ZMORPH
3D PRINTERS
THAT DELIVER

ZMORPH i500

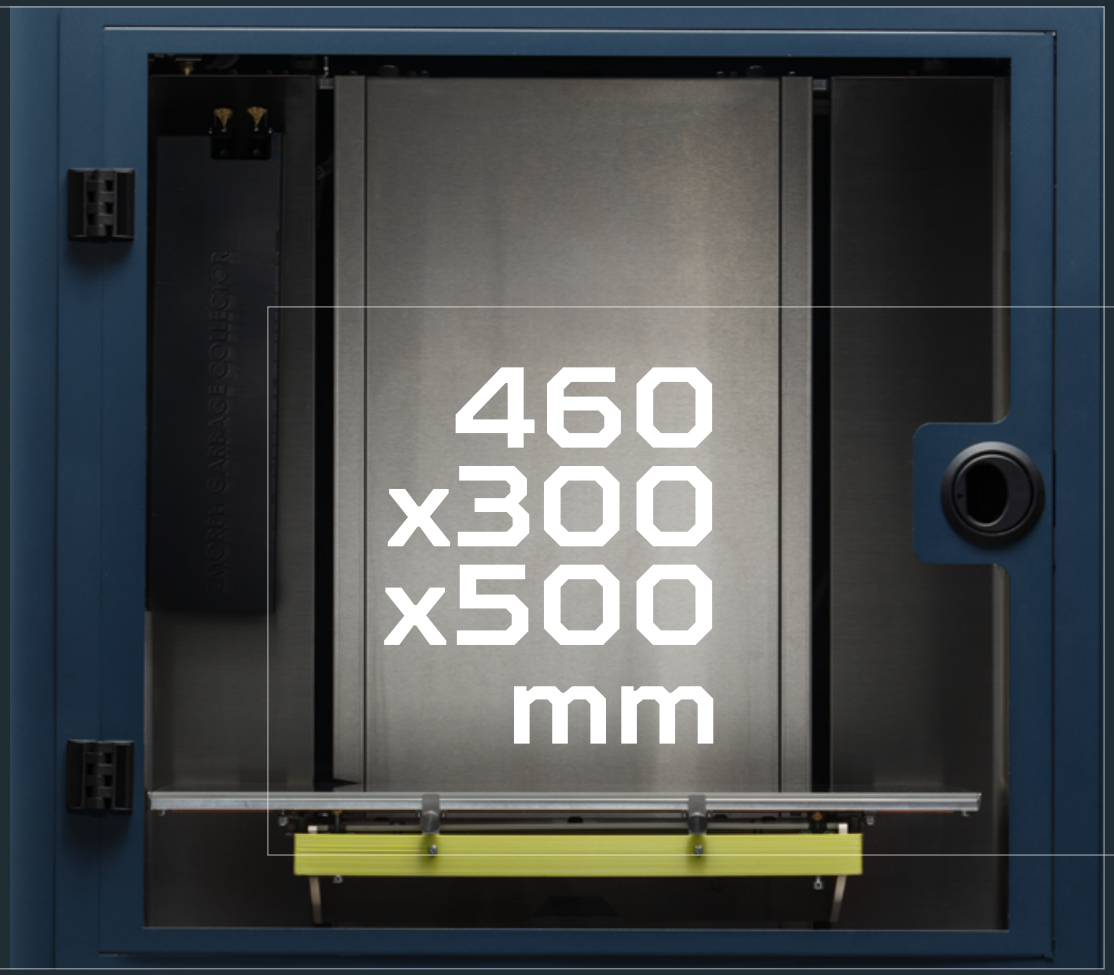
High-Performance 3D Printer

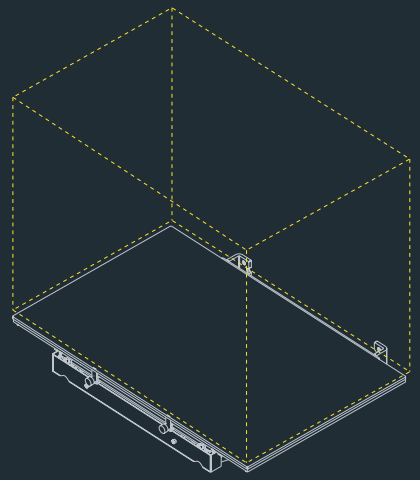
DISCOVER
ZMORPH i500

→

High-performance, industrial format 3D printer

Large Build Volume to Meet Your Demands

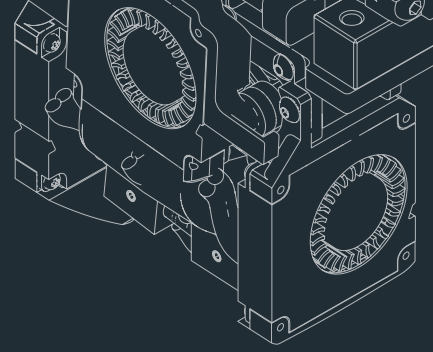


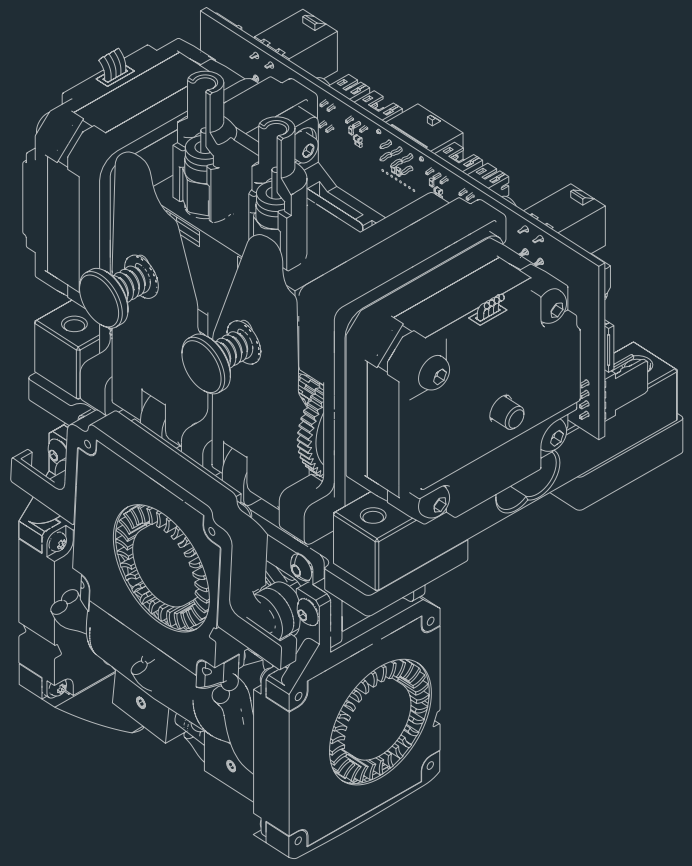


