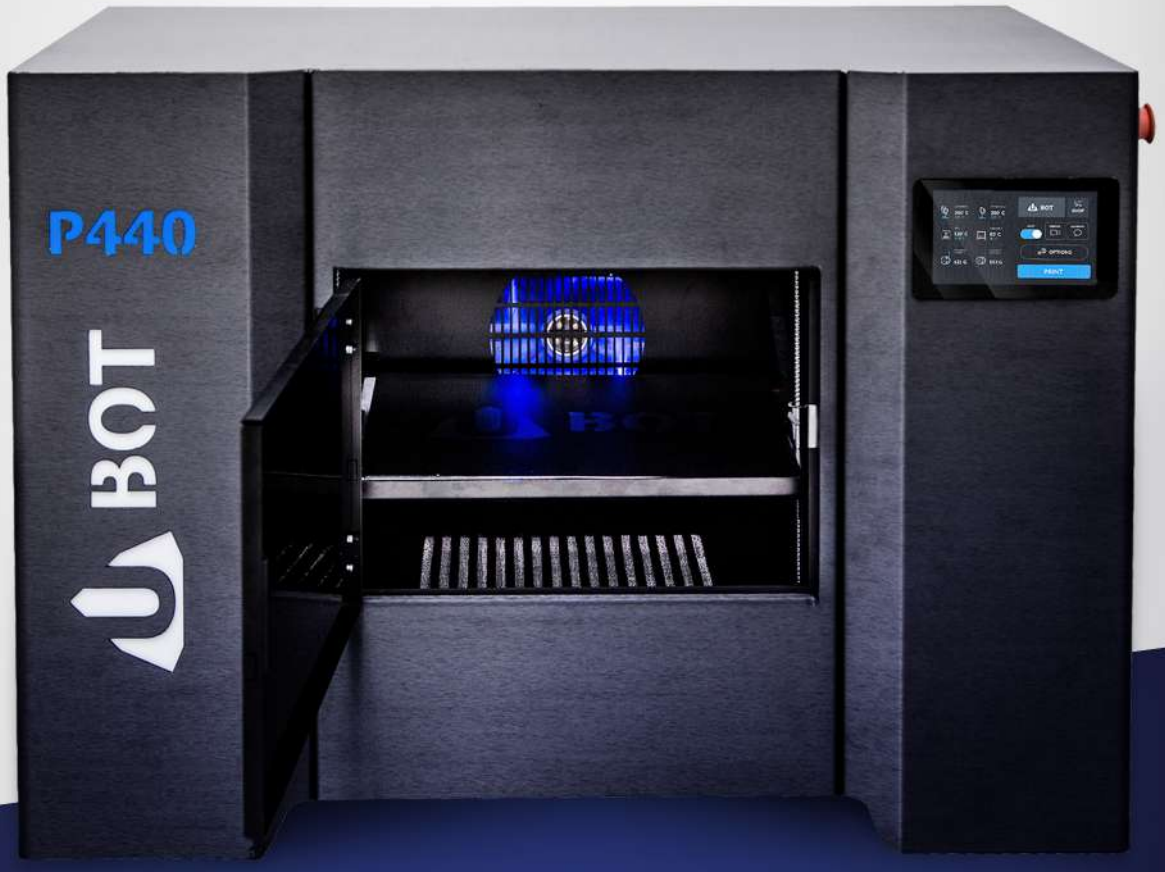
UBOT

PROFESSIONAL 3D PRINTING AT YOUR FINGERTIPS!



