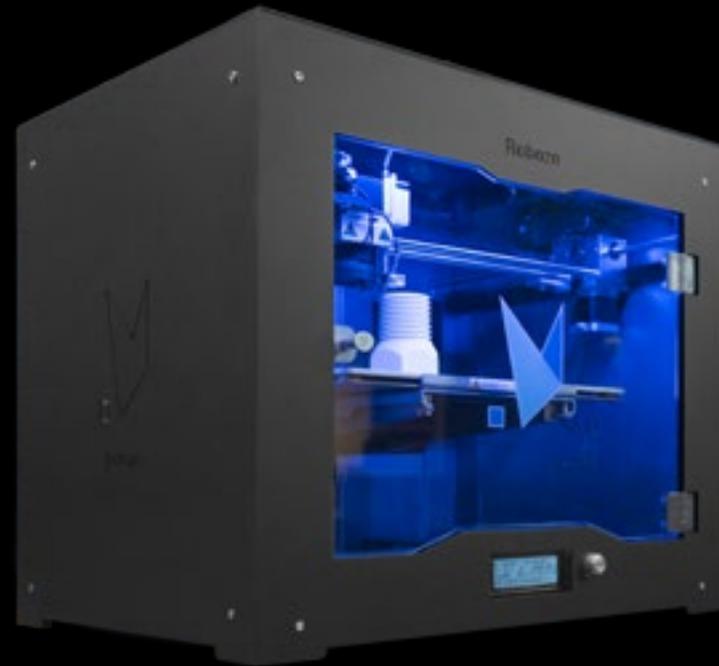


Roboze one

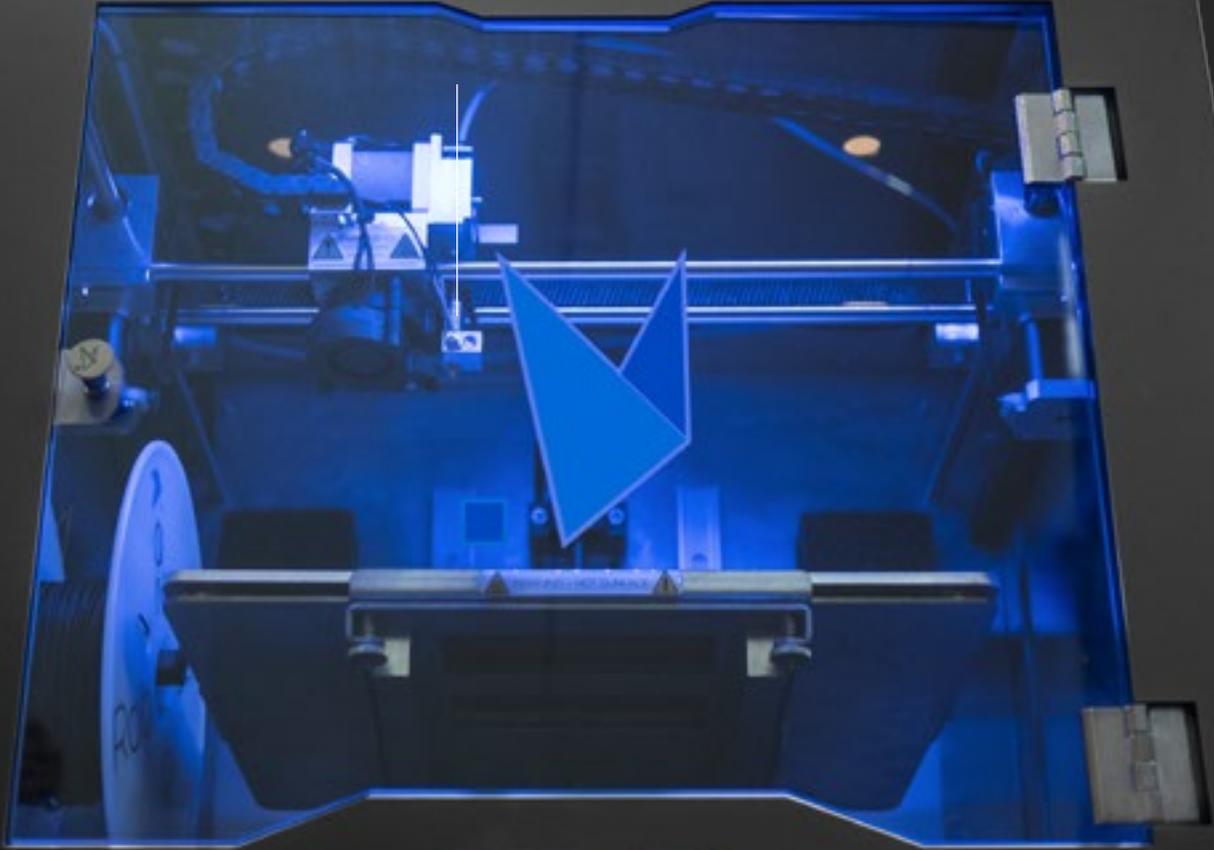
THE MOST POWERFUL DESKTOP 3D
PRINTING TECHNOLOGY



