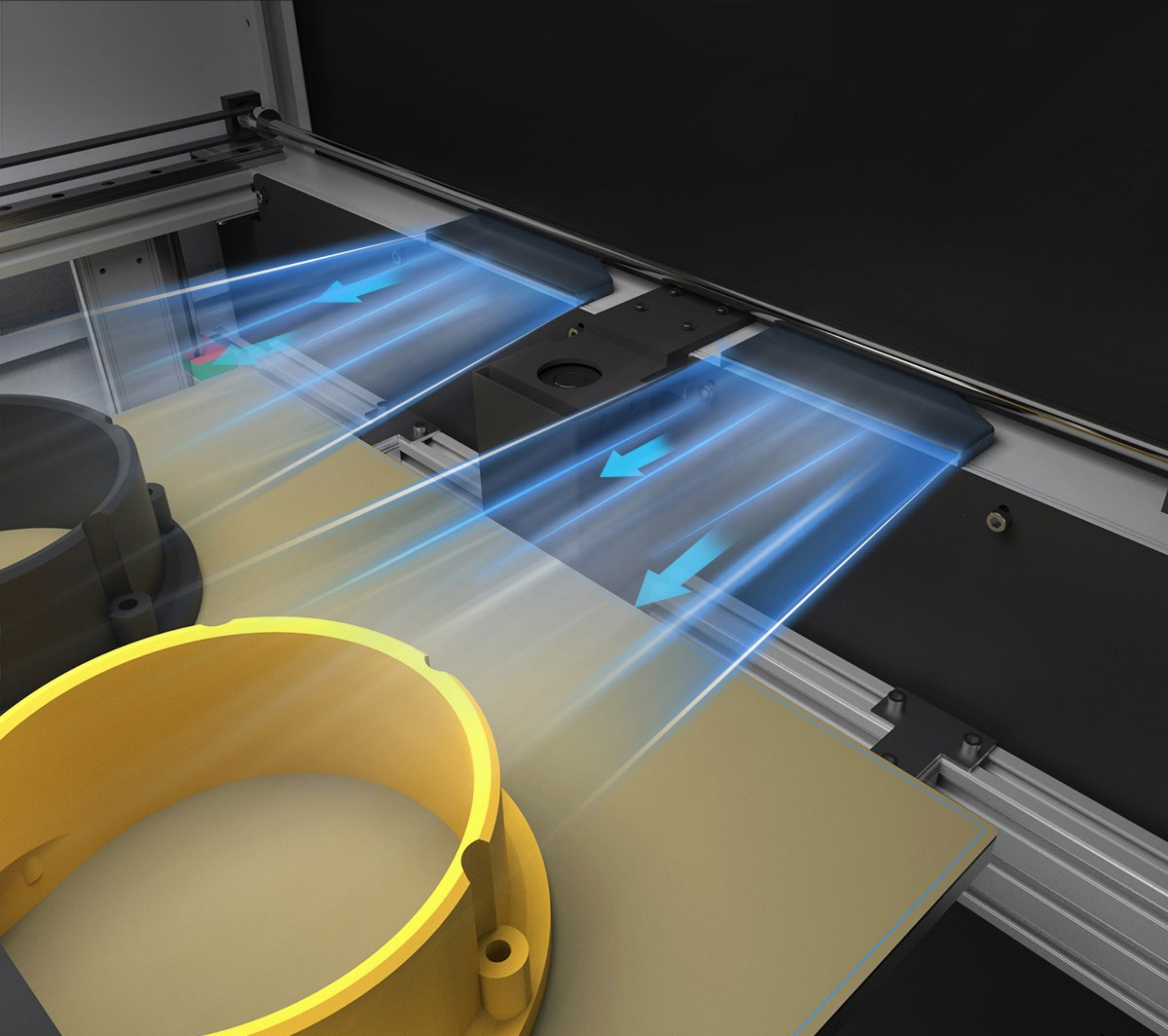
# New Cooling System Design

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The dual cooling system truly takes model cooling to the next level with an aerodynamic air duct design that blasts models with intensely powerful directed airflow for enhanced cooling capabilities, crafting perfect prints.

