D1000 Pro HS

The Ultimate In-House Solution:
Industrial-Grade 1-Cubic-Meter Smart High-Speed 3D Printer

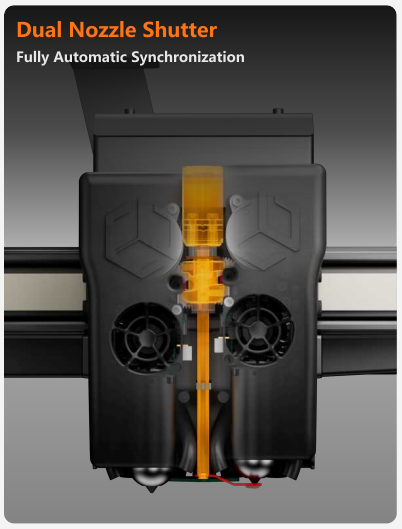
The D1000 Pro HS represents the ultimate evolution in large-format 3D printing, delivering significant advances in usability, stability, and safety. This new high-speed version achieves a stable printing speed of 300 mm/s and is engineered to produce large, full-size parts, prototypes, tools, and molds in-house with unprecedented efficiency.

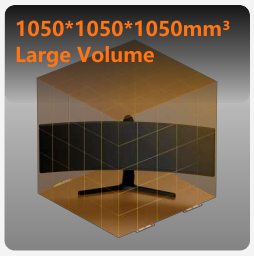
Featuring a massive build volume of 1050×1050×1050 mm, it handles big projects with ease. Compatible with large 2×5 kg spools of materials such as PLA, ABS, ASA, PET-CF, PA-CF, and PPS-CF, it enables continuous, uninterrupted printing of large-scale models. Every component is manufactured to the highest standards, ensuring reliable and consistent performance.

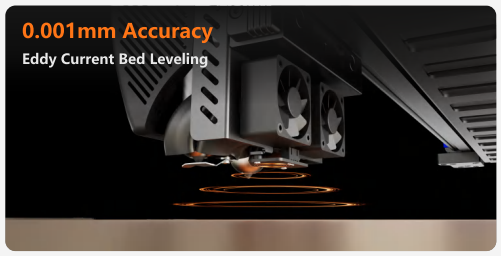
Every time. Every part. No mistake.

Get a quote | Check specs

What's the News on the D1000 Pro HS?