Roboze

The only beltless printer with a **real** 50 micron layer

Roboze



1 10:00 @ 10:00
2 0 V 0 000.00
3 100% 30 000.00
40 Carl Fitness

Revolutionary mechanical movement

New re-engineered extruder

50 micron resolution

Technical materials

Ball screw in Z

Heated buildplate up to 100°C

LCD Display

Inner Spool

ROBOZE ONE

Destined for professional users, Roboze One is positioned in the middle between the common desktop printers and professional printers, with a whole new technology and mechanical components never used until now.

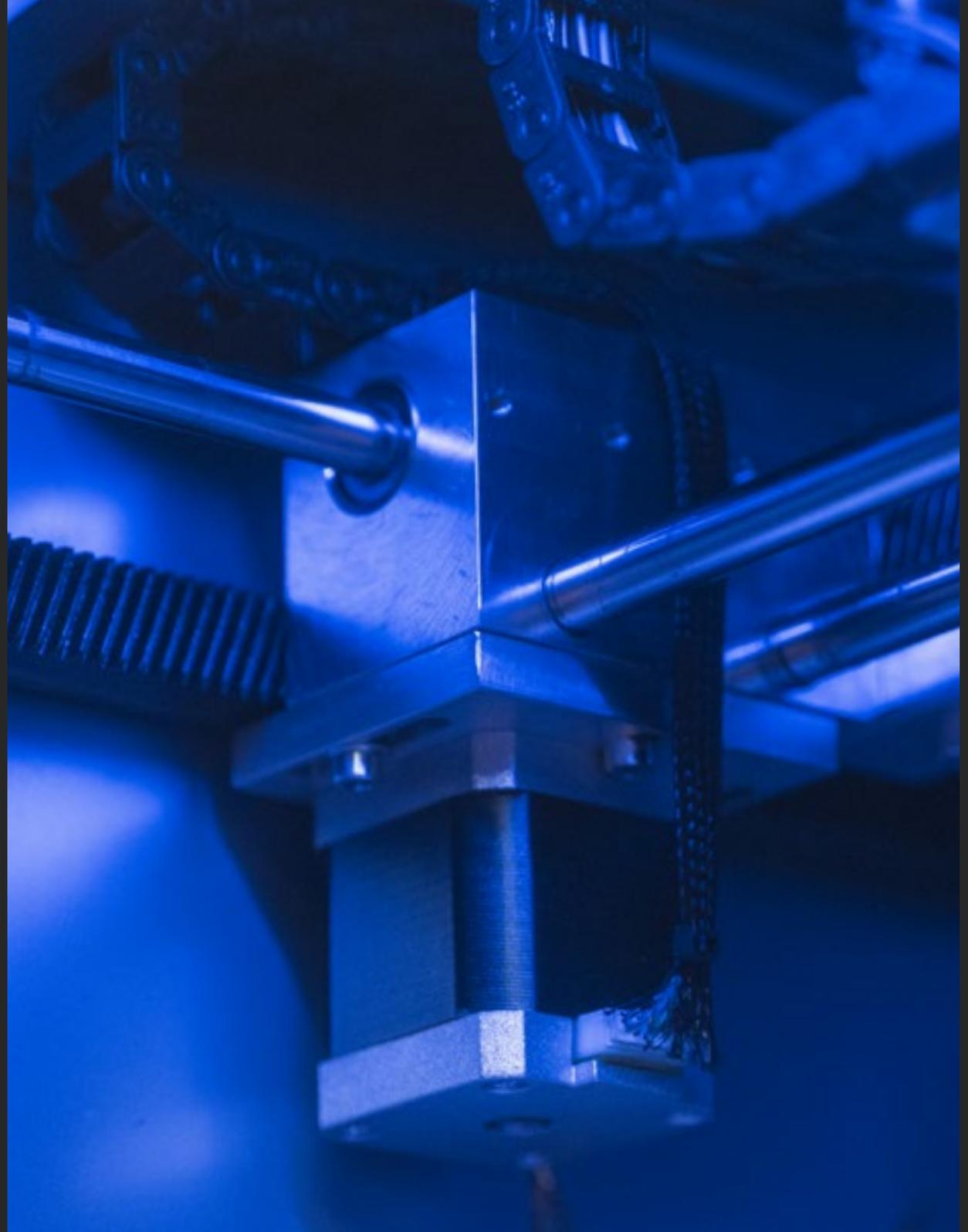
A patented mechatronic movement system of X and Y axis entrusted to a pair of racks with pinion in direct contact, allowing positioning accuracy in real 0.05 mm. Beyond the choice of the components, which make Roboze One stable but at the same time light to the end users, are added concepts of beauty and convenience.