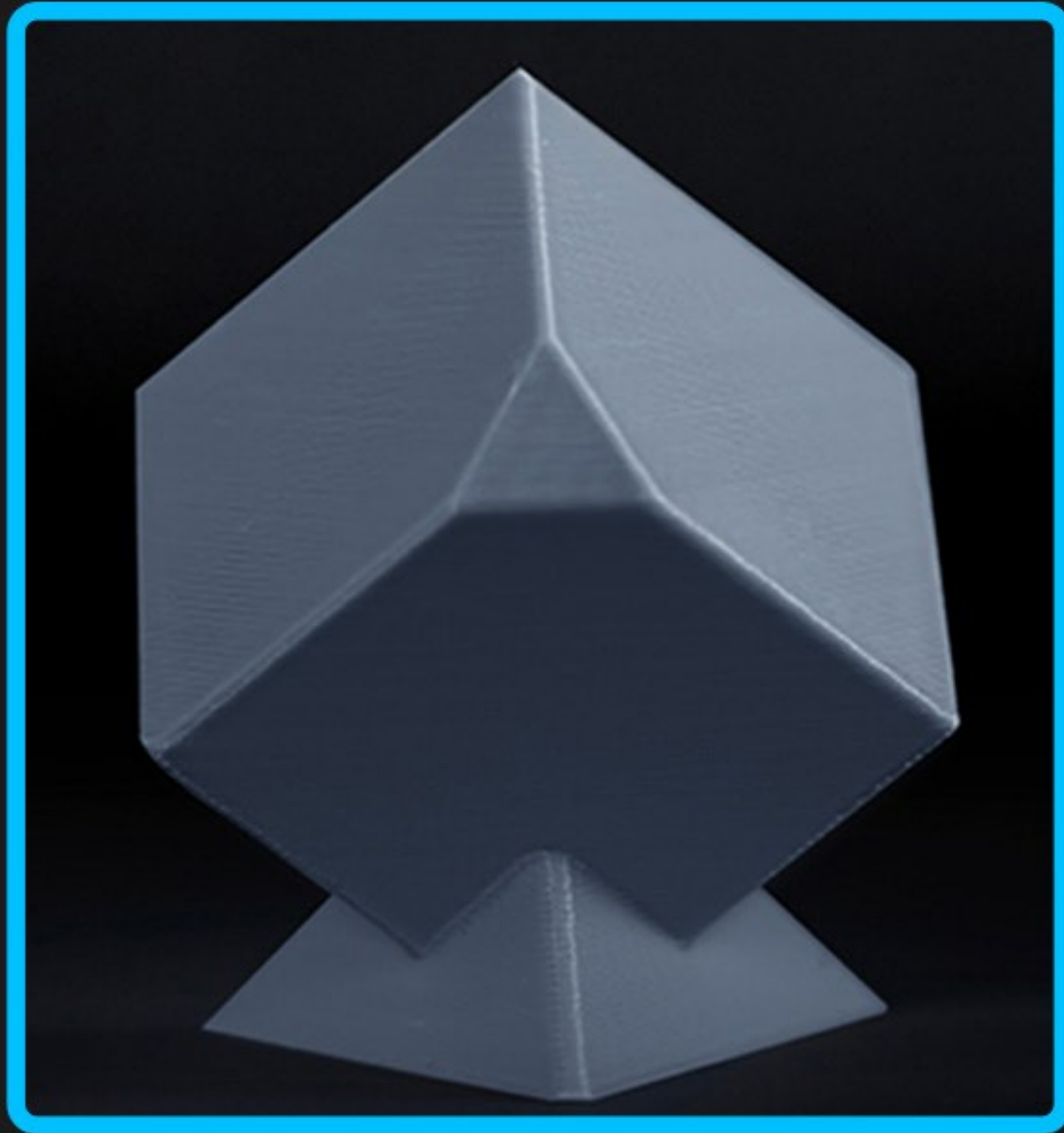




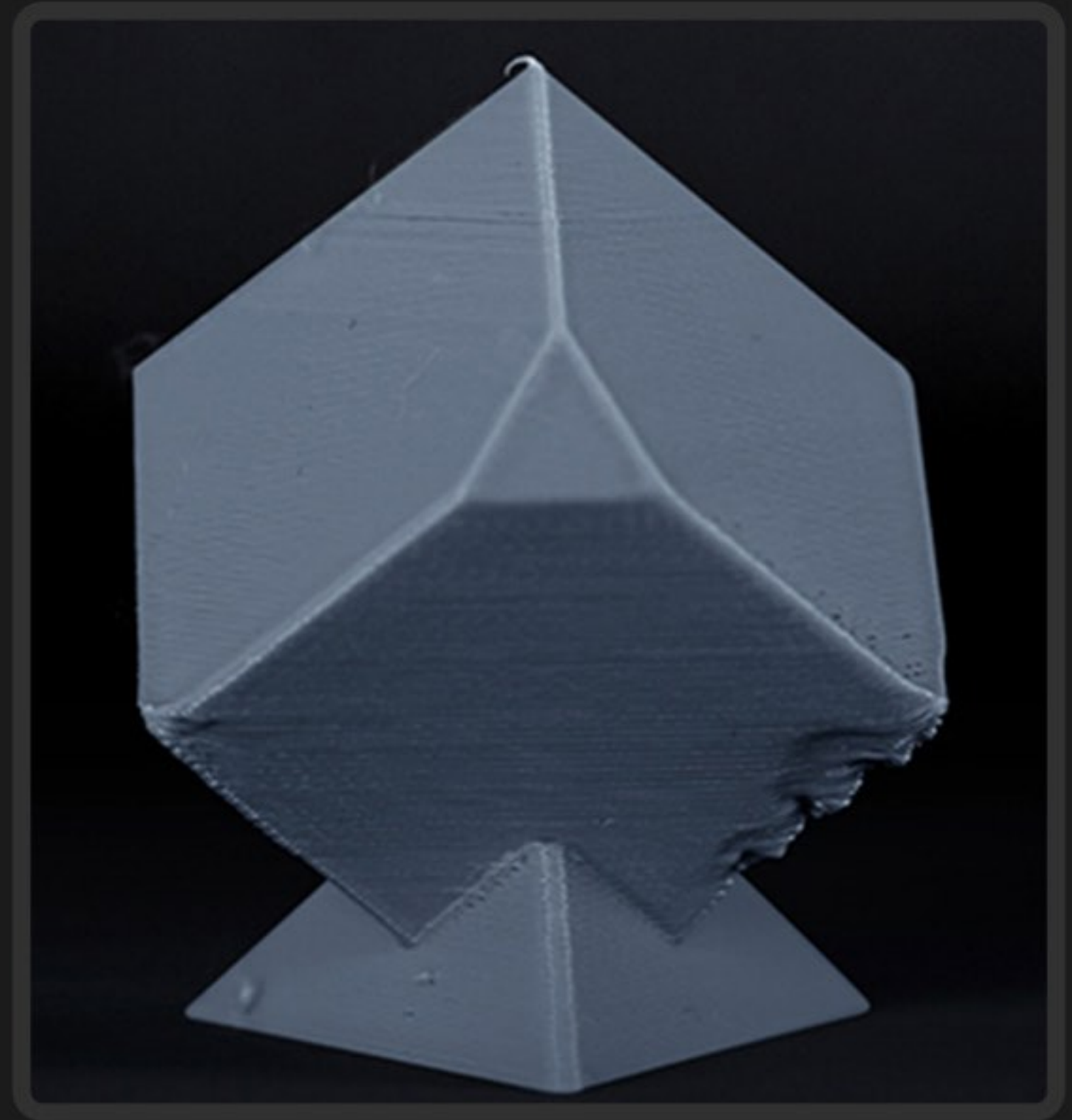




**Speed cool solidification, effectively avoid stringing, warping**



**Mingda air cooling effect**



Regular air cooling effect



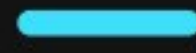
# Remote Printing Multi-Machine Control

After being connected via WiFi or network cable, the MD-400D can be remotely printed and monitored in real time. At the same time, it also supports multi machine control, facilitating rapid mass production.