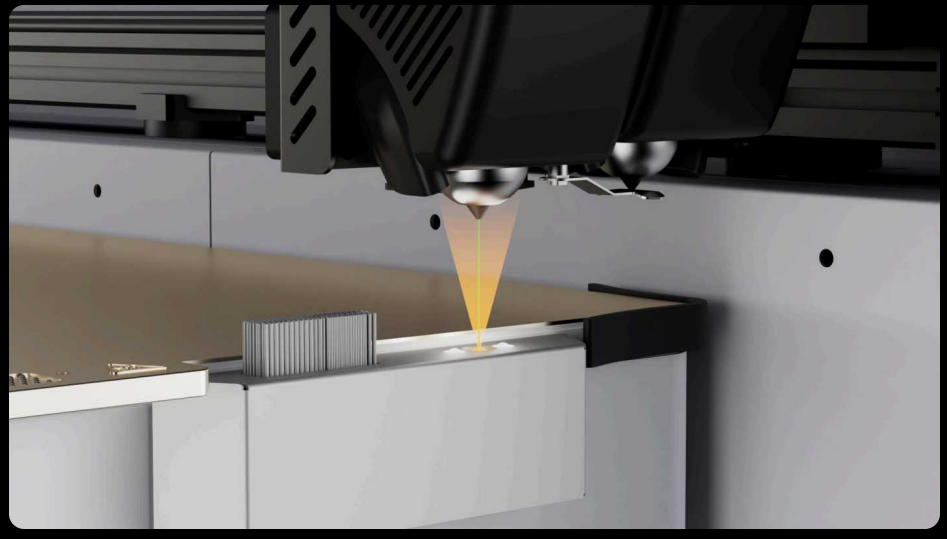




Full-Auto Dual-Nozzle XYZ Offset Calibration

XY via HD Macro Camera
Fully-Auto AI Visual Recognition

0.02mm Accuracy



Z via Dual Photoelectric Sensors
Full-Auto Multiple Positioning

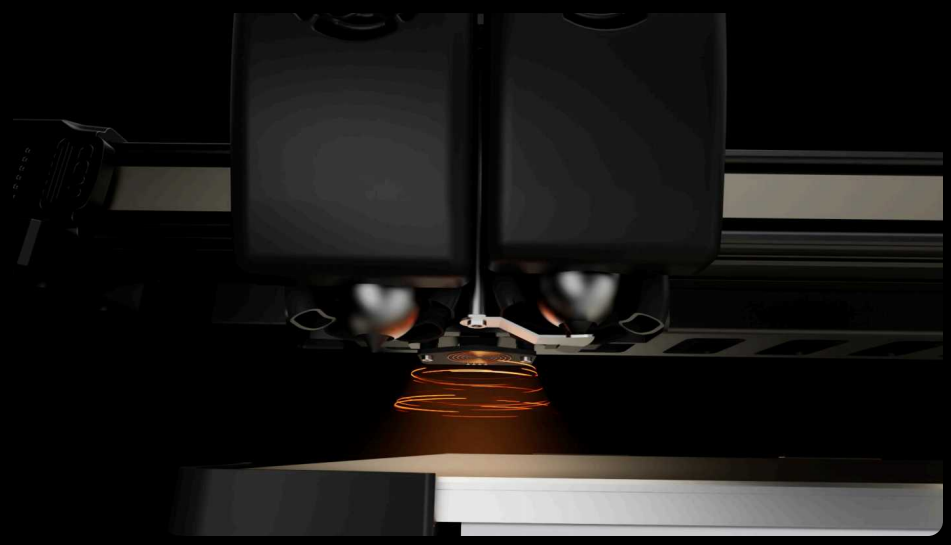
0.005mm Accuracy

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

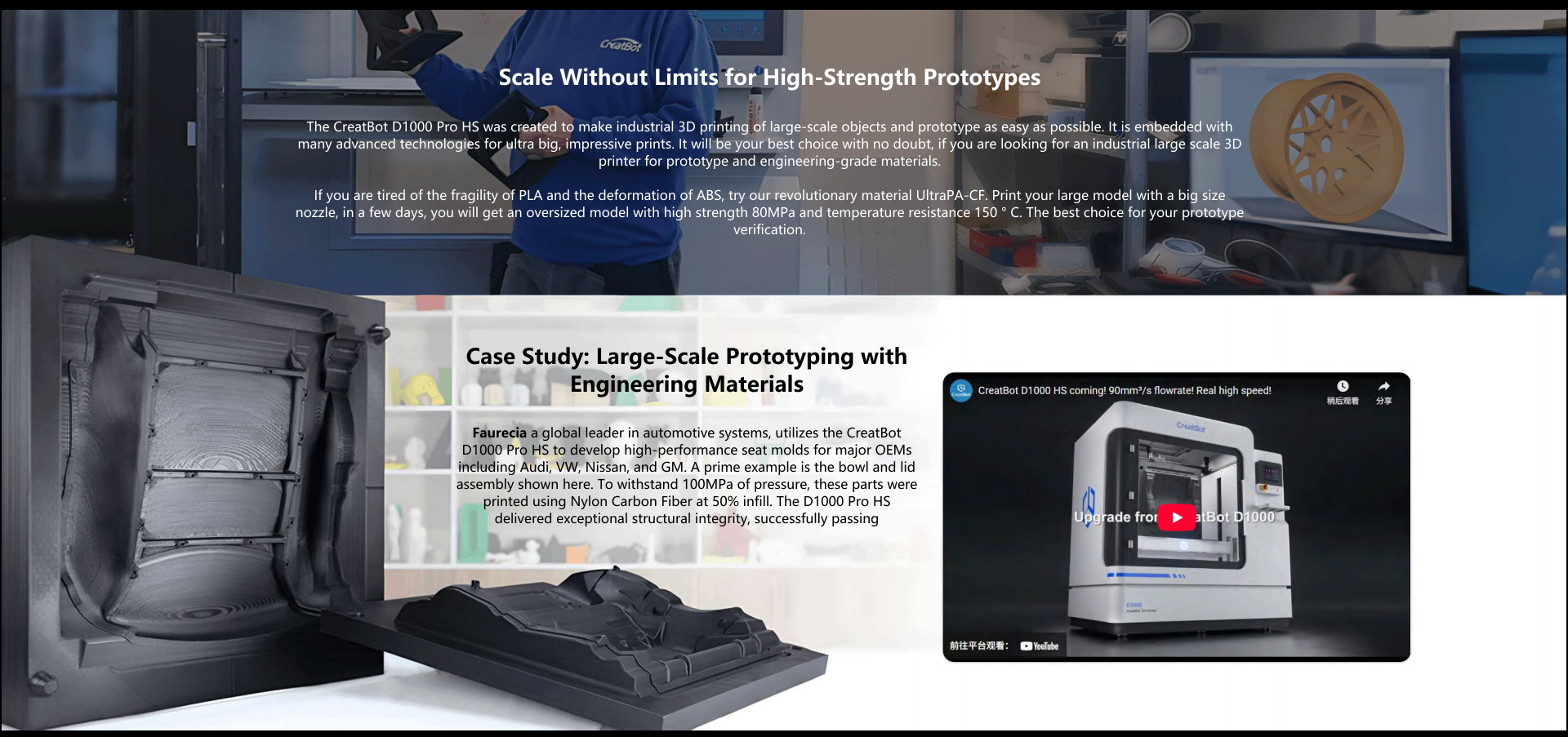
The D1000 Pro HS features a next-gen smart auto-raising dual-extruder kit, capable of reaching hotend temperatures up to 420 °C. The hotend can be quickly swapped for different nozzle sizes.