Roboze One was created just thinking to every detail: the design, the easy maintenance, the heated printing bed with a print size of 280 x 220 x 200 mm (xyz).

REVOLUTIONARY MECHANICAL MOVEMENT OF X AND Y AXIS

As regards X and Y axis, the movement is entrusted to a double pair of hardened stainless steel helical racks together with pinion in direct contact with positioning precision of 0,05 mm.

The supports made of aluminum by CNC machining precision, combined with ball sleeves and stainless steel guides for linear motion, ensure fluidity in sliding at high speed with a low friction coefficient. This allow rapid and extremely accurate positioning with noticeable results in terms of resolution and speed production.



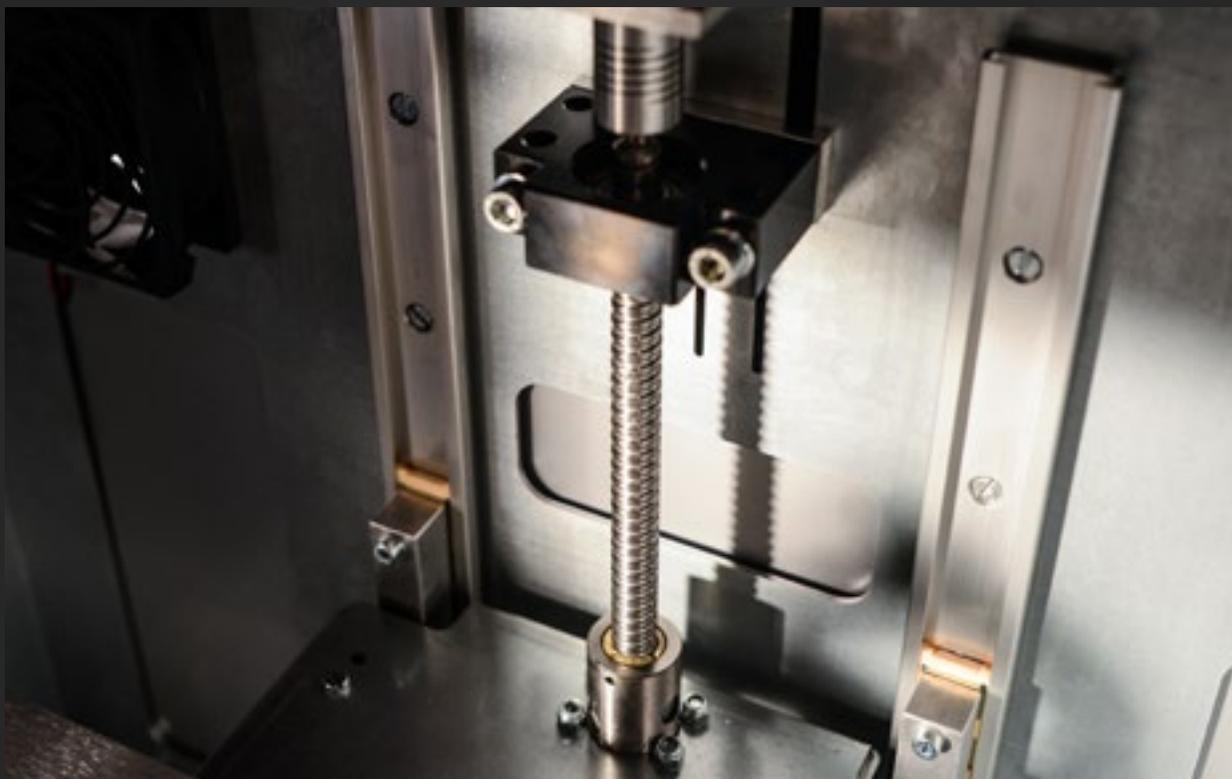


MASSIVE EXTRUDER

It is the heart of the filament deposition technology.

