

D400 HS

Champion DNA:
Professional High-Speed 3D Printer

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What's the News on the D400 HS?

Dual Nozzle Shutter
Fully Automatic Synchronization



Up to 40% Faster Printing
Lightweight Auto-Rising Extruder



420*400*420mm³ Large Volume



True External Air Cooling



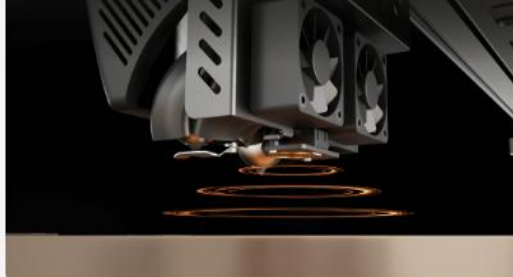
0.02mm XY Positioning Accuracy
HD Camera Dual Nozzle Offset



70°C Heated Chamber
Internal Insulation Cotton



0.001mm Accuracy
Eddy Current Bed Leveling

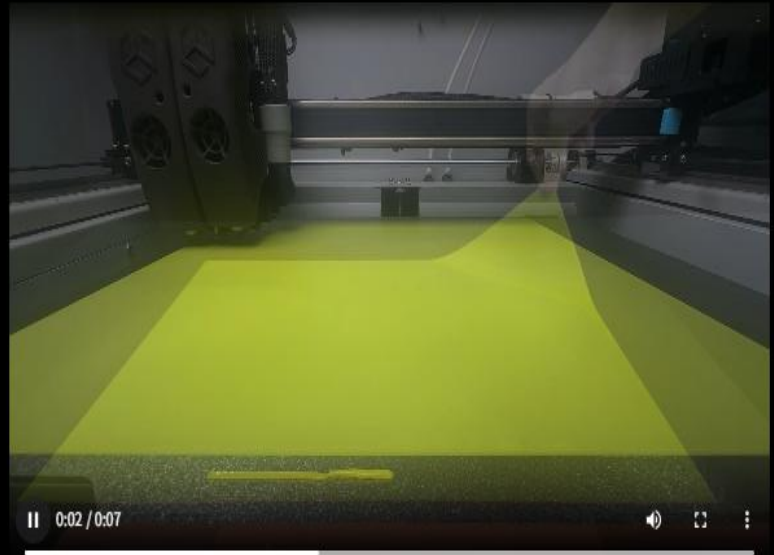


90 mm³/s Flow Rate
Stronger X Rail

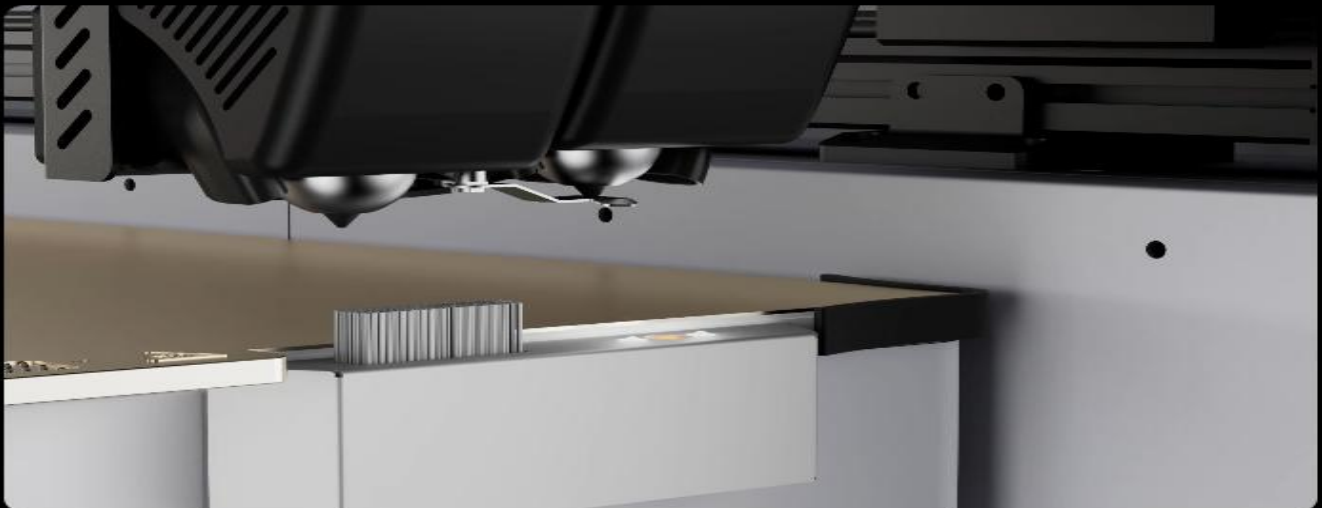


The First Layer Defines Print Quality

Equipped with automatic mesh bed leveling, our large-format 3D printers ensure an ultra-smooth and uniform first layer across the entire expansive platform for flawless printing results.



XY via HD Macro Camera
Fully-Auto AI Visual Recognition
0.02mm Accuracy



Z via Dual Photoelectric Sensor
Full-Auto Multiple Positioning
0.005mm Accuracy



Eddy Current Bed Leveling **0.001mm** Precision

Revolutionizing Large-Scale Print Platform Calibration

The eddy current leveling system solves critical challenges in calibrating large build plates. Utilizing high-frequency electromagnetic sensing technology, it achieves an ultra-high probing accuracy of 0.001mm—improving precision by 99% compared to traditional methods. This ensures perfect first-layer adhesion and guarantees printing success even with oversized models.

Featuring a non-contact, zero-wear sensor design, the system performs continuous scanning without interruption, completing bed calibration in just 60 seconds—reducing leveling time by 80% and significantly improving printing efficiency.



Auto-Raising Dual Extruders | **420°C**

Flow Rate: **90 mm³/s**

Heating to 400°C: **2 Mins**

Thermostat Accuracy: **±0.15 °C**

The D400 HS features a next-gen smart auto-raising dual-extruder kit, capable of reaching hotend temperatures up to 420 °C. The hotend can be quickly swapped for different nozzle sizes.