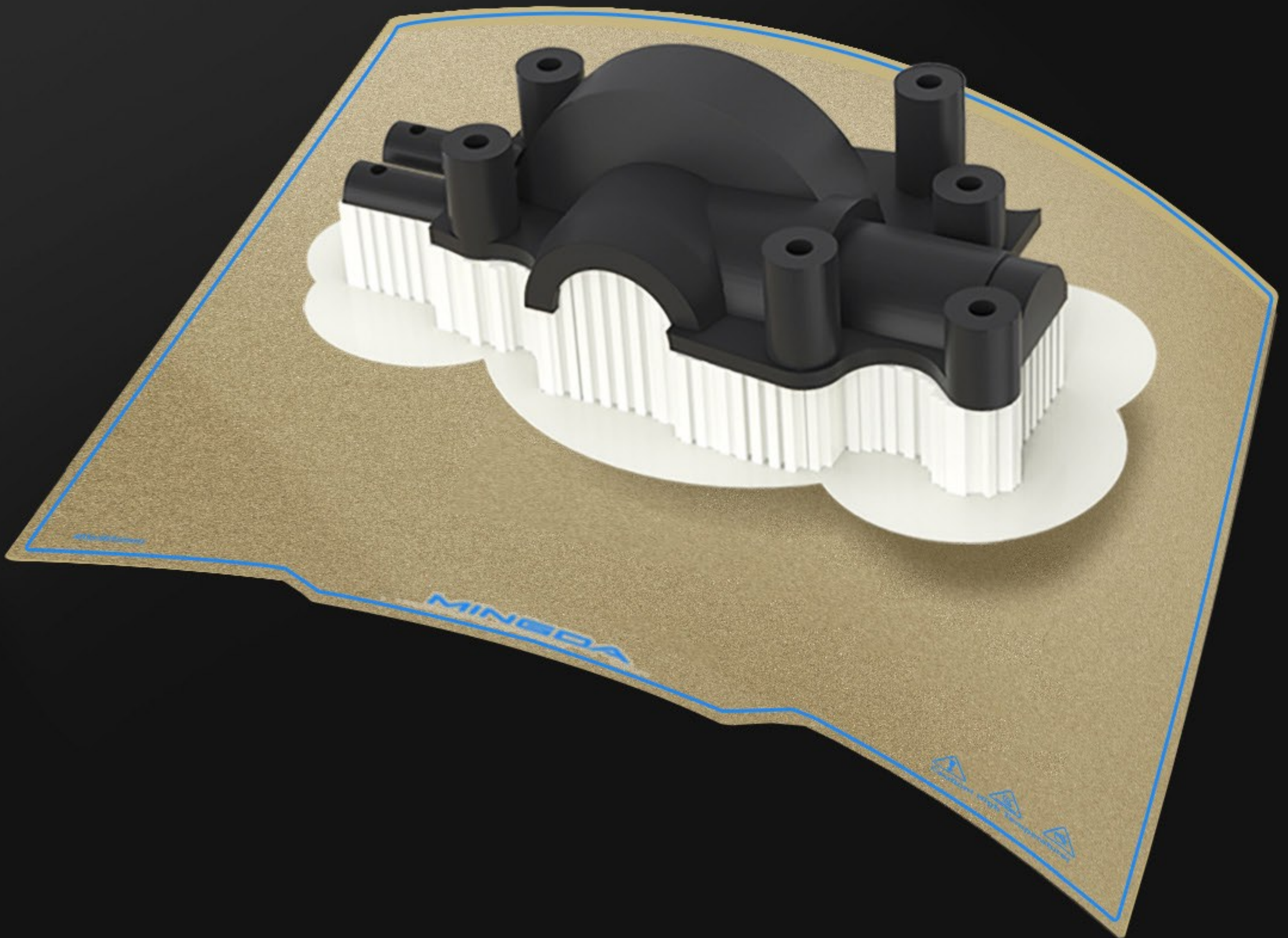




# PEI Flexible Printing Platform



It has strong adhesion, high temperature resistance, and is suitable for various consumables. It can be easily removed by bending.