We have completely redesigned it in order to conduct the heat in the exact spot where the material softens and to dissipate it throughout the rest of the surface.

Completely designed and produced internally, with CNC machines, made in AISI 303 stainless steel, to ensure durability, and Al6082 Alluminum alloy, to ensure a higher heat dissipation.



Z AXIS

While X and Y have a revolutionary movement, Z axis has the best components on market: C7 ball screw with flexible motor coupling.

The use of this component of higher quality than a common endless screw, has significant advantages, including:

Very high accuracy and durability

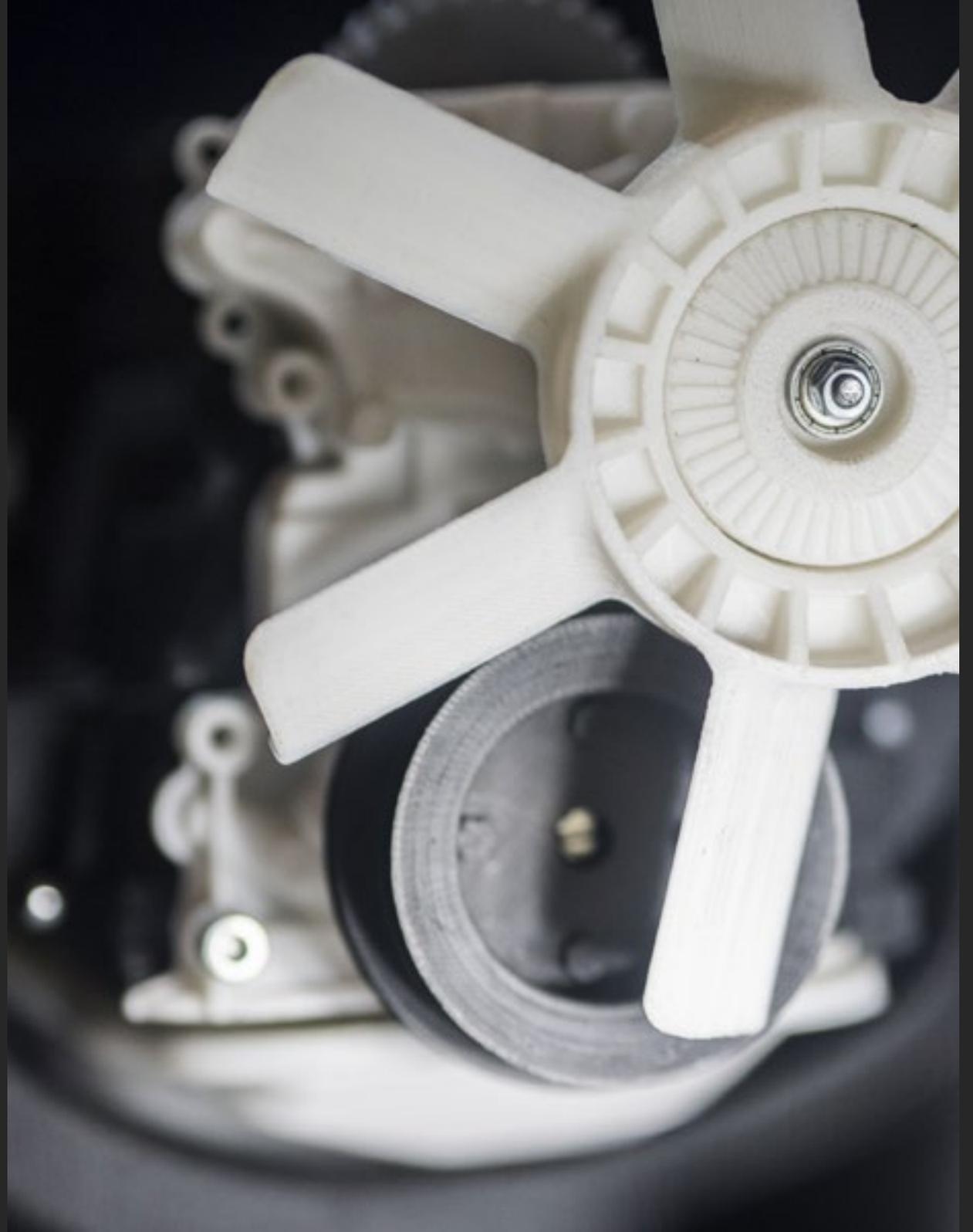
Wear resistance

Significant axial stiffness

RESOLUTION

Roboze One is designed to ensure the highest quality in terms of print resolution.