Enhanced with the upgraded Dual Nozzle Shutter technology, it delivers flawless printing with different support materials. Combined with a topologically optimized lightweight design, the printhead enables even higher printing speeds and greater motion agility.



Automatic Dual Nozzle Shutter

This innovative system features a precision mechanical shutter that automatically closes over the nozzle of the idle extruder the moment it lifts away. By creating a physical seal, it effectively prevents oozing and cross-contamination between materials, ensuring flawless multi-material and multi-color prints. It's the key to achieving pristine quality and reliability in every layer.



Scale Without Limits for High-Strength Prototypes

The CreatBot D400 HS was created to make industrial 3D printing of large-scale objects and prototypes as easy as possible. It is embedded with many advanced technologies for ultra-large, impressive prints. It will undoubtedly be your best choice if you are looking for an industrial large-scale 3D printer for prototyping with engineering-grade materials.

If you are tired of the fragility of PLA and the warping of ABS, try our revolutionary material, UltraPA-CF. By printing your large models with a large-diameter nozzle, you will get an oversized model with a high strength of 80MPa and heat resistance up to 150°C within days. It is the best choice for your prototype verification.



Design Prototype



Functional Prototype



End Use Parts



Spare Parts



Forms & Models



Active Heated Chamber | 70°C

The design employs a double-layer insulation cotton layer, allowing the cavity temperature to be raised to 70°C. This is crucial for preventing the shrinkage and deformation of large engineering materials.

Reduces Thermal Stress & Warping

Improves Interlayer Bonding

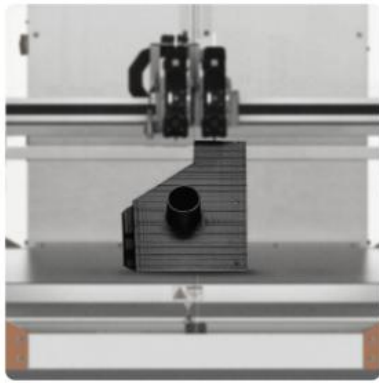
Minimizes Moisture Impact

Ensures Process Consistency

When printing large or high-strength engineering materials (e.g., ABS), uneven cooling causes internal thermal stress, leading to warping, delamination, or cracking.



Did You Know a Heated Chamber Can Warp Your Printer?