Discover new possibilities with UBOT
3D Industrial Printer

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UBOT **P440**

PRINETR AREA
440 X 330 X 300 MM

HOTEND HELLFIRE

NEW UBOT HERKULES EXTRUDER

AUTOMATIC WORK **BENCH CALIBRATION**

THREE-ZONE MAGNETIC WORK BENCH

CLOSED AND **HEATED WORK CHAMBER**

ELECTRIC CURRENT SAFETY AND **POWER BACKUP**

AN IMPRESSIVE WORK AREA OF 440 X 330 X 300 MM

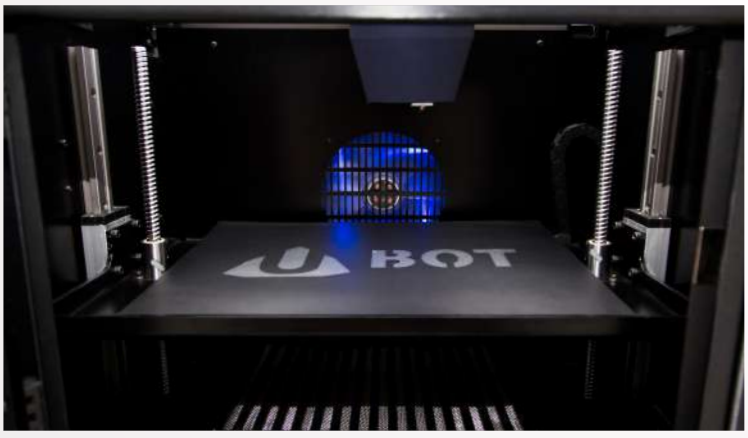
FILAMENT SENSOR WITH LEFT MATERIAL WEIGHT CONTROL

EDUCATION · MEDICINE · AUTOMOTIVE · AIRCRAFT · ARCHITECTURE

JEWELLERY · DESIGN · ELECTRONICS · MOBILE · TUNING

CLOSED HEATED WORK CHAMBER

The 3D printer is provided with a work chamber, heated by an independent 1500 W system. This solution, already known from industrial systems of 3D thermoplastic printing and significantly different in its properties from desktop devices where uncontrolled heating is provided by the heat emitted by the work bench itself. In the P440 printer, heat distribution is provided by several independent fans - air motion does not cause rapid temperature changes. The air is exhausted from the chamber by an additional fan and filtered by a four-stage chamber filter: HEPA, carbon, PP and cold catalysis.



THREE-ZONE MAGNETIC TABLE

The work bench consists of three components:

1 **a work bench**

made of precision aluminium, which performs a magnetic function and is responsible for an appropriate stability of temperature, uniformly distributed along the entire surface; heating is provided by an 800 W system.

2 **a work table**

made of thick steel 6 mm, additionally bent to ensure adequate stiffness

3 **a resilient table**

covered with a special adhesive coating, preventing from print deformation

The table is magnetically fixed, therefore, it can easily be removed after completed work, while the print can easily be peeled off from its surface with a slight bending. The maximal table temperature is 160°C.

HOTEND **HELLFIRE**

It is a printing head, intended for high-temperature materials and provided with an intuitive tool replacement system which allows for quick changes of nozzle diameters from 0.2 mm up to 1.2 mm in 0.1 mm intervals. It features an increased heater power (double-fire) to achieve the set temperature even faster. The maximum nozzle temperature is 400°C.

FILAMENT SENSOR WITH LEFT MATERIAL WEIGHT CONTROL

Material feed control:
This 3D printer is not only able to detect the end of filament on a roll but also to identify possible problems with filament feed (e.g. a clogged nozzle, tangled material, etc.).
Material weight measue:

The 3D printer software constantly monitors operation progress, e.g. by mobile devices so the user may, at any time, check the actual data on left material to supplement it before there is no material on the roll. In addition, the 3D printer communicates about critical states via SMS messages. For example, 1 hour before the end of material on the roll, the user receives a message about a coming necessity of filament supplementation. Other types of messages include, among others, printing stop in result of a failure or a normal printing task end.

NEW UBOT HERKULES EXTRUDER

A proprietary extruder enables material extrusion with double force (double jugger) by the application of a double feedback system and an increased torque. Both these features ensure better, more precise material extrusion, while reducing the risk of filament "chafing".

ADDITIONAL FEATURES

- A possibility to purchase the filament and printing materials directly from the 3D printer's panel
- Internal memory - a possibility to send a file from a PC to the 3D printer's HD
- Integration with computer and phone applications - a cloud system provides a possibility to simultaneously connect more external peripherals; a possibility of remote control with a camera viewing feature
- A 2-year guarantee
- A possibility to purchase an additional guarantee package

AUTOMATIC WORK BENCH CALIBRATION

The work bench is auto-levelled. The software maps its surface and generates an image by the method of finite elements. Therefore, it is calibrated with respect to the printing nozzle and ensures an ideal adhesion of a printed model to the surface. The work bench is ideally flat and allows for printing of flat bases without the need to use additional rafts.