To achieve this, we engineered a new mechanism of extrusion able to constantly control the flow of material and the deposition of layers. This, combined with the conceived mechanical movement, allows to obtain objects with a surface quality of 50 microns.





LCD DISPLAY

Convinced that the design should also be functional, we have inserted an intuitive Lcd display with integrated sd card reader and with all the features that allow to print without a PC workstation.



INNER SPOOL

Roboze One combines design and practicality.

Starting from this essential binomial and thanks to the optimization of spaces, we inserted the filament coil inside the machine.

This feature also protects objects from external agents and environmental conditions, keeping unchanged the technical properties, and it guarantee the quality of printing.

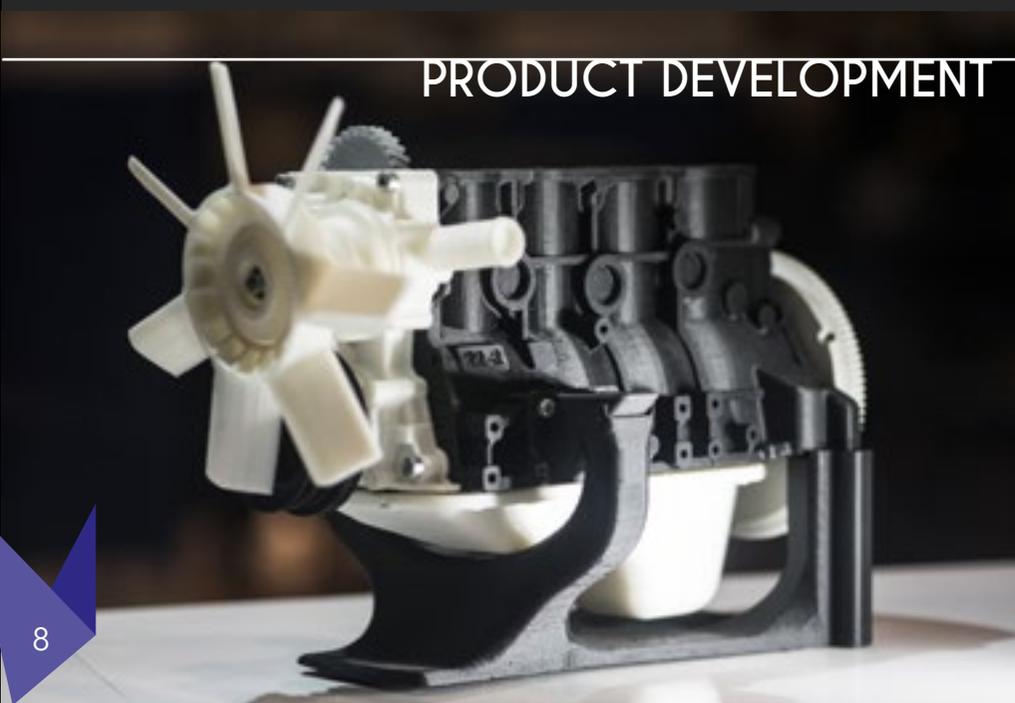
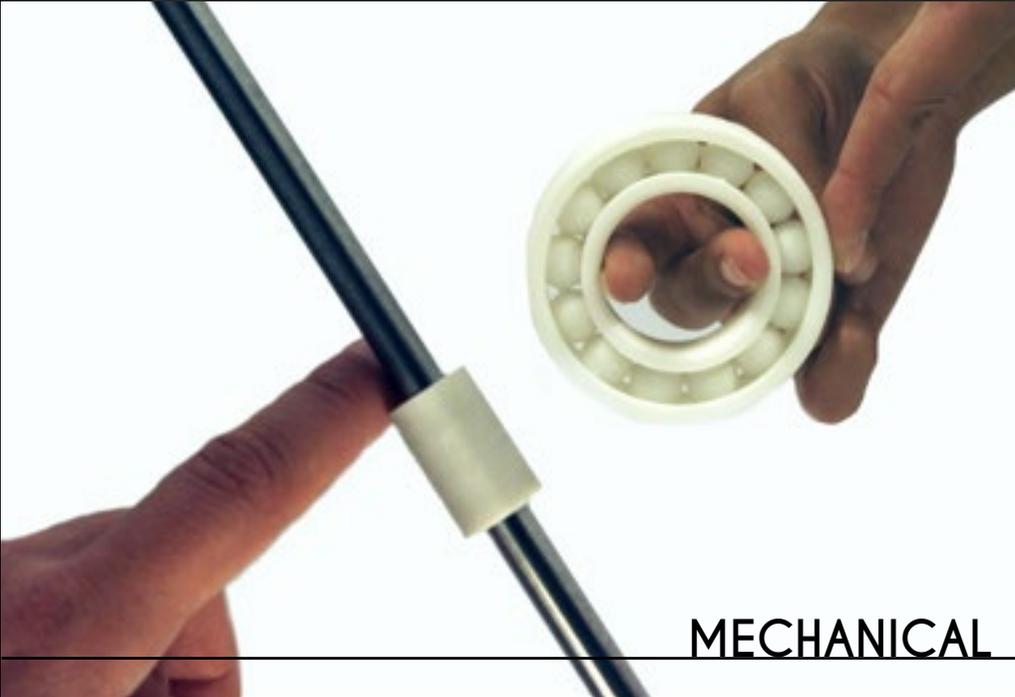


