Produce large parts and custom batches

Roboze ARGO 500

Roboze

Three factors that make Roboze technology one-of-a-kind

Roboze Technology

Patented Beltless System

- Mechanical Repeatability;
- 10 µm positioning tolerance;
- Low Maintenance.

HVP Extruder (Patent pending)

- Optimize flow of high viscosity polymers;
- Reduce shrink rate;
- Avoid extruder clogging.

Insulated Heated Chamber

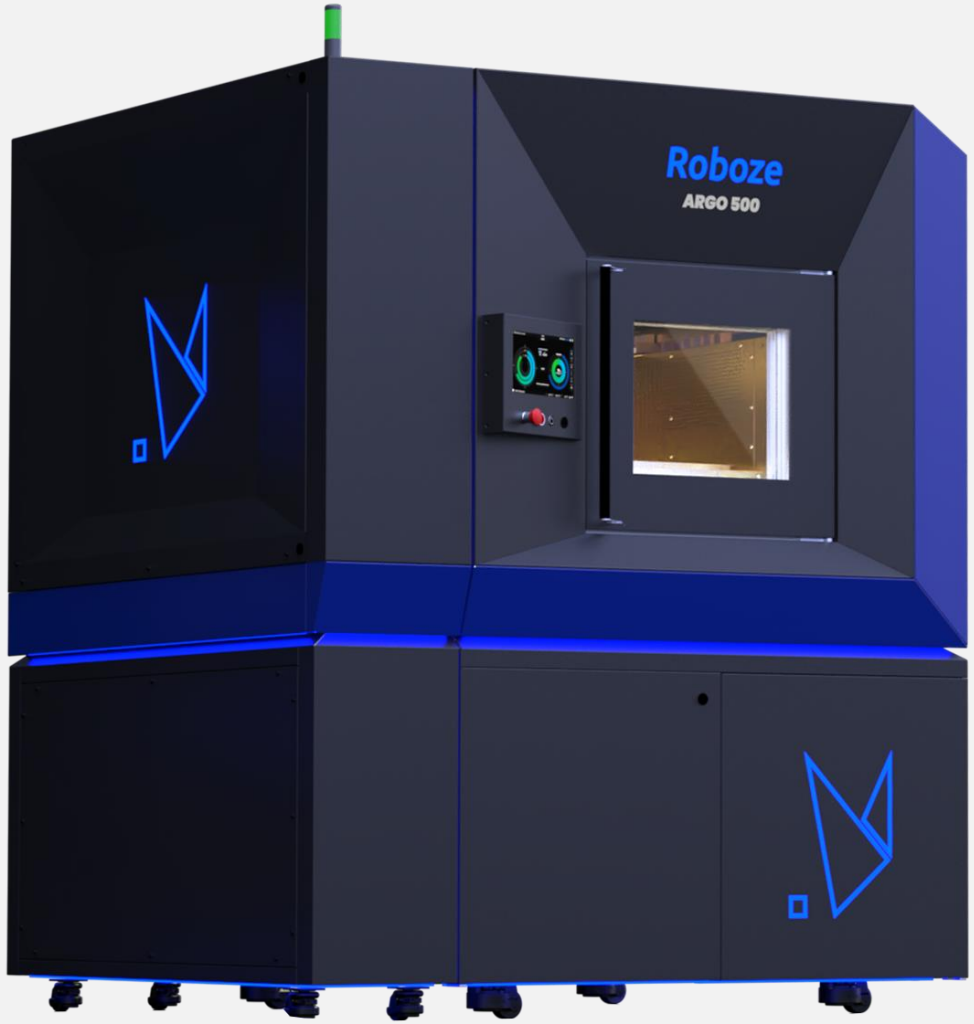
- Up to 180 °C (356 °F);
- Uniform airflow and controlled temperature;
- Thermal post processing is not necessary.