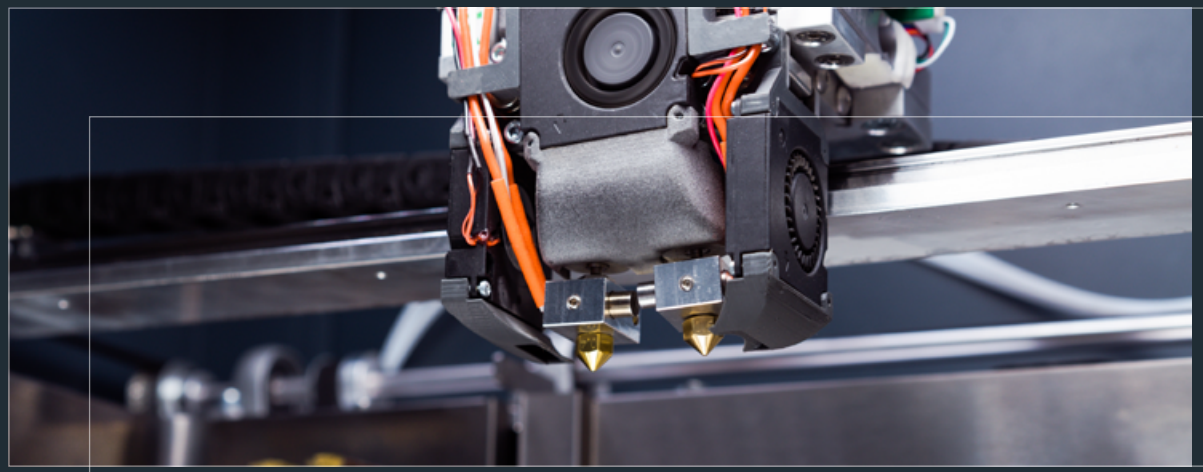
Increase the throughput and productivity by printing huge parts or multiple objects on a single build plate with a class-leading build volume of **460x300x500 mm (18x11x19.6 inches).**

Cost-effective solution for low-volume production. Create custom tools in great quantities or prototype large parts with complex geometry.