HEATED BUILDPLATE

The total print size 280 (x) X 220 (y) X 200 (z) mm, gives you enough space for larger projects, without ever compromising on resolution.

The heated plate up to 100°C made by special aluminium alloy also guarantees the perfect adhesion and hold of the first layers even after several hours of work.

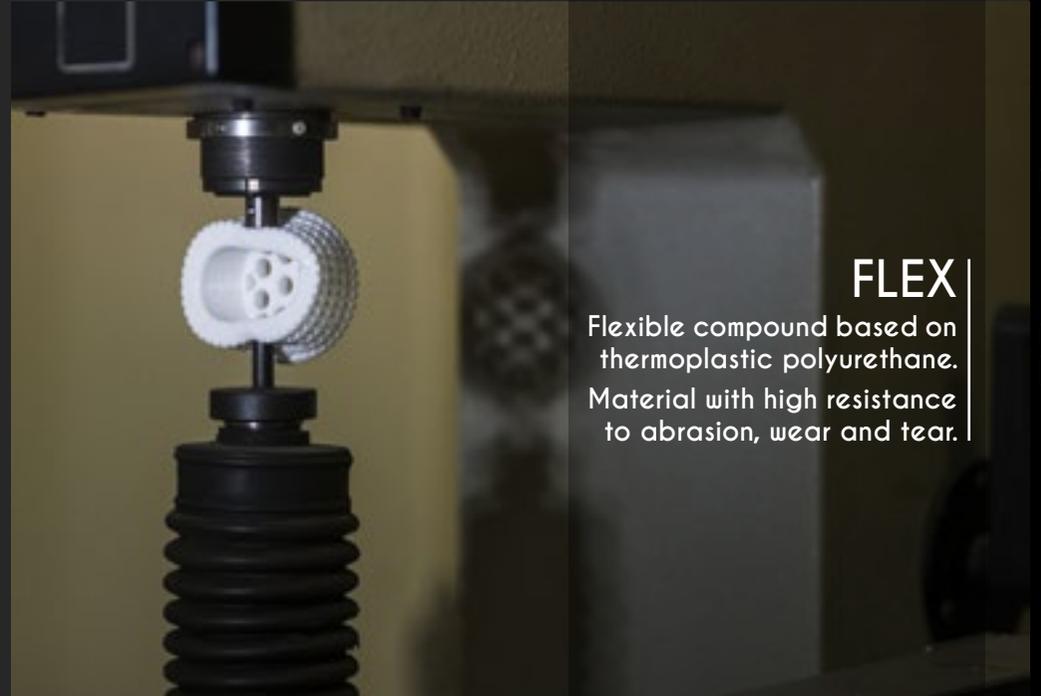
After printing the removal of the object is easy and without any risks.