#PrintStrongLikeMetal #AdditiveManufacturing

Production Series

Roboze Solution

Roboze



Roboze ARGO 500

Produce large parts and custom batches

The first large-format super polymer 3D printer
for industrial production

HIGH-PERFORMANCE MATERIALS

LARGE-SCALE FINISHED PARTS

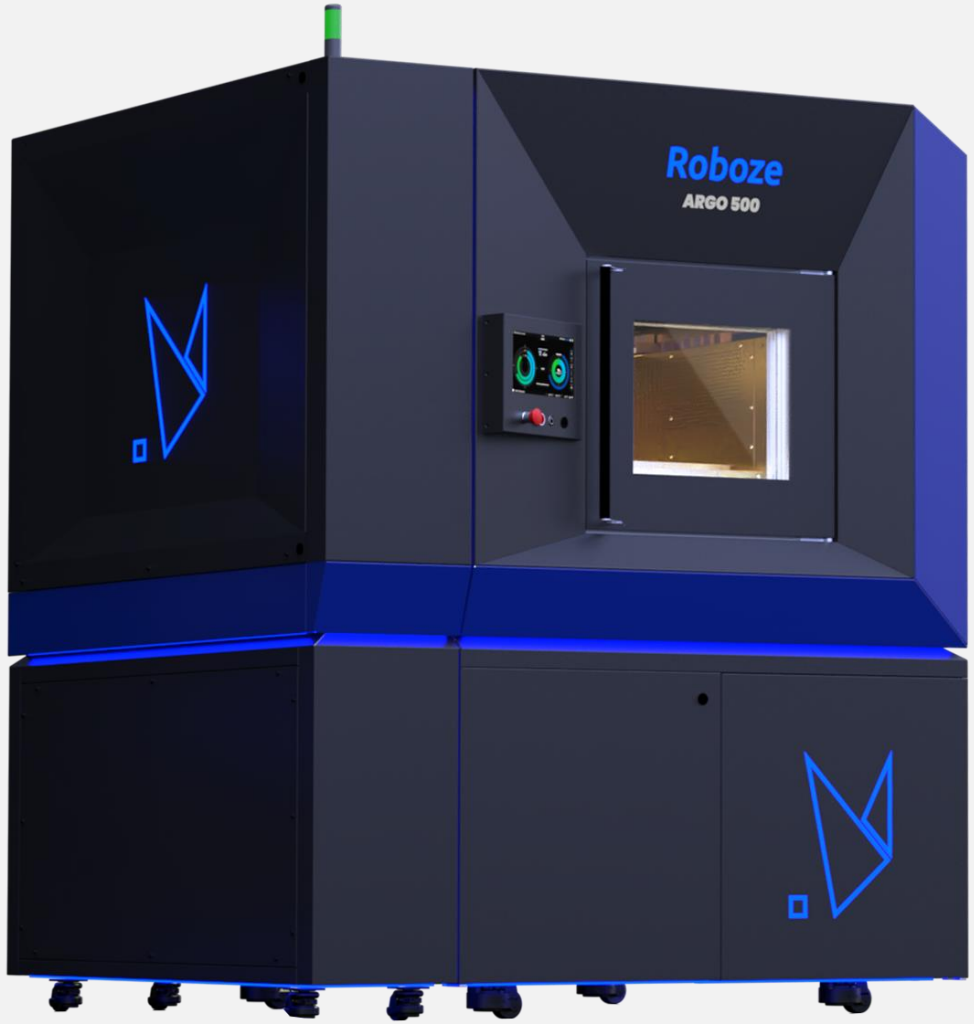
REPEATABILITY PROCESS OVER TIME

10 µm POSITIONING ACCURACY

#PrintStrongLikeMetal #AdditiveManufacturing

Production Series

Roboze Solution



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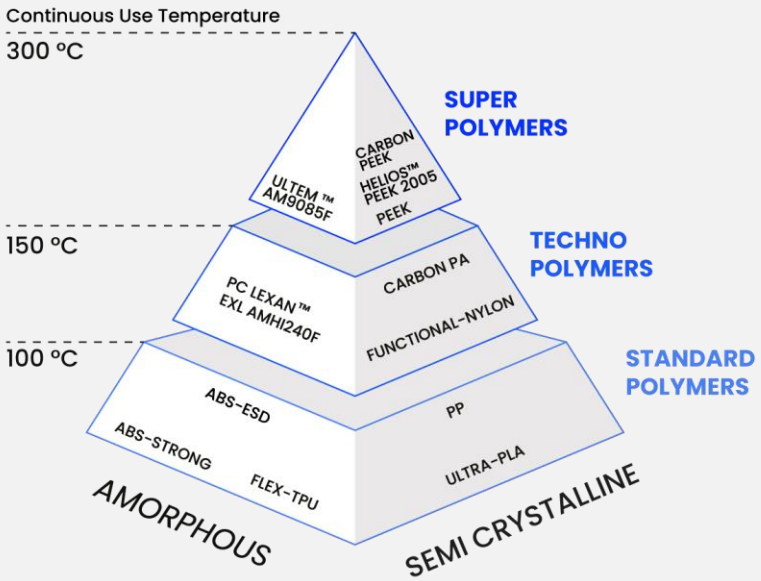