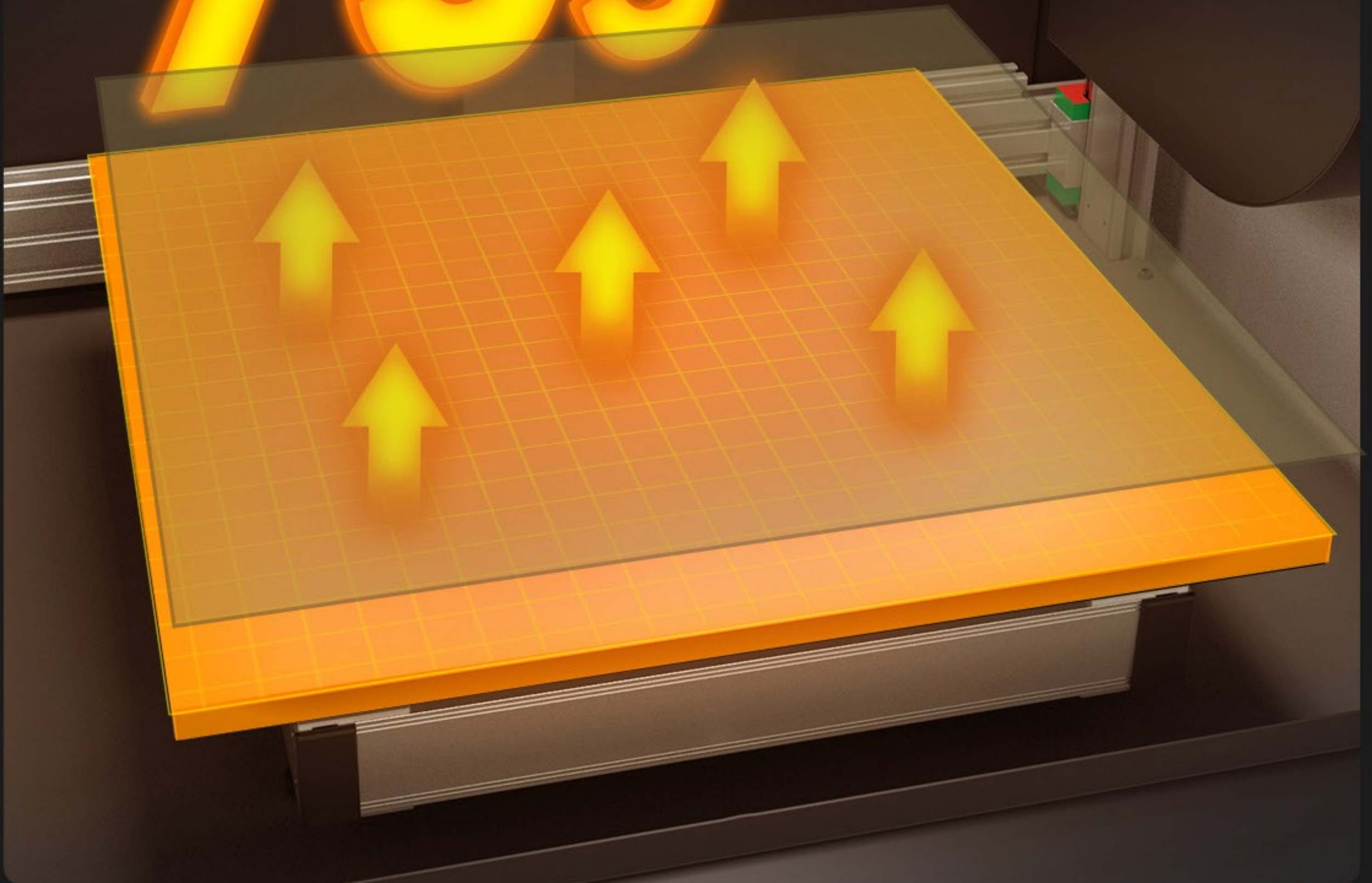


# Quick Heating Bed

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Max temperature of heating bed is 110°C. Aluminum alloy hot bed, evenly heated, can be heated to 60 degrees Celsius in about 75 seconds; The heating speed remains unchanged at 220V and 110V voltages.

75s





# MINGDA Self-developed Core Hardware Delivers Speedy Smooth Performance.

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This high-performance **64-bit self-developed motherboard**, powered by the 6-core CPU, ensures fast processing of data and rapid completion of 3D printing tasks. With **32GB of memory**, you can quickly store, export, and print large files with ease.