ULTRA

Technical material for high definition parts composed of a special mix of PLA and other fillers. Ideal for printing of prototypes and small series that need definition and mechanical stiffness at the same time



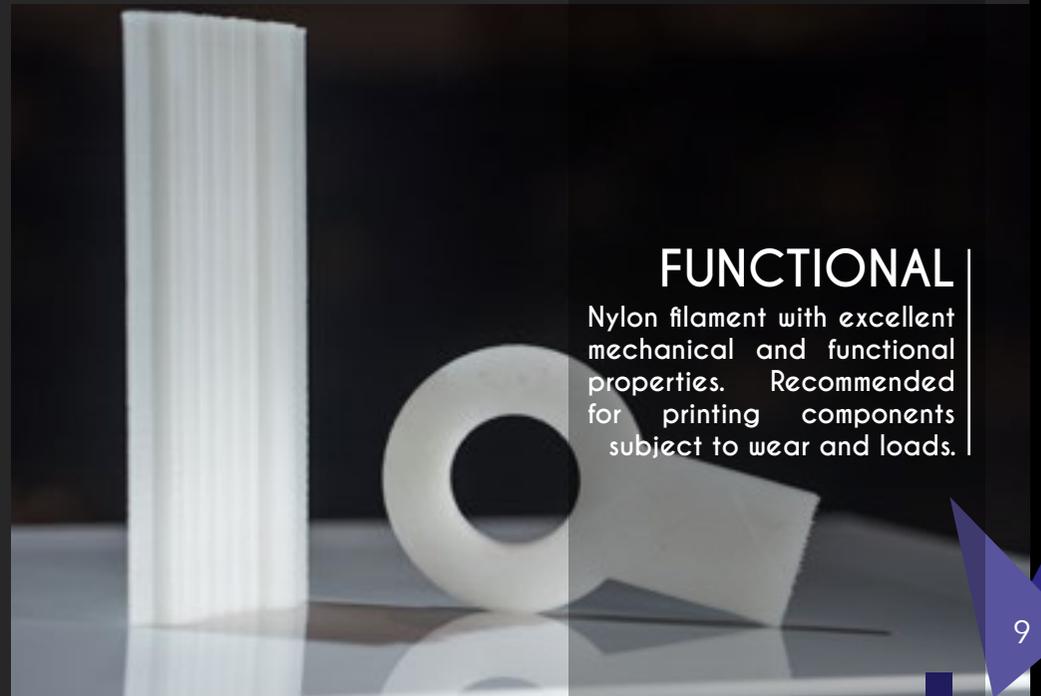
FLEX

Flexible compound based on thermoplastic polyurethane. Material with high resistance to abrasion, wear and tear.