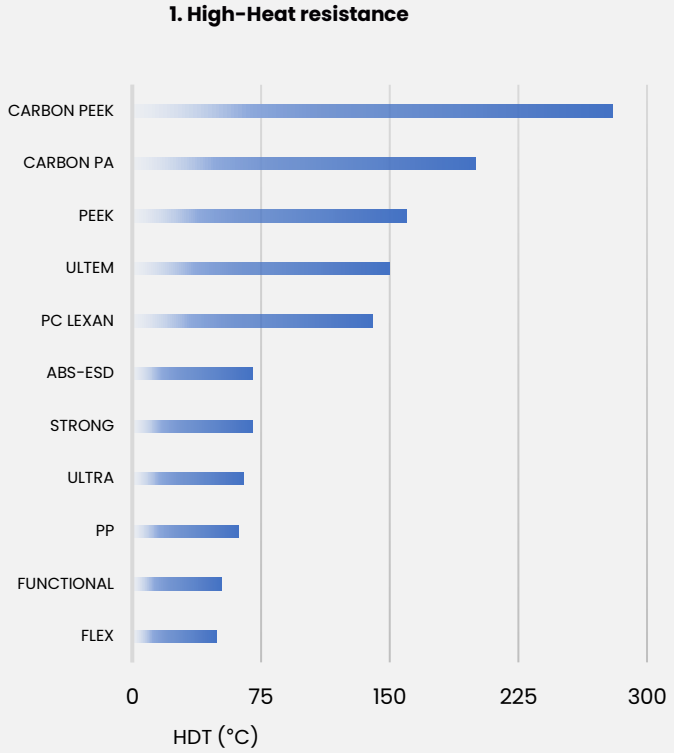
	Production Series
	Roboze ARGO 500
Build Volume	500 x 500 x 500 mm 19.7 x 19.7 x 19.7 in
Extruder Temperature	500 °C / 932 °F
Heated Chamber	180 °C / 356 °F
Vacuum Plate	Yes
Accuracy	XY: 10 µm / 393.70 µin Z: 25 µm / 984.25 µin
Resolution	Quality Profile: 0.225 mm / 0.009 in Speed Profile 0.300 mm / 0.012 in
MATERIALS	
ULTRA-PLA	X
STRONG-ABS	X
FUNCTIONAL-NYLON	X
ABS-ESD	X
CARBON PA	X
PP	X
PC-LEXAN™AMHI240F	X
FLEX-TPU	X
ULTEM™AM9085F	X
PEEK	X
CARBON PEEK	X
HELIOS™ PEEK 2005	X