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.

Left Nozzle Right Nozzle



Scale Without Limits for High-Strength Prototypes

The CreatBot D1000 Pro HS was created to make industrial 3D printing of large-scale objects and prototype as easy as possible. It is embedded with many advanced technologies for ultra big, impressive prints. It will be your best choice with no doubt, if you are looking for an industrial large scale 3D printer for prototype and engineering-grade materials.

If you are tired of the fragility of PLA and the deformation of ABS, try our revolutionary material UltraPA-CF. Print your large model with a big size nozzle, in a few days, you will get an oversized model with high strength 80MPa and temperature resistance 150 ° C. The best choice for your prototype verification.

Case Study: Large-Scale Prototyping with Engineering Materials

Faurecia a global leader in automotive systems, utilizes the CreatBot D1000 Pro HS to develop high-performance seat molds for major OEMs including Audi, VW, Nissan, and GM. A prime example is the bowl and lid assembly shown here. To withstand 100MPa of pressure, these parts were printed using Nylon Carbon Fiber at 50% infill. The D1000 Pro HS delivered exceptional structural integrity, successfully passing

Active Heated Chamber |80°C

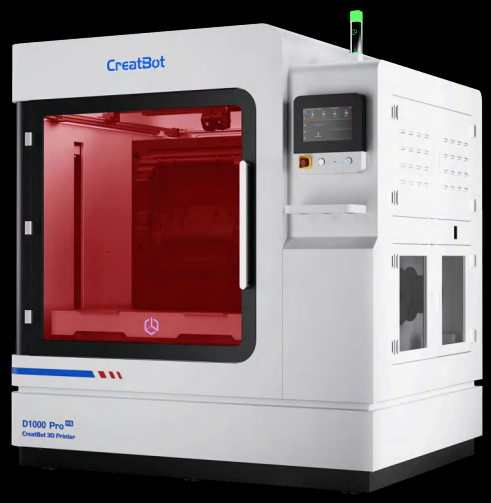
The design employs a double-layer insulation cotton layer, allowing the cavity temperature to be raised to 80°C. This is crucial for preventing the shrinkage and deformation of large engineering materials.

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

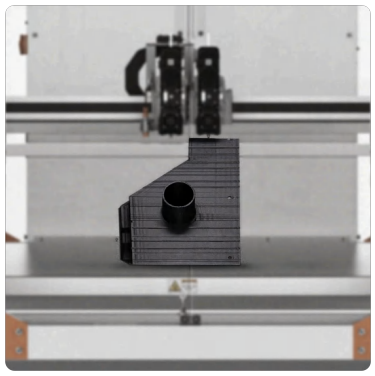
Improves Interlayer Bonding
In low-temperature environments, excessive temperature differences between molten and solidified layers weaken adhesion. A controlled heated chamber maintains optimal layer temperature, enhancing molecular diffusion for stronger interlayer bonding.

Minimizes Moisture Impact
The heated chamber minimizes the impact of ambient humidity on hygroscopic filaments (e.g., Nylon), preventing bubbles or strength loss caused by moisture absorption during printing.

Ensures Process Consistency
For industrial production, chamber temperature stability is critical for part-to-part uniformity. Active temperature control eliminates environmental variability, guaranteeing reliable repeatability.



Did You Know a Heated Chamber Can Warp Your Printer?



Ln 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:

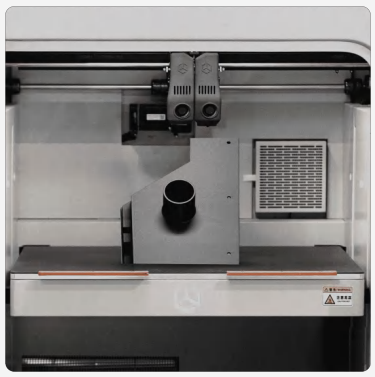
- Layer Misalignment and Surface Roughness
- Loss of Dimensional Accuracy
- Structural Defects in Large Parts

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!