In large-format FFF 3D printing, when chamber temperature rises, the printer frame and structural components also undergo thermal deformation—metal expansion, axis misalignment, and mechanical part displacement. These micro-distortions accumulate layer by layer, ultimately leading to:

- Layer Misalignment and Surface Roughness
- Loss of Dimensional Accuracy
- Structural Defects in Large Parts

This is why treating chamber temperature as an optional add-on, or claiming it can be retrofitted later, proves these manufacturers just don't get it. They have no compensation for machine deformation—some aren't even aware of the issue. They simply add it as a feature to drive sales, with total disregard for actual print quality.

With 8+ Years of R&D on the Chamber Temperature of FFF Industrial Printers

Our Solution: The Synergy of Two Patented Technologies—Intelligent Chamber Heating Algorithm & Z-Axis Magic Box Technology:

Intelligent Heating Algorithm: Predicts and counteracts irregular deformations caused by chamber temperature variations

Z Axis Magic Box: Maintains flawless surface finish via real-time thermal compensation for frame and build-plate expansion.

Ultimate Result: Flawless prints produced even when slight machine deformation has already occurred!

Machine Weight Matters: Our robust construction significantly minimizes deformation. The heavier the machine, the less distortion occurs!



Outage Restore & Filament Detection & Backup Mode

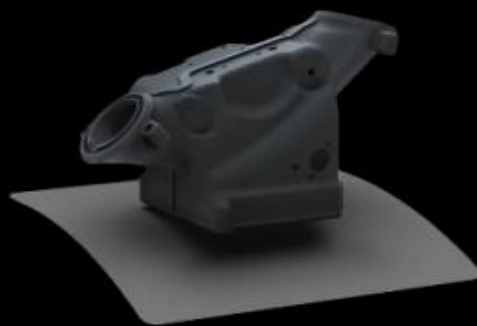
The printer automatically memorizes the current position and saves print data when power is interrupted. Upon restart, it resumes printing from the exact point of interruption, eliminating the need to restart entire prints and saving valuable time and material costs.

The printer also prevents failed prints by pausing and alerting you when the filament runs out, allowing you to replace the spool and continue printing without losing progress.

Backup Mode: If the filament in the main nozzle (No. 1) is exhausted, the printer automatically switches to the secondary nozzle (No. 2) to continue printing, ensuring uninterrupted production even during filament changes.

Magnetic Suction Platform

Proprietary magnetic platform, large, easily removable, and heat-resistant over 100°C, and won't demagnetize over time. For oversized models, it is easy to detach them quickly and the bottom of the model is flat. Convenient to all operators.