Dual Drive Dual Extruder



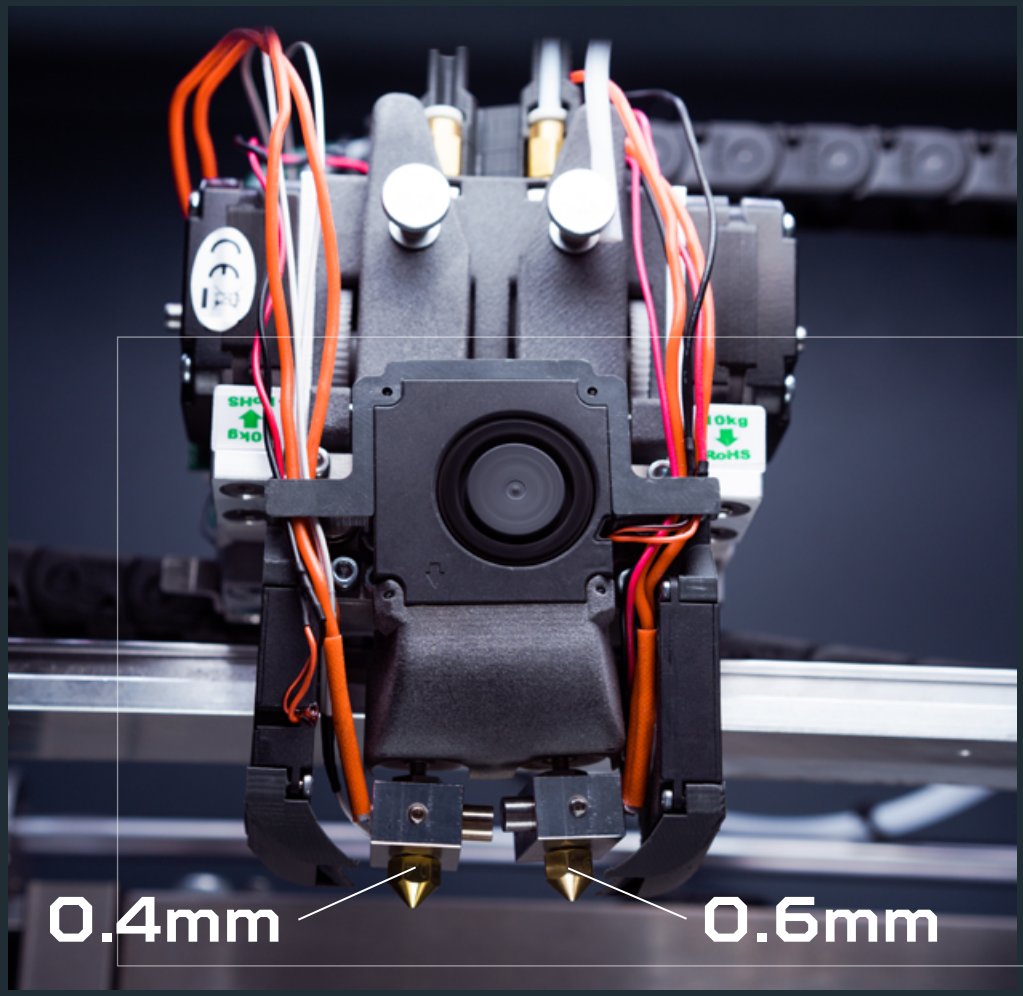


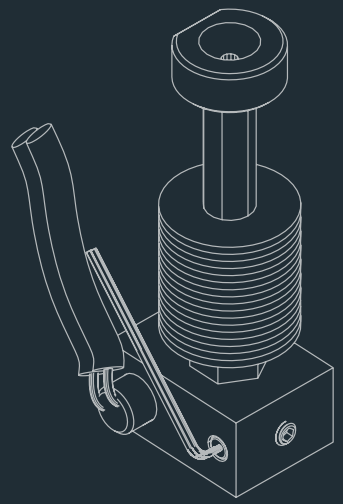


The Zmorph's advanced full metal Dual Drive Dual Extruder can heat up to 300°C. Waste Remover for wiped waste, matched with Tripple Control System on a filament flow keeps interrupted, high-quality, repeatable 3D printing for the most demanding applications.

The unique Nozzle Lifting System is made to ensure the currently idle nozzle will not be interfering in any way with the model, for instance by the gravitational flow of the filament or by hitting the model.

Replacable Hotends





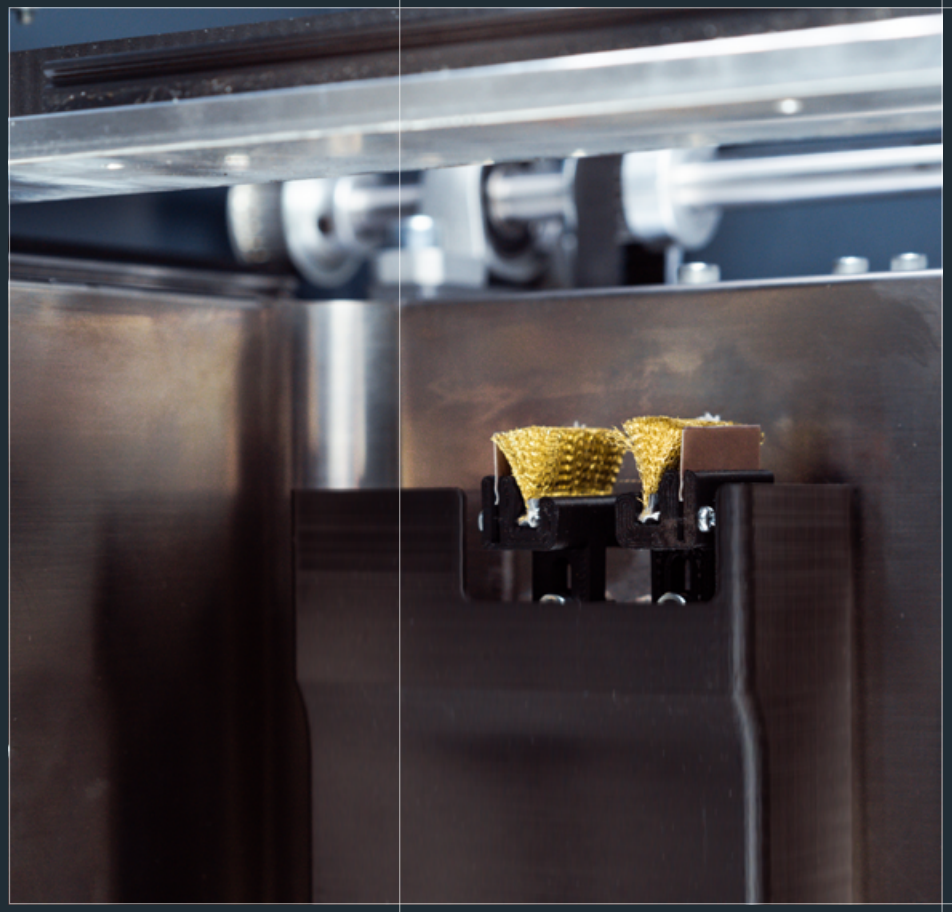
The Dual Drive Dual Extruder features two replacable hotends with various nozzle diameters. Zmorph i500 by default uses two different hotends: Zmorph i500 Build Hotend 0.4 mm and Zmorph i500 Support Hotend 0.6 mm dedicated to support structures.

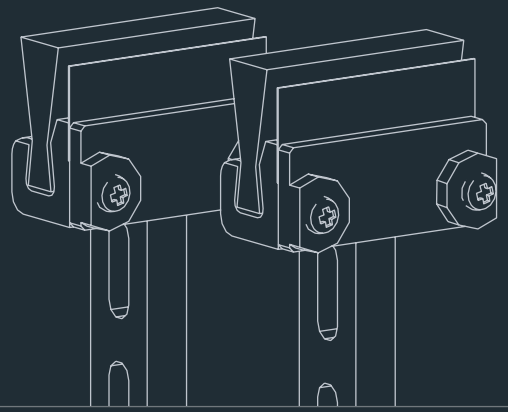
The operator can optimize the printing time, by replacing the hotend to one with a bigger nozzle size.