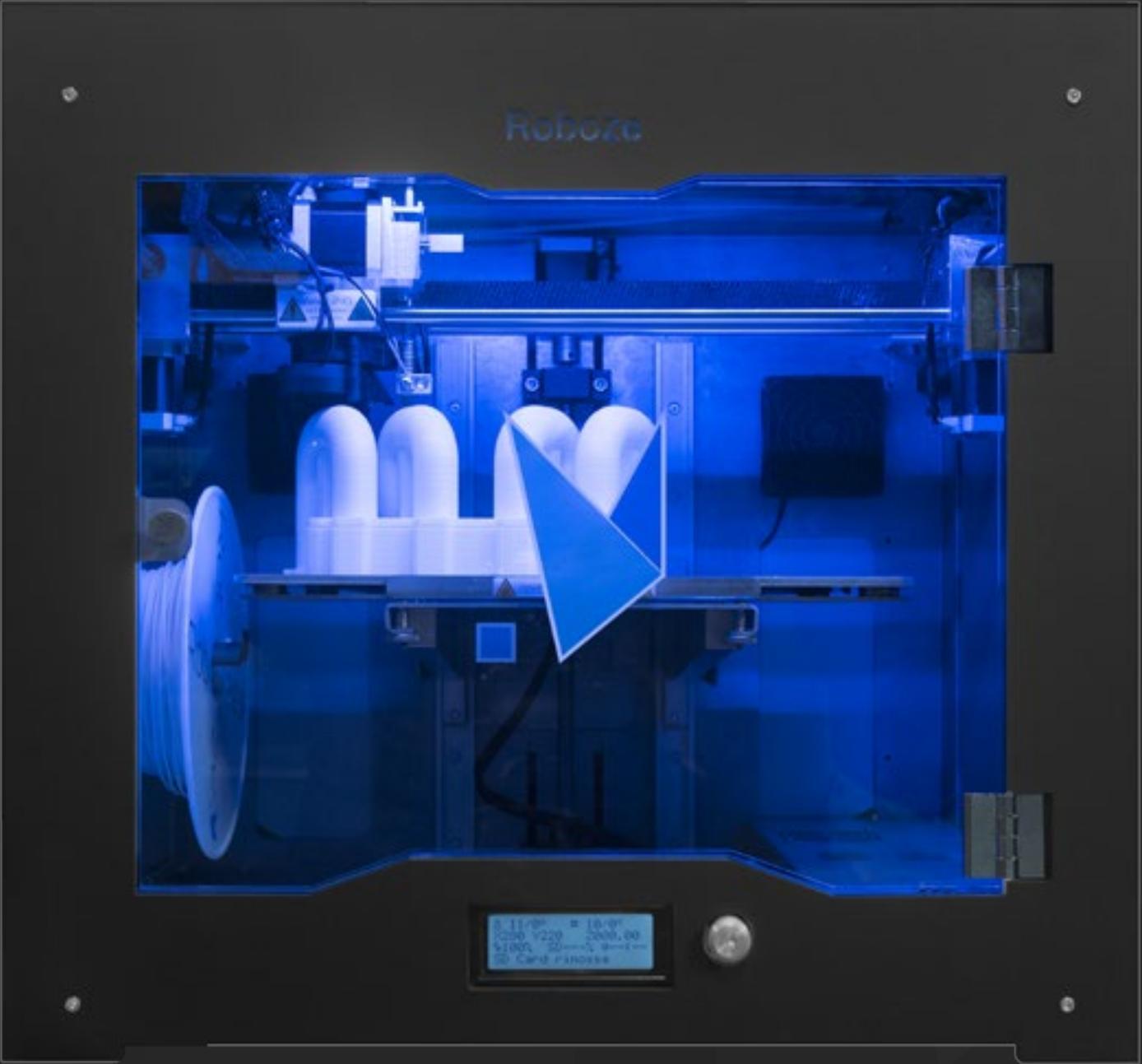
STRONG

ABS-derived material with improved mechanical properties. Recommended for prototyping and production of functional components. Certified by mechanical testing.



FUNCTIONAL

Nylon filament with excellent mechanical and functional properties. Recommended for printing components subject to wear and loads.



DIMENSIONS

- Outside total: (x)550 X (y)450 X (z)500 mm
- Workspace: (x) 280 X (y) 220 X (z)200 mm
- Dimensions (box): (x)646 X (y)550 X (z)650 mm
- Weight: 30 kg

RESOLUTION OF THE LAYERS

- Very high: 50 microns
- High: 70 microns
- Average: 150 microns
- Low: 200 microns

PRINT VELOCITY

- Recommended speed: 60-90 mm/s
- Maximum recommended speed: 250 mm/s

ELECTRONICS

- Stepper Motors 1,2A 1,8 degree
- Stepper Driver A4988 con dissipatori
- Lcd screen with rotary encoder and push button for navigation
- 348 W Power source
- 100k Thermistors in the extruder
- 40W 12V Heater cartridge
- Heated plate up to 120°

MATERIALS

- ULTRA
- STRONG
- FUNCTIONAL
- FLEX
- Others 1,75mm

EXTRUDER MECHANISM

- Unique removable Extruder with a fixing grain
- Cooling fan on first layer
- 0.4 mm Nozzle
- Vents cooling components with heat sinks

GENERAL MECHANICS

- Frame made by galvanized steel and powder coated.
- INOX Bars for X and Y Forklift
- Misumi ball sleeves for X and Y linear motion
- X and Y Movement system with helical racks and pinion through direct contact
- C7 ball screw for the Z axis with flexible motor coupling for the absorption of vibration
- Moving parts and aluminium supports on numerical control milling machines
- Glass base or aluminium heated for printing in ABS
- Leveling System printing plate on 3 points and cushioning
- Quick-change printer base system with neodymium magnets

BOX CONTENT

- 1 ULTRA spool
- 4GB SD CARD
- Power cable
- USB cable

SOFTWARE

- Open Source

COMMUNICATIONS

- SDHC Standard Card Reader and 4GB card included.
- USB type B

MORE INFO

- Inner spool
- Minimal mechanical maintenance
- Extreme stiffness and durability



www.robوزه.com



VIA M. Cifarelli 28/A - 70124 Bari - Italy

P.IVA 07513040720



+39. 080, 5743707



info@robوزه.com



Contact us: sales@robوزه.com