Safety Door Protection System

Enterprise-Compliant Secure Printing Solution

This safety-certified door monitoring system automatically halts printing operations immediately upon door access detection, ensuring full compliance with enterprise safety protocols. The industrial-grade interlock mechanism prevents unauthorized operation exposure, eliminates mechanical hazards, and maintains full process accountability with encrypted operation logs.

Outage Restore & Filament Detection & Backup Mode

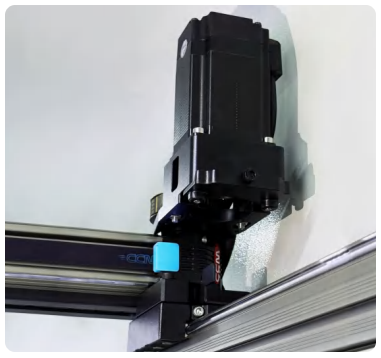
The printer automatically memorizes the current position and saves print data when power is interrupted. Upon restart, it resumes printing from the exact point of interruption, eliminating the need to restart entire prints and saving valuable time and material costs.

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.



Linear Rail and Servo Motors

When it reaches to 1000mm+ length, small rail have big deflection. The D1000 Pro HS uses heavy-duty linear rails and servo motors to ensure smooth and precise movement even at high speeds without compromising the precision and reliability required for massive prints.

True External Air Cooling

Medical-Grade Cooling Pump
Ultra-Quiet & Reliable: Equipped with a medical-grade pump, it delivers powerful, constant air pressure with minimal noise. Engineered for 24/7 operation, it ensures a quiet and stable workflow for professional environments.

Eddy Current Sensor Protection
Precision Guarded Against Heat: Protects the eddy current sensor from extreme chamber heat during platform probing. Targeted cooling prevents thermal damage and failure, ensuring peak precision and long-term sensor reliability.

True Air Model Cooling
Flawless High-Speed Printing: Directs fresh external air to solidify material instantly. This 'cross-flow' cooling prevents sagging and stringing in heated chambers, delivering perfect overhangs and superior surface finish.

Filament Dry Room

Our 3D printer features an integrated filament drying compartment, which maintains a controllable tempera ture environment of 0-70°C. Designed to prevent moisture absorption in hygroscopic materials such as nylo n, PC, PA-CF, PET-CF, It eliminates printing defects like bubbling and stringing, ensuring consistent, high-quality output throughout the printing process.

Independent Quad-Z Axis

Quad-Z Auto-Leveling

Eliminate Manual Leveling for Absolute Flatness: The independent four-motor drive allows for individual height compensation at each corner of the platform. The system automatically detects and fine-tunes the vertical height of every corner to ensure extreme parallelism between the build plate and the gantry, completely solving first-layer adhesion issues for large-scale prints.

Superior Load Capacity & Stability

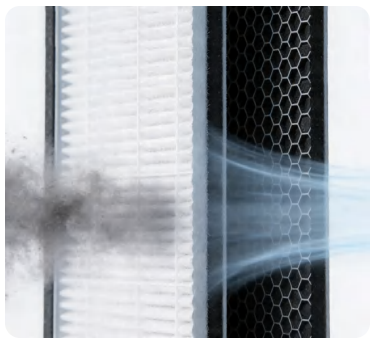
Rock-Solid Support for Heavy Industrial Parts: Large-scale models can weigh up to hundreds of kilograms. The four motors work in perfect synchronization to support and lift heavy loads smoothly. Even during high-speed (HS) printing, the platform remains rock-steady, eliminating layer lines caused by platform micro-vibrations.

Anti-Tilt & Torque Correction

Uniform Precision Across the 1000mm Span: The independent motors actively lock the platform' s status in real-time. Regardless of the print head' s position, the four support points provide equal counterforce to prevent physical tilting or mechanical twisting, ensuring consistent dimensional accuracy across every inch of the 1000mm wide build area.

Superior Layer Consistency

Injection-Molding Surface Quality: By distributing power evenly through four high-subdivision stepper motors, Z-axis travel becomes smoother and more refined. This effectively eliminates periodic layer banding caused by mechanical transmission errors, giving large industrial parts a flawless surface texture comparable to injection molding.