# 7-inch IPS

## High-definition Large Screen

MD-400D has a 7-inch IPS 2.1 million high-definition computer screen. Compared with traditional LCD screens, it can see bright, saturated, and natural high-quality images from any angle. At the same time, it is more environmentally friendly and saves electricity.



## Support multiple languages

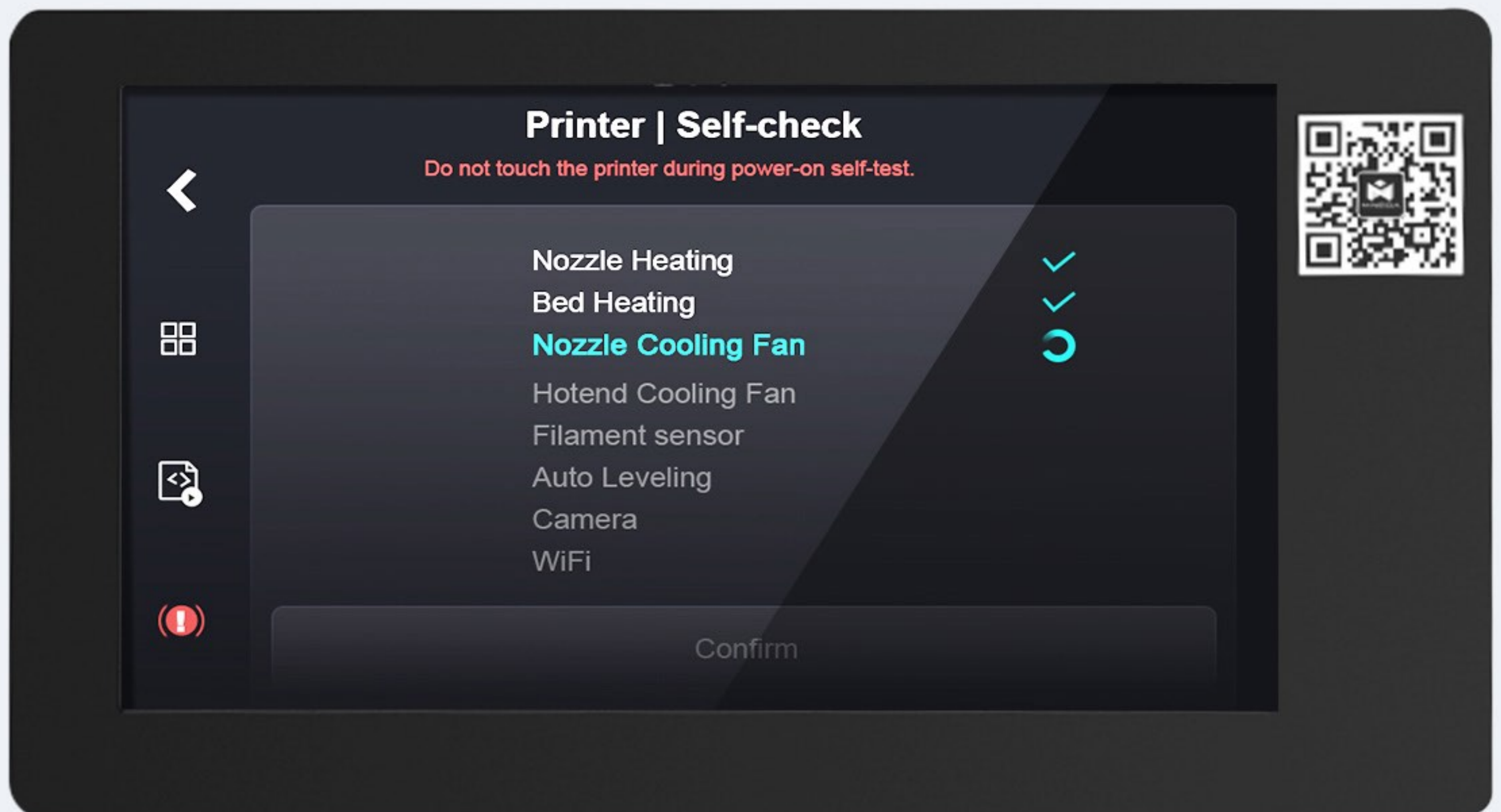
- |            |              |              |             |
|------------|--------------|--------------|-------------|
| 1. English | 6. Hebrew    | 11. Poland   | 16. Ukraine |
| 2. Danish  | 7. Hungarian | 12. Portugal | 17. Chinese |
| 3. German  | 8. Italian   | 13. Russia   | 18. Dutch   |
| 4. Spanish | 9. Japanese  | 14. Sweden   | 19. Czech   |
| 5. French  | 10. Korean   | 15. Turkey   | etc         |