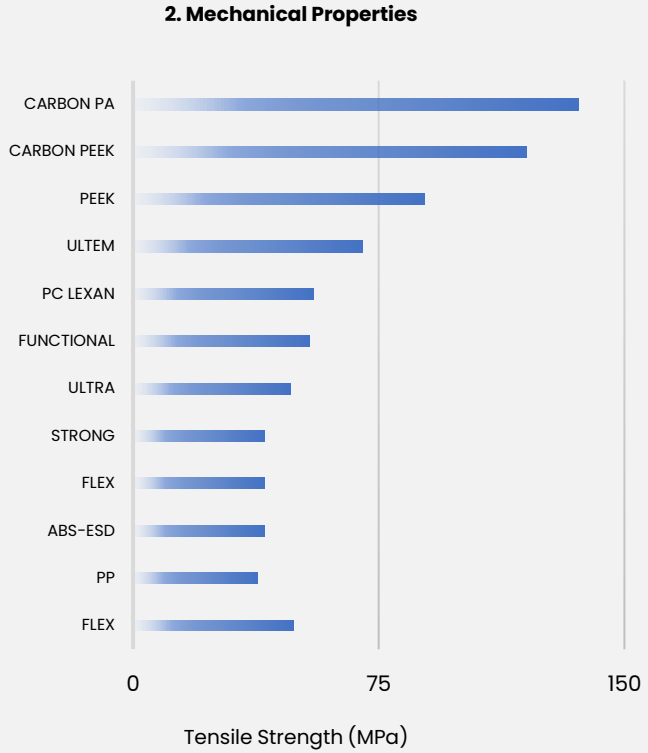
Roboze

Roboze Material

Engineered for Production







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Mid-range polymers

Roboze Materials

PC-LEXAN™ EXL AMHI240F
Polycarbonate + Siloxane

High impact resistance and ductility at low temperature (up to -30°C)
Flame and UV rays resistance

FUNCTIONAL-NYLON
Polyamide 6

Low wear and low friction coefficient
Good chemical and mechanical resistance

ABS-ESD
ABS + Carbon Nanotubes

Electrostatic discharge protection with a surface resistivity of 10^7 Ω (the typical range is 10^6-10^9 Ω)

PP
Polypropylene

High chemical resistance, bump and abrasion.
electric insulation properties.

FLEX-TPU
Thermoplastic polyurethane

Abrasion and fatigue resistance
High elasticity and good hardness
Atmospheric agents and ozone resistance

STRONG-ABS
Acrylonitrile-butadiene-styrene

Good processability
Impact resistance
Low water absorption

ULTRA-PLA
Polylactic Acid

High surface quality
Easy to print
Sustainable and hypoallergenic

#PrintStrongLikeMetal #AdditiveManufacturing

Super polymers and composite materials

Roboze Materials

PEEK
Polyether ether ketone

Extreme chemical resistance

High thermal resistance

Self lubricating

Continuous Use Temperature
Test Method: ASTM D3045
Value: **250°C**

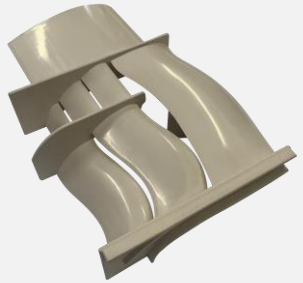
Carbon PEEK
PEEK + Carbon Fibers

High compression strength

High mechanical properties

Ideal for metal replacement in the most extreme environments.

HDT (load 1.82MPa)
Test Method: ASTM D648
Value: **250°C**



Helios™ PEEK 2005
PEEK + Ceramic Fibers

Stiff and strong at high temperatures

Thermal and electrical insulation

Easy to print and post-process

Tensile Strength
Test Method: ASTM D638
Value: **125 MPa**

Carbon PA
PA + Carbon Fibers

High tensile strength

High tensile modulus

Good thermal resistance

Tensile Strength
Test Method: ASTM D638
Value: **93 MPa**

ULTEM™AM9085F
Polyether imide

Thermal resistance

Flame retardant

Good surface quality

EN 45545

Certification

#PrintStrongLikeMetal #AdditiveManufacturing

Roboze 3D Printing to be competitive and generate profits

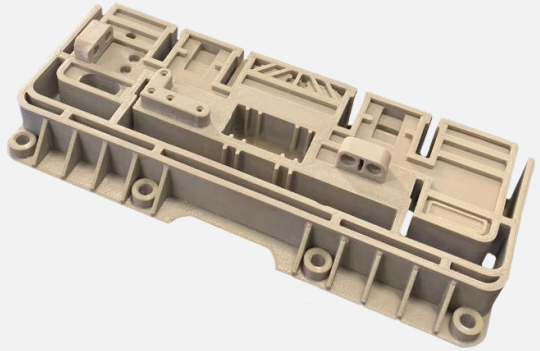
Industrial Production Challenges

Busbar Support

ELECTRICAL MOBILITY

PEEK | **512.16 g** | **461 €** | **22 h 42 min**

100% Infill



CubeSat

SPACE

CARBON PEEK | **157.5 g** | **155 €** | **7 h 0 min**

100% Infill

#PrintStrongLikeMetal #AdditiveManufacturing

Keep in touch

BARI, IT

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