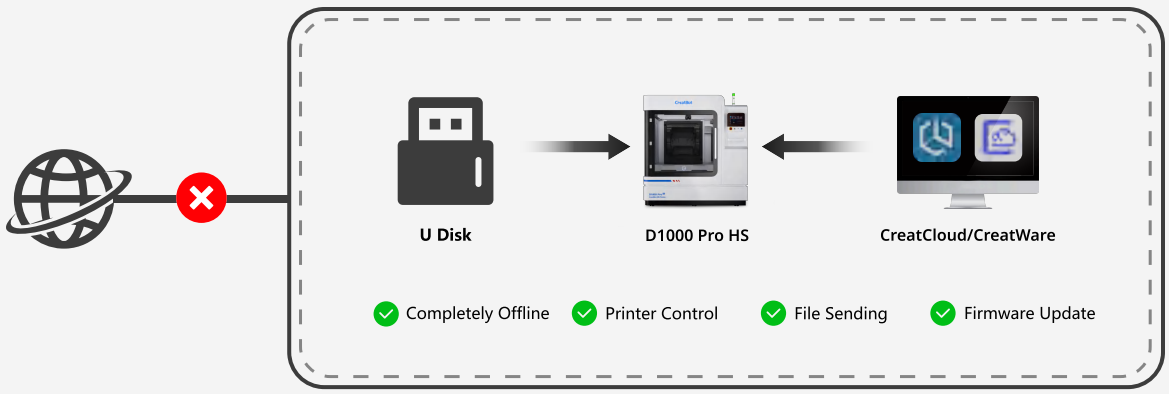


Ultra Air Filter System / 99.995% Adsorption

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.

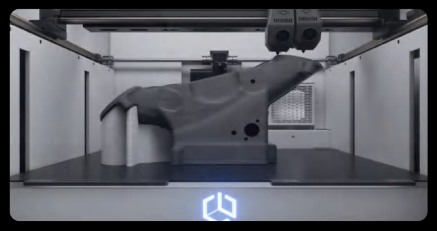
WIFI, LAN, Internet, APP Control

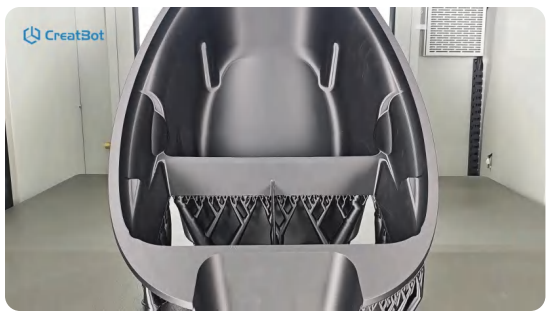
In addition to cloud connectivity, CreatBot also supports local area network mode and physical connection operation. You can control the printer, send sliced files, and update firmware without an internet connection.



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.





D1000 Pro HS Highlights

1050*1050*1050mm Build Volume
High Resolution & Speed
Camera Control Technology
Reliable 24/7
Fully Enclosed

Exceptional Stability

The precision-engineered steel monocoque construction ensures exceptional machine stability, minimizing vibration and maintaining consistent print quality even during high-speed, long-duration printing sessions. This robust design guarantees reliable performance for industrial-scale production.

Specifications

* Note: Red text highlights upgraded features for the HS model.

Printing	
Print Technology	FDM/FFF
Build Volume	Single Extrusion:1050×1050×1050mm Dual Extrusion:990×1000×1000mm
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	0.8mm (0.3-1.0mm optional)
Print File Type	Gcode

Temperature	
Max. Nozzle Temperature	420 °C
Max. Bed Temperature	100 °C
Hot Chamber Temperature	80 °C
Filament Dry Room Temperature	0 °C/70 °C

Speed	
Max Print speed	300mm/s
Flow rate	90 mm3/s

Electrical	
Power Requirements	220~240 V,50~60 Hz
Display	10-inch full color touch screen independent operating
Rated Power	Printer:5500W,Chamber:6000W
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
Dual Nozzle Auto-Resume Printing	Yes
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	Safety Door Lock
Chamber Insulation	Internal Insulation Cotton
External Air Cooling	Yes

Mechanical	
Build Plate	Aviation Aluminum Plates
Build Plate Leveling	Automatic
Extruder	Smart Dual Extruderss
Auto-raising Extruders	Yes
X/Y Positioning Precision	0.011 mm
Z Positioning Precision	0.0025 mm
Z-axis structure	Independent Quad-Z Axis

Size &Weight	
Product Dimensions &Weight	1850×1350×1942mm 750kg
Packing Size &Weight	2070×1610×2240mm 880kg