# Self Check when Power on



When power on it can automatically check the status of the extruder, hot bed, camera, automatic leveling, fan, and other components; If there are any abnormalities, a prompt will be displayed on the printer screen for quick and convenient processing.

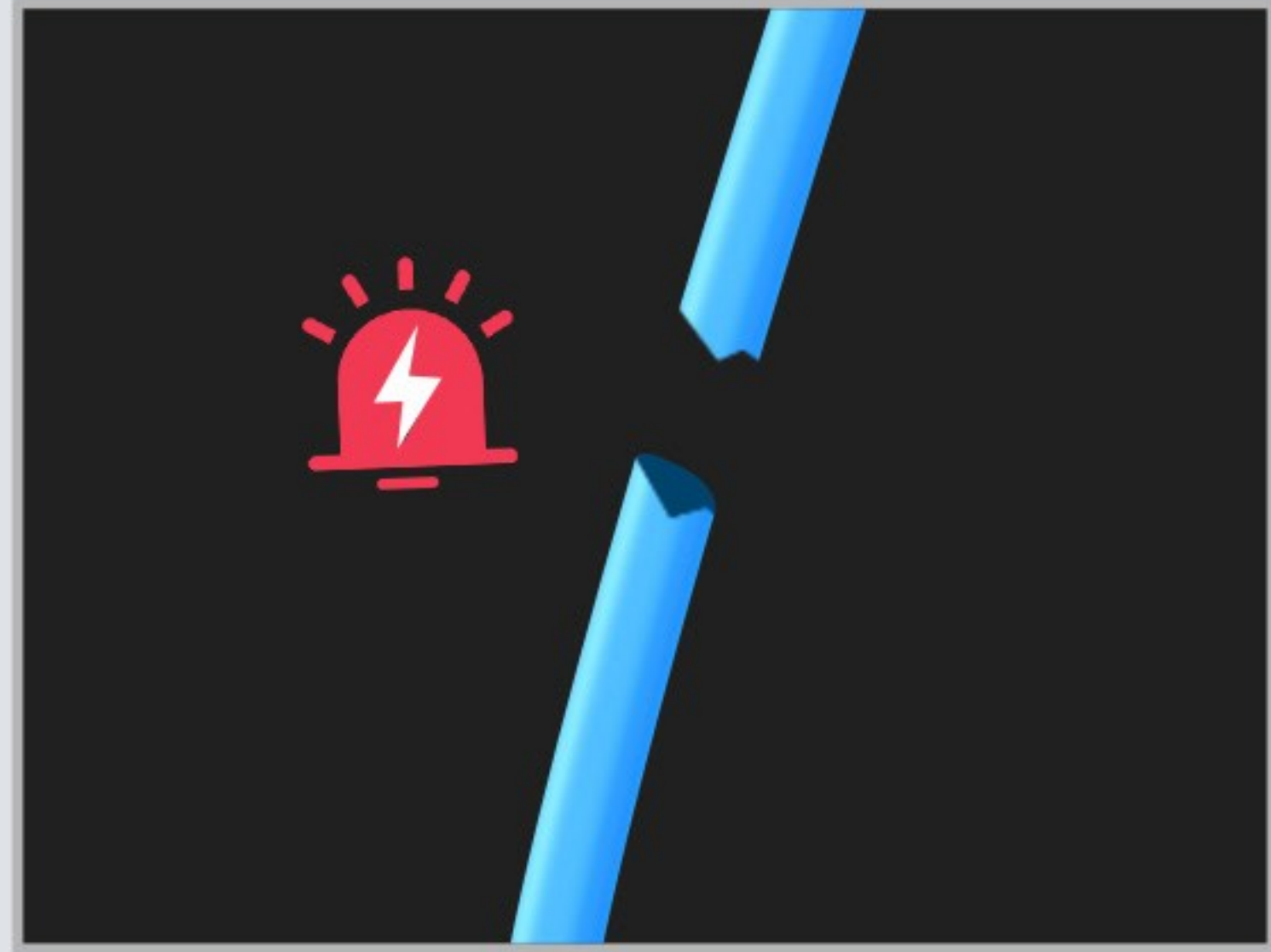






## Smart Resume Printing Function

The machine can automatically resume printing after power offer, less worries on print failure.



## Automatic Filament Detection

It will pause the printing process, if the filament run out or if the filament is broken.



# Compatible With Various Filaments

## Common filament

PLA, TPU, PETG etc

## Support filament

S-Mulit, S-HtPA, PVA, etc

## Engineering filament

HtPA, PET-GF, PET-CF, PA12-CF, HTPA-GF, HTPA-CF,  
ABS-GF25, ABS-CF20, PA-GF25, PA-CF25, etc





# Application

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**For Manufacturing Application  
And Design Prototype Verification**

New Product Design And Development





# Breakaway Support Filament

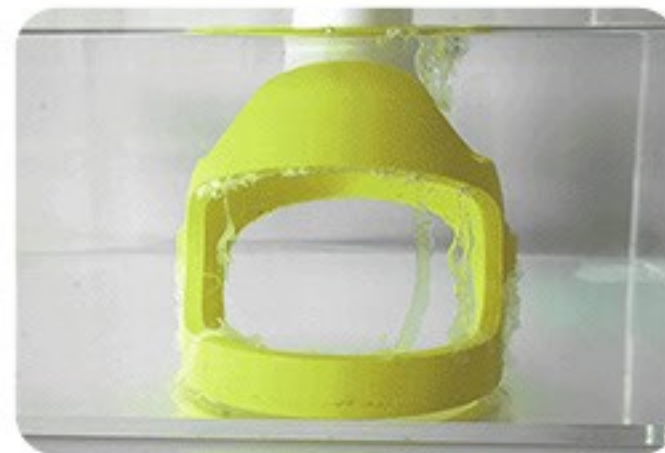
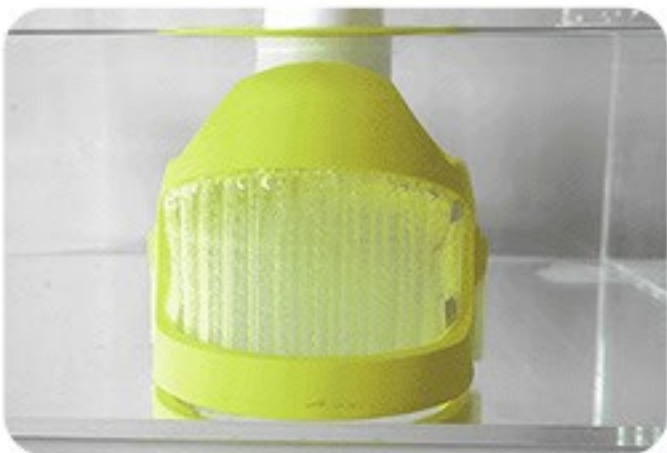
Much easier to remove the support,  
the supported surface comes out clean and smooth.





# Soluble Support Filament

Printing complex models with internal geometries and hollow structures is made possible by using water-soluble filament.