Nozzle Waste Remover

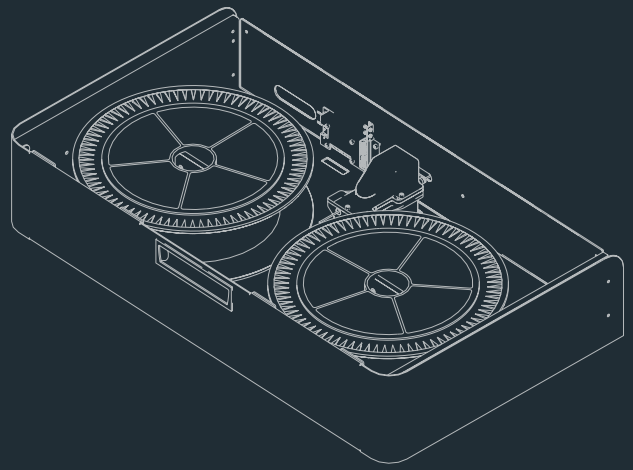
Zmorph i500 is equipped with Nozzle Waste Remover, which keeps the extruder clean during dual material printing. With each material swap (between the build and support hotends), the extruder drives through the cleaning system to wipe the nozzles from unnecessary drips.

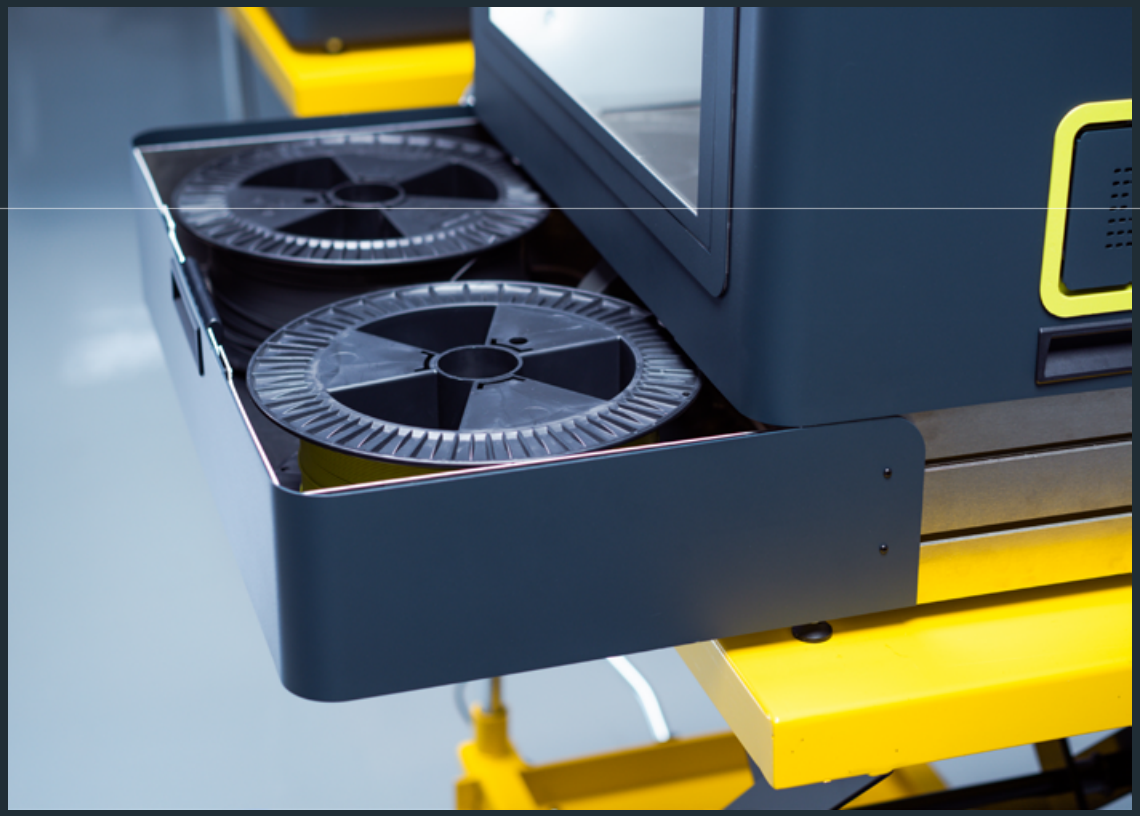
Nozzle Waste Remover contains two brass brushes and teflon scrapers. Removed waste is collected in the attached box to keep the environment tidy.





