

A step forward to customized manufacturing

# Roboze

# ARGO 1000



Production Series

# ARGO 1000



**BIG**

**FAST**

**STRONG**

ARGO 1000 is **the world's largest 3D printer**, equipped with **heated chamber**, for the **fast production** of incredibly and strong **super polymer and composite parts**. ARGO 1000 opens the era of custom manufacturing on exceptionally **large parts**.

#PrintStrongLikeMetal #AdditiveManufacturing

Let's rock the Metal Replacement Market!

# ARGO 1000



## Higher value in higher dimension

With its large volume of work, it is possible to print larger components and produce more parts in a single job, allowing you to meet different and changing needs, optimizing time and reducing costs.

*Build volume*  
**1 x 1 x 1 meter**  
**39.27x39,27x39,27 in**

## Best -in-Class Heated Chamber

The Roboze heated chamber is the result of years of work, prototypes and hundreds of simulations. This solution developed uniquely by Roboze allows a homogeneous working environment aimed at consolidating the parts and for a perfect thermal fusion of the layers to achieve exceptional mechanical properties.

*Heated Chamber*  
**Up to 180 °C/356 °F**

## Industrial Automation

ARGO 1000 is equipped with an industrial automation system that easily integrates into your production workflow, allowing you to schedule part production, analyze data and quickly predict/resolve potential failures, increasing your efficiency and reducing printing downtime.

*Industrial Automation*  
**Automation and Control System**

Production Series

# ARGO 1000



## Production Series

Roboze ARGO 1000

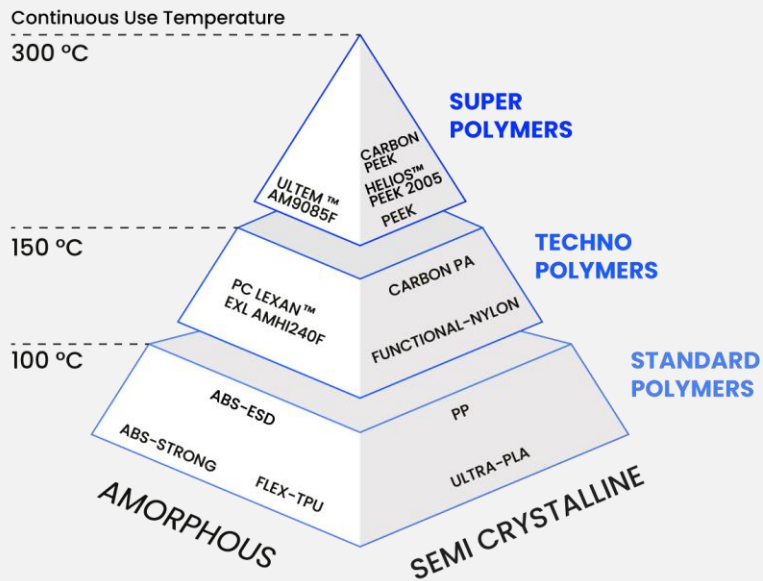
External Dimensions	390 x 225 x 215 cm 153.54 x 88.58 x 84.54 in
Build Volume	1000 x 1000 x 1000 mm 39.37 x 39.37 x 39.37 in
Machine weight	4,000 Kg/8,818.5 lb
Extruder Temperature	450 °C / 842 °F
Heated Chamber	180 °C / 356 °F
Vacuum Plate	Yes
Process Accuracy	99.96% of parts obtained on multiple machines

## MATERIALS

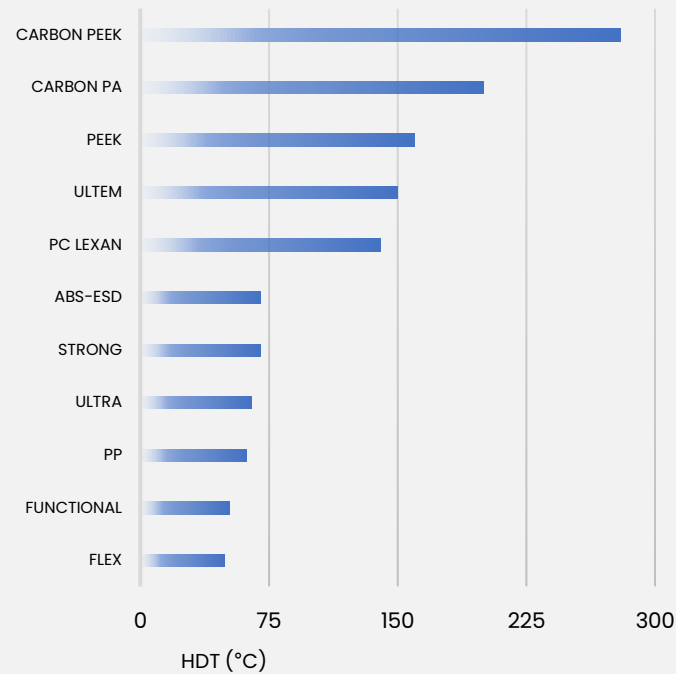
ULTRA-PLA	X
STRONG-ABS	X
FUNCTIONAL-NYLON	X
ABS-ESD	X
CARBON PA	X
PP	X
PC-LEXAN™AMHI240F	X
FLEX-TPU	X
ULTEM™AM9085F	X
PEEK	X
CARBON PEEK	X
HELIOS™ PEEK 2005	X
SUPPORT MATERIALS	X

#PrintStrongLikeMetal #AdditiveManufacturing