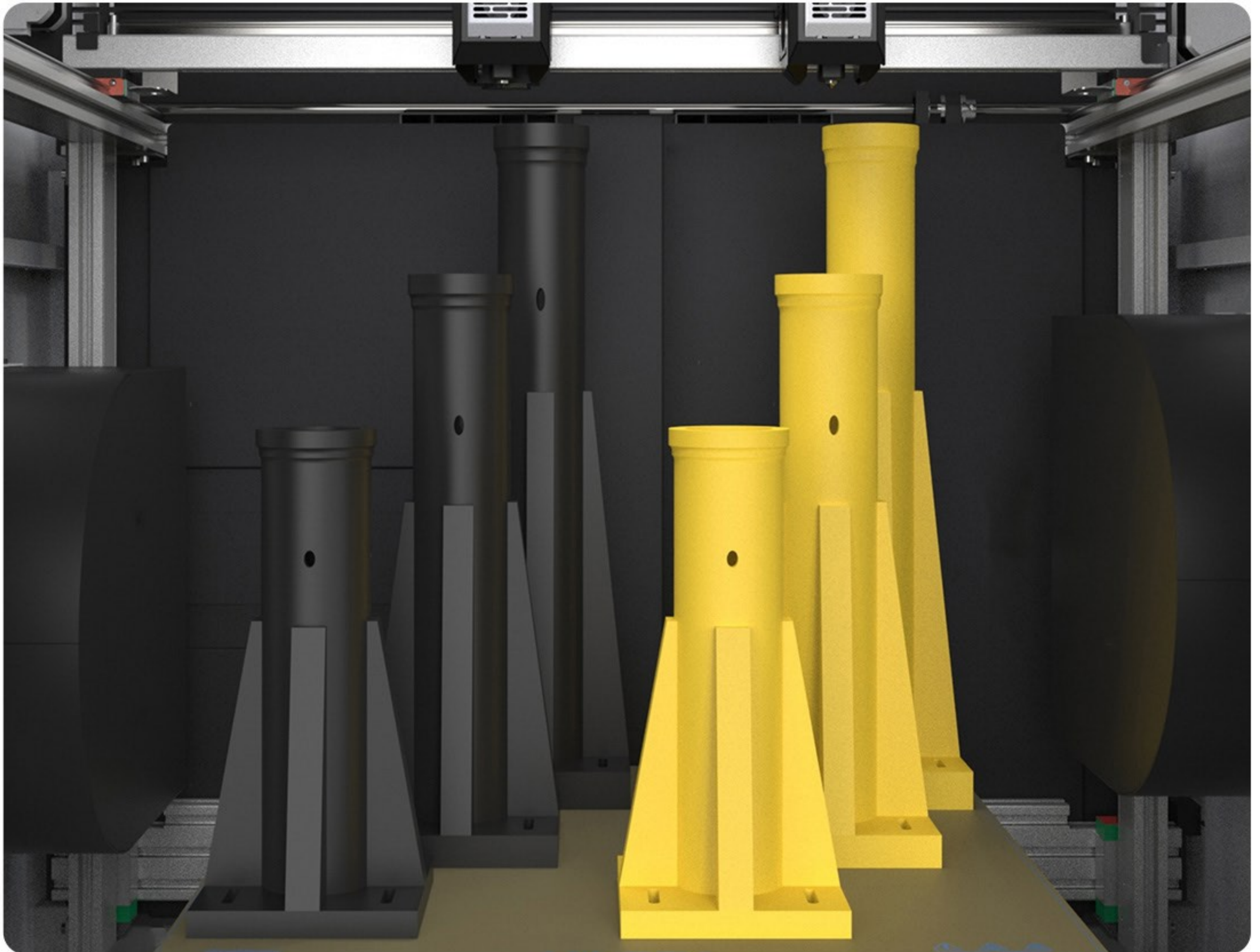
# Small Batch Production

3D Printing Farm & Workshop





# Duplicate Mode And Mirror Mode That Double Productivity





# Product Parameters

## PRINTING

Printing Technology	Fused Deposition Modeling (FDM)
Print Volume	400*400*400mm
Duplicate Mode	400(2*200)*400*400 mm
Mirror Mode	320(2*160)*400*400 mm
Extruder Quantity	Two
Nozzle Diameter	0.4mm (0.6mm, 0.8mm optional)
Filament Diameter	1.75mm
Filament Compatibility	<b>Common filament:</b> PLA, TPU, PETG; <b>Engineering filament:</b> PA-CF/GF, PET-CF/GF, HtPA-CF/GF, ABS-GF25, ABS-CF20, PA-GF25/CF25; <b>Support filament:</b> S-Mulit, S-HtPA, PVA, etc
Power Requirements	100/240V-50/60Hz
Rated Power	700W ( Extruder: 80W Hot Bed: 500W )
Connectivity	U disk
Resume Printing Function	Save data when power is off
Filament Detection	Pause printing when filament run out
Extruder Temperature	≤350°C
Platform Temperature	≤110°C
Firmware	klipper
Max Printing Speed	500mm/s(Recommend Printing Speed: 200-300mm/s)
Print Precision	± 0.1 mm
Platform	PEI
Package Weight	112.5Kg
Package Size	82x72x108cm
Support Software	MingDa OrcaSlicer, Reptier-Host, Simplify3D
Supported File Types	Stl, Obj, G-code
Operating Systems	Windows(7,8,10), Mac OS X