Material Station with AFLS

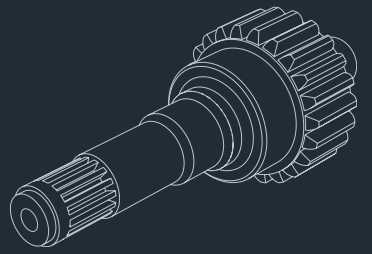




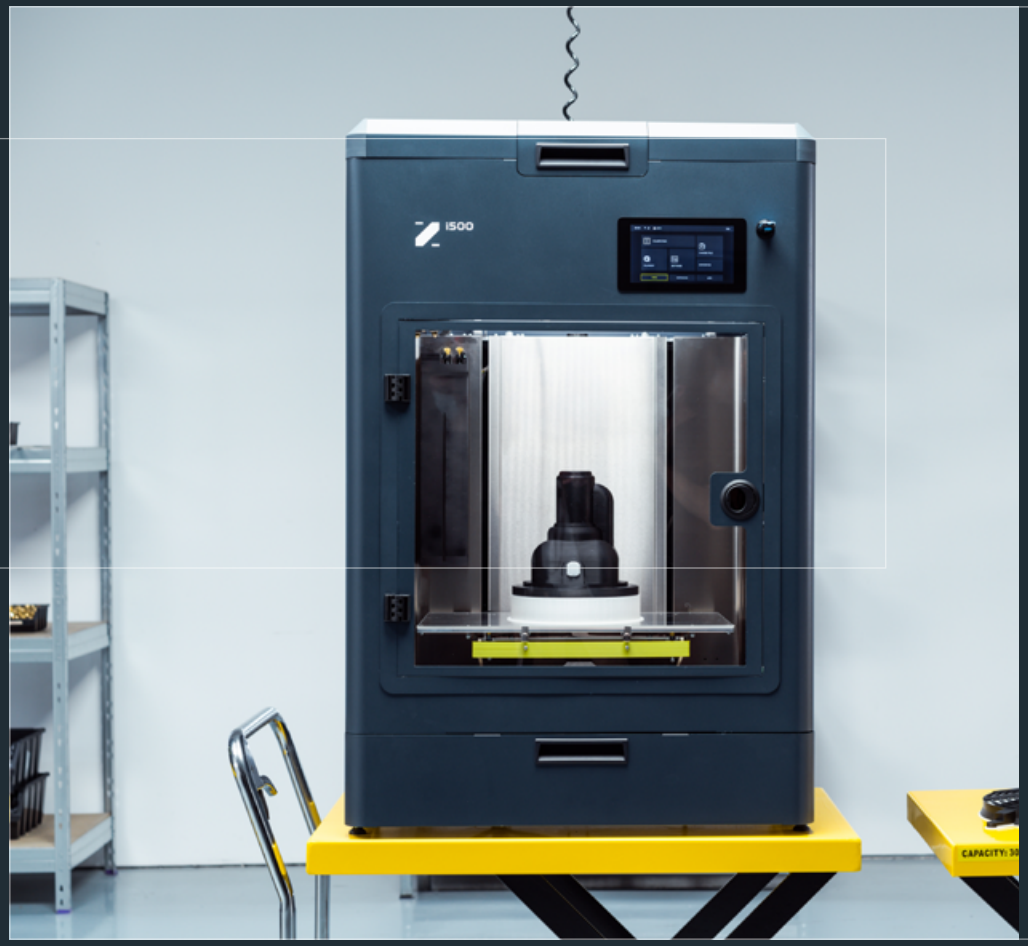
The integrated Material Station can fit two spools of filament up to 2,5 kg each to maintain continuous work for a long period of time. This means bigger models are possible to print at once.

The Material Station includes Automatic Filament Loading System equipped with filament sensor. The AFLS smoothly provides the material from the drawer to the extruder and monitors the filament flow.

Seamless 3D Printing



Filament sensors monitor the material flow in Zmorph i500. The sensors in the extruder and AFLS constantly check for the interrupted flow of the filament. When runout, machine will provide notification, operator can replace the material and continue printing without a hassle.

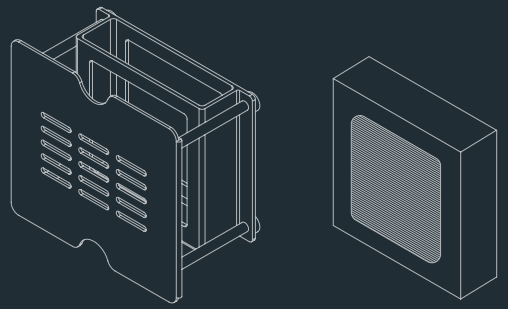


Air Flow System

The Air Flow Sytem includes two detachable components equipped with filter inserts and fans. One dedicated to provide fresh and filtered air to the inside of the printer and one to release air clear of particles and fumes. Thanks to this solution, the air inside circulates ensuring even heat distribution to reduce the material shrinking and cracking.

Output HEPA/Carbon filter.

Clears the air coming out of the machine of fumes and particles protecting the operator and other bystanders.



Input G4 filter.

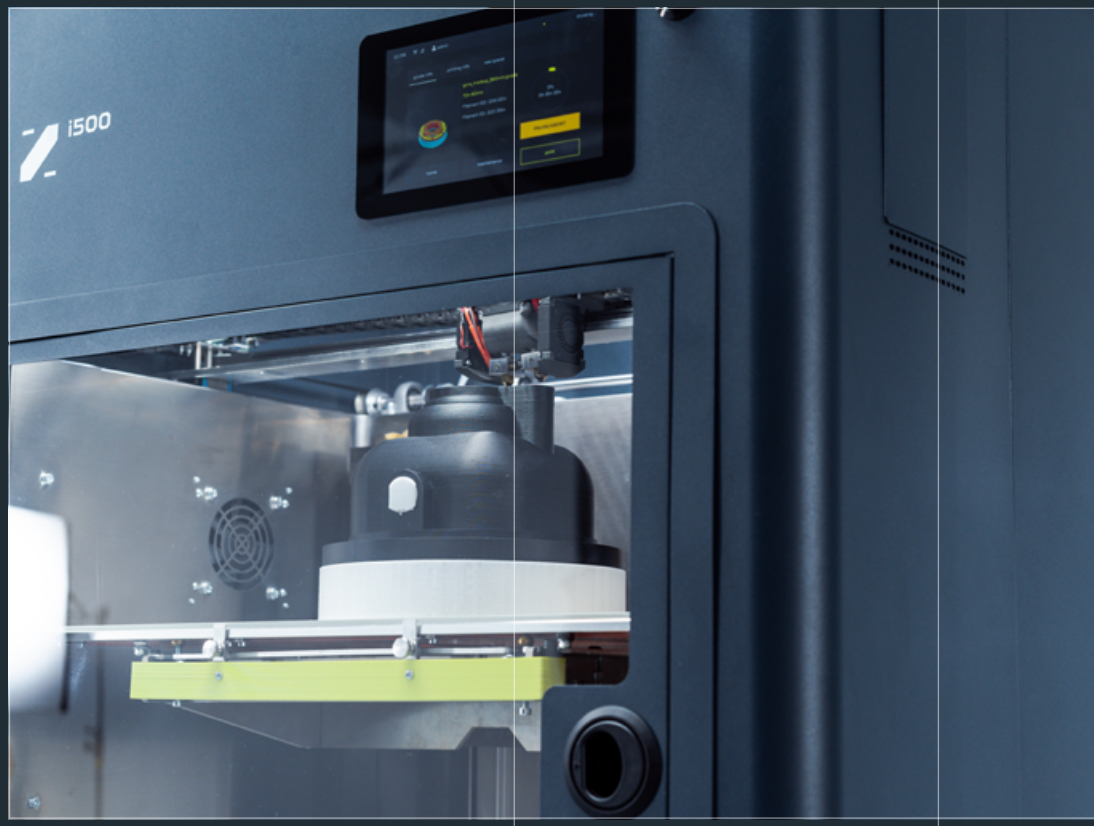
The air flowing into the machine is filtered of dust particles to maintain the best printing quality by keeping the environment clean.