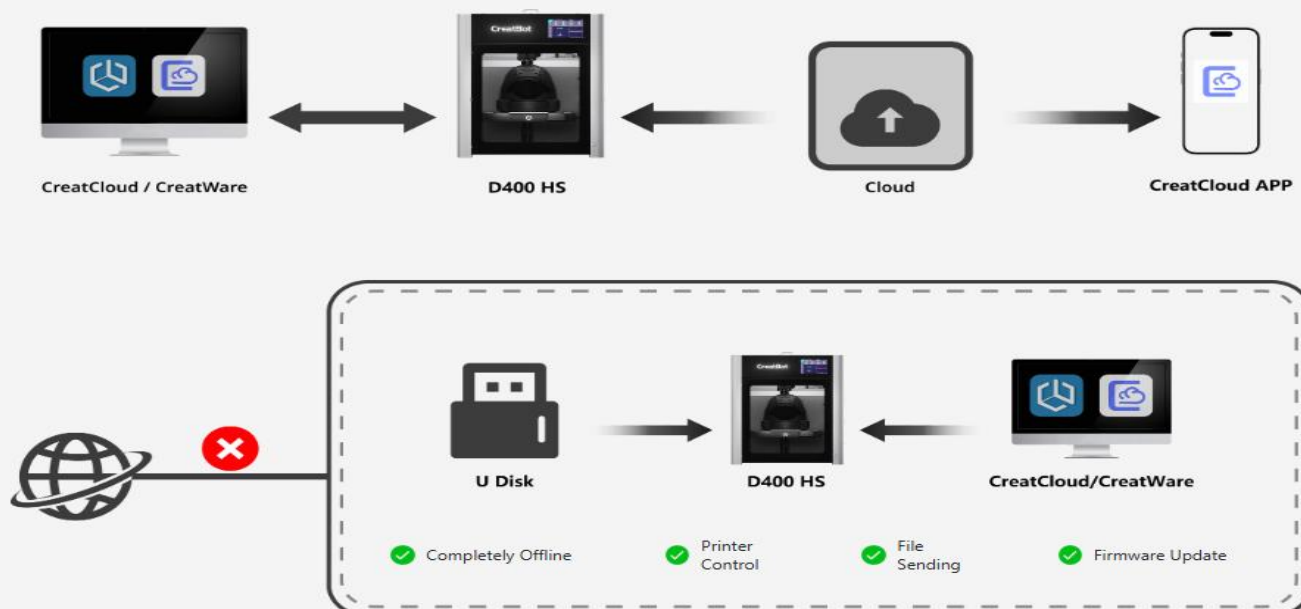


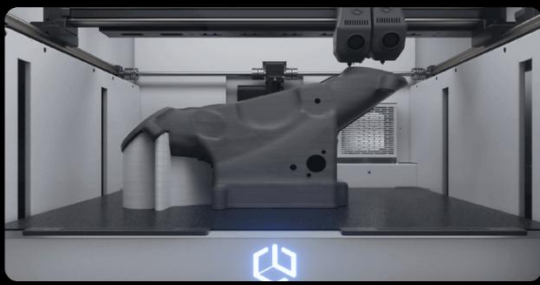
Ultra Air Filter System / 99.995% Adsorption

Our advanced air purification system employs a dual-filter design: an initial HEPA filter captures fine particles, while an activated carbon filter absorbs volatile organic compounds (VOCs) and odors. This ensures a clean and safe printing environment, protecting both the operator and the printed parts from harmful emissions.

WIFI, LAN, Internet, APP Control

In addition to cloud connectivity, CreatBot also supports local area network mode and physical connection operation. You can control the printer, send sliced files, and update firmware without an internet connection.





Camera Control Technology

Camera control technology allows customers to control the printing process on speed, pause, temp., etc., with an APP remotely, achieving the best printing quality in the shortest time without failure. A very useful feature for large models and long-time printing.

Specifications

Printing

Print Technology	FDM/FFF
Build Volume	Single Extrusion: 420 x 400 x 420mm Dual Extrusion: 365 x 400 x 420mm
Number of Nozzles	Double
Auto Rising Extruders	Yes
Layer Resolution	0.05 mm
Filament Diameter	1.75 mm
Filament Compatibility	PLA, ABS, ASA, PP, PETG, PC, Nylon, TPU, ABS-CF, PC-CF, PET-CF, PET-GF, UltraPA-CF, PPS-CF, etc
Nozzle Diameter	0.6mm (0.3, 0.4, 0.6, 0.8,1.0mm) Optional
Print File Type	Gcode
Temperature	
Max. Nozzle Temperature	420 °C
Max. Bed Temperature	120 °C
Hot Chamber Temperature	70 °C
Speed	
Max Print Speed	300 mm/s
Flow Rate	90 mm ³ /s
Electrical	

Power Requirements	110~240 V, 50~60 Hz
Display	7 inch touch screen
Rated Power	Printer: 2500W
File Transfer	USB/U disk / WiFi / LAN
Software	
Software	CreatWare, Orca Slicer, Cura, Simplify3D,Prusa, etc
Supported File Types	STL, OBJ, Gcode, AMF, STP, STEP
Operating Systems	Windows ALL / Mac OS
Special Function	
Air filter	HEPA+Carbon
Filament Detection	Pause Printing
Firmware	Klipper - High Speed
Camera Control	Camera Remote Monitoring
Bed Leveling Technology	Eddy Current Leveling
XY Offset Technology	HD Camera Dual Nozzle Offset
Z Offset Technology	Dual Photoelectric Sensor
Nozzle Shutter Technology	Dual nozzle shutter
Door Opening Detection	Yes
External Air Cooling	Yes
Mechanical	
Build Plate	Aviation Aluminum Plates + Removable magnetic sheet
Build Plate Leveling	Automatic
Extruder	Smart Dual Extruders
Auto-Raising Extruders	Yes
X/Y Positioning Precision	0.00375 mm

Z Positioning Precision	0.00156 mm
Size & Weight	
Product Dimensions & Weight	785 x 700 x 985mm 110kg
Packing Size & Weight	830 x 760 x 1090mm 140kg