		Stiffnes	Durability	Printability	Maximum Service Temperature	Extruder Temperature	Bed temperature	Material features
	U-ABS	●●●○○	●●●◐○	●●●●○	94 °C	230–245 °C	80–100 °C	Easy mechanical and chemical treatment
	U-PLA	●●●●○	●●●●○	●●●●●	54 °C	190–220 °C	0–65 °C	The easiest in printing
	U-PET G	●●◐○○	●●●○○	●●●●◐	73 °C	220–245 °C	70–95 °C	Certified for food contact
	U-HIPS	●●●●●	●●○○○	●●●○○	73 °C	215–235 °C	70–100 °C	Dissolvable in d-linoene
	U-B FLEX	●◐○○○	●●●●○	●●●○○	80 °C	220–240 °C	60–80 °C	Elastic- Toughness Shore`a 32 scale ShD
AVAILABLE ON REQUEST	U-TPU	●○○○○	●●●◐○	●○○○○	91 °C	215–235 °C	60–80 °C	A higher flexibility - Toughness Shore`a 93 scale ShA
AVAILABLE ON REQUEST	U-NYLON (PA)	●●◐○○	●●●●○	●●●○○	125 °C	220–260 °C	85–100 °C	Durable, softly flexible
AVAILABLE ON REQUEST	U-ASA	●●●○○	●●●●○	●●●◐○	85 °C	220–240 °C	90–110 °C	High UV-resistant
AVAILABLE ON REQUEST	U-PVA	●◐○○○	●●●○○	●●◐○○	75 °C	180–230 °C	50–60 °C	Reinforced with carbon fibers
AVAILABLE ON REQUEST	U-NANO CARBON	●●●◐○	●●●●●	●◐○○○	160 °C	240–260 °C	90–110 °C	Support material ,water-soluble
AVAILABLE ON REQUEST	U-PMMA	●●●●○	●●●◐○	●●○○○	95 °C	240–260 °C	75–110 °C	Well resistance to scratch
AVAILABLE ON REQUEST	PPSU	●●●●●	●●●●◐	●○○○○	205 °C	360–390 °C	140–160 °C	Chemically Resistant
AVAILABLE ON REQUEST	PC-ABS	●●●○○	●●●◐○	●●○○○	105 °C	250–270 °C	80–100 °C	High stiffness
AVAILABLE ON REQUEST	PC	●●●◐○	●●●●○	●◐○○○	130 °C	250–300 °C	110–140 °C	High impact
AVAILABLE ON REQUEST	PEI	●●●●●	●●●●◐	●○○○○	180 °C	350–380 °C	140–160 °C	Non-flammable
AVAILABLE ON REQUEST	PEEK	●●●●●	●●●●◐	●○○○○	250 °C	370–400 °C	130–160 °C	High temperature resistance
AVAILABLE ON REQUEST	ESD	●●●◐○	●●●○○	●●●○○	98 °C	240–260 °C	100–110 °C	Anti-static properties

Specification

Printing technology: FFF (Fused Filament Fabrication)

Print area: 440 x 330 x 300 mm

Layer resolution: up to 50 microns

Extruder:1 or 2 printing head, laser head

Nozzle diameter: 0.2/1.2, also special warhead, strengthened

Minimal wall thickness: 0.4 mm

Filament diameter: 1.75 mm

Flow detection of filament: yes; 2 independent system

Certified materials: PLA, ABS, HIPS, PET, Nylon, PP, ASA,PC, NanoCarbon, TPU, B-FLEX, PC-ABS, ESD, PEEK, Ultem, PPSU, composite materials and another

Support material: HIPS, BVOH, PVA

Chamber Filter: Yes; 4- functional

Printing temperature (extruder): up to 400˚C

Platform temperature: up to 160 ˚C

Chamber temperature: up to 80˚C

Positioning precision XY: 3,125 microns

Positioning precision Z: 0.8 microns

Working platform: special magnetic platform with adhesive pad

Auto calibration: yes

Connection: USB, WIFI, built memory

Remote print: yes, smartphone, PC application

Additional: U-ME System, camera view, UPS system

Printer Size: 1110 x 605 x 730 mm

Printer weight: 220 kg

Power: 240V AC ~ 11A 50/60 Hz

Maximum power consumption: max. 2500 W

Software: Simplify3D along with preset settings

Supported file types: .stl, .obj

Supported operating systems: Windows, macOS

Safety Certifications: CE

Guarantee period: 2 years (additionally possibility to buy guaranteePLUS packet)

PRINTER AREA: **440 X 330 X 300 MM**

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