Built with Quality in Mind

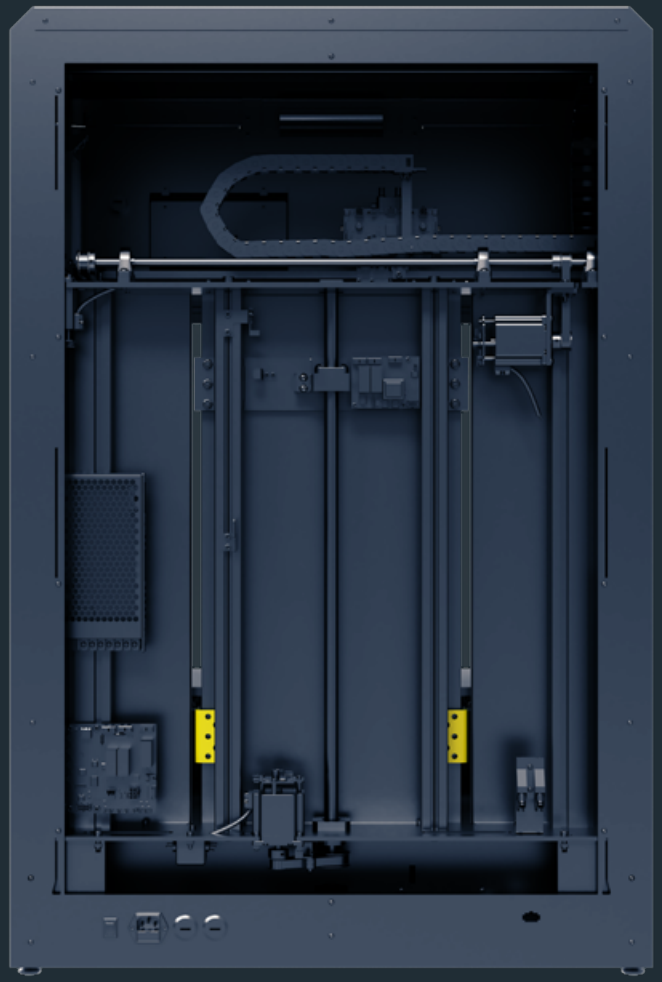
Purpose built to last long and durable. Long-life design, high-quality components like precision linear mechanics IKO/IGUS and closed build makes Zmorph i500 a workhorse for demanding applications.

Fully enclosed & passively heated chamber. A bulletproof unibody made of high-quality 1.5 mm and 2 mm aluminum parts designed by engineers to withstand harsh manufacturing environments casing parts covered with structural paint. Resistant to scratches and finger prints.

Build Platform. Created to last from high-quality components, Zmorph i500 Build Platform delivers even heat distribution, second to none warping prevention and lifetime for over thousands of print hours. It's easily removable and can heat up to 130°C.



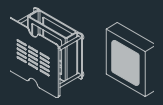
Serviceability



Achieve peak performance with Zmorph i500 reducing your operational costs and maximizing your uptime and productivity. Spend time on 3D printing and less time on machine maintenance.

Easy access to critical components with Zmorph Distributed Control System. Reduce your service and maintenance time with easy access to critical components for servicing and removal.

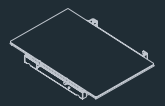
All consumable parts are easily replacable and sold separately by the manufacturer. The machine will notify the user when the parts should be changed.



Filters up to 1000h
(depends on worktype)

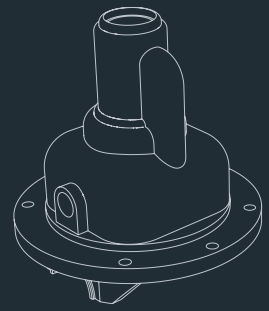
Waste Remover Tips up to 10 000 wipes
(depends on worktype)

Exchangeable hotends



Borosillicate glass for Zmorph i500 heated bed

Maximize Uptime and Throughput



Zmorph i500 was designed to maximize uptime and throughput. Thanks to the technologies implemented in the 3D printer, such as Automated Filament Loading System, Distributed Control System or the unique Dual Drive Dual Extruder you can minimize downtime in your workspace to minimum and focus on your work, rather than maintaining the machine.

Additional Features

Touch Panel

Mounted on the optimal height, the touch panel with big, 7” screen has a wide angle of view making it very comfortable to use. The intuitive UI keeps the operating process seamless.

Intuitive Calibration

Semi-automatic calibration process is easy to operate and ensures satisfying results with each print.

Connectivity

Numerous ways to connect to your machine. Deliver files by the USB, send files remotely via Wi-Fi or Ethernet or use the Zmorph Hub.

Camera

Zmorph i500 is equipped with a camera inside the enclosure to monitor the printing process.

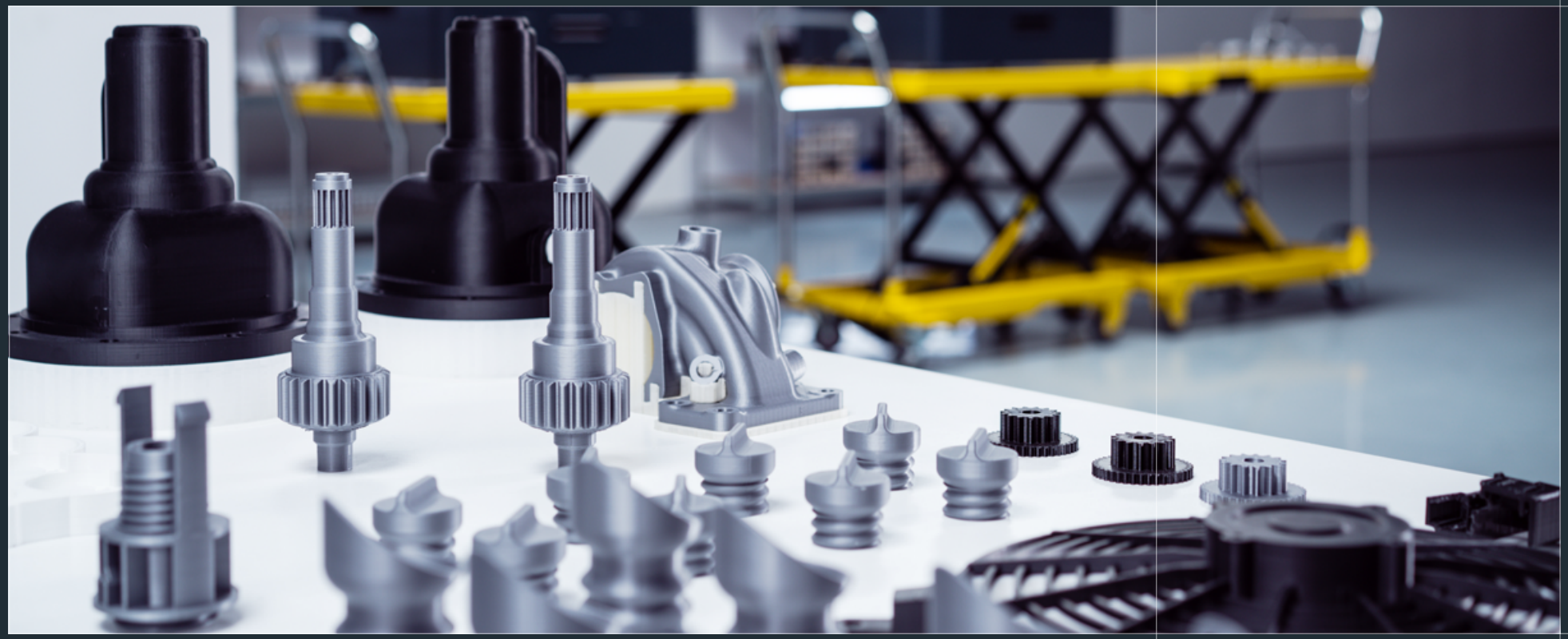
Auto-Update

Zmorph i500 firmware can be automatically updated when connected to the internet.

Electric Door Lock

Prevents unauthorized access to the working area while the machine is printing. The door will automatically unlock when it is safe to take out the printed model.

Materials

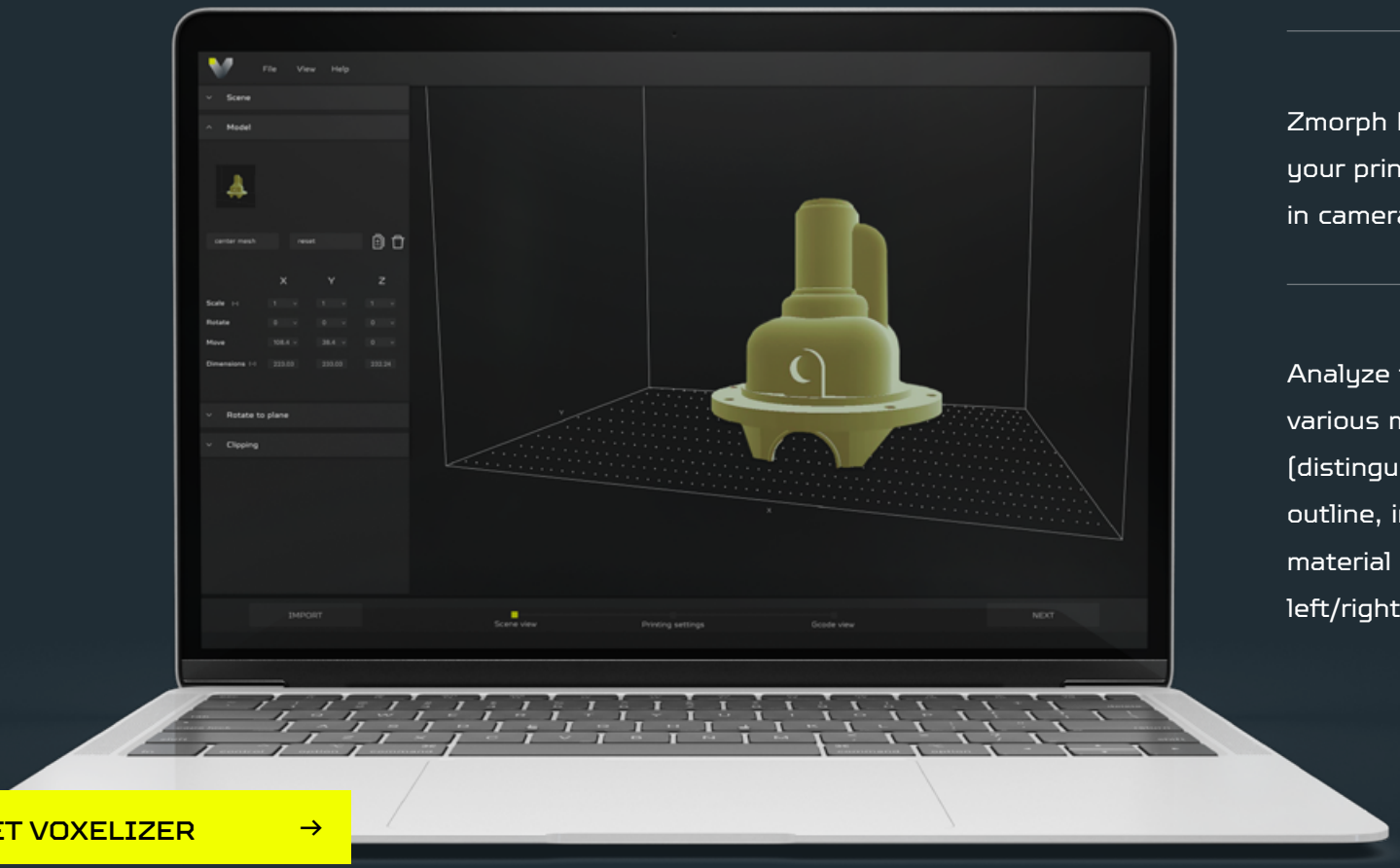


Keep costs low, and iterate faster with 3D printing materials that meet the highest expectations. Zmorph's materials can handle extensive wear and tear, bending, and impacts without breaking.

The Zmorph i500 built-in Material Station boosts machine uptime and keeps your workspace clean. The system can fit up to 2x2,5kg spools and automatically start feeding material to the extruder. Print precise and reliable with almost any material on the market.

Voxelizer for Industry

Get the most out of Zmorph i500 with the dedicated slicing software. Voxelizer Industry is a special version designed for the i500 aimed at professional work including dual material printing complex geometries. Especially with soluble support materials.



GET VOXELIZER →

Set the printing intent and decide if you want to print durable, fast or precise models, or mix different presets to achieve desired results.

Zmorph Hub. Transfer files wirelessly to your printer and monitor the job via built-in camera.

Analyze the G-code with two various modes od display; Hex type (distinguishing parts of the model: outline, infill, support, etc.), and Hex material (generates preview representing left/right material usage).

Available All Over the World

RESELLERS

Zmorph i500 is available worldwide through a network of authorized companies that distribute Zmorph machines, branded materials, accessories and spare parts.

Visit our website to find the nearest Zmorph reseller.

FIND RESELLERS →

Technical Specifications

3D PRINTING

3D printing technology	FFF (Fused Filament Fabrication)
Toolhead	Single material 1.75 [mm], Dual material 1.75 [mm],
Layer resolution	0.05 - 0.4 [mm]
Maximum extruder temperature	300 [°C]
Work area (single material)	460 x 300 x 500 [mm]
Work area (dual material)	440 x 300 x 500 [mm]
Maximum bed temp.	130 [°C]
Minimum wall thickness	0.4 [mm]
Dimensional accuracy	+/- 0.2 [mm]
Work area leveling method	Semi-automatic
Material form	Spool, maximum fi300x100
Material diameter	1.75 [mm]
Nozzle diameter	0.4, 0.6, (0.8 - in progress) [mm]
Support	Mechanically and chemically removed - printed with build or support material
Connectivity	USB (pendrive), Ethernet, WiFi
Available materials	PLA, ABS, PET, Nylon, PVA, ASA, TPE, PC/ABS, HIPS
Third-party materials	Supported
Work speed	10 - 110 [mm/s]
Travel speed	350 [mm/s]

WEIGHT AND PHYSICAL DIMENSIONS

3D printer	703 x 507 x 1075 [mm]
Transport package dimensions	800 x 600 x 1200 [mm]
Transport weight	~ 70 [kg]
3D printer weight	~ 55 [kg]

TEMPERATURE PARAMETERS

Ambient operation temperature	15 - 30 [°C]
Storage temperature	-10 ~ 40 [°C]

ELECTRICAL PARAMETERS

Input current	110 [VAC] ~ 9-10 [A] 50/60 [Hz] 240 [VAC] ~ 5 [A] 50/60 [Hz]
Maximum power consumption	1000 [W]

SOFTWARE PARAMETERS

Type of software	Original, dedicated
Supported formats	STL, OBJ

AIR FILTRATION PARAMETERS

Output filter type	HEPA/Carbon
Input filter type	G4 (anti-dust)
Ventilation power	3.1 [W]
Filter dimensions	80 x 80 x 25 [mm]
Fitration control	Temperature

OTHER

Toolhead changing system	Nozzle Lifting System
Nozzle Waste Remover	Brass brushes and Teflon scrapers
Filament loading	Automatic Filament Loading System
End of material detection	Filament sensors + RFID tags*

* RFID tags will be implemented after launch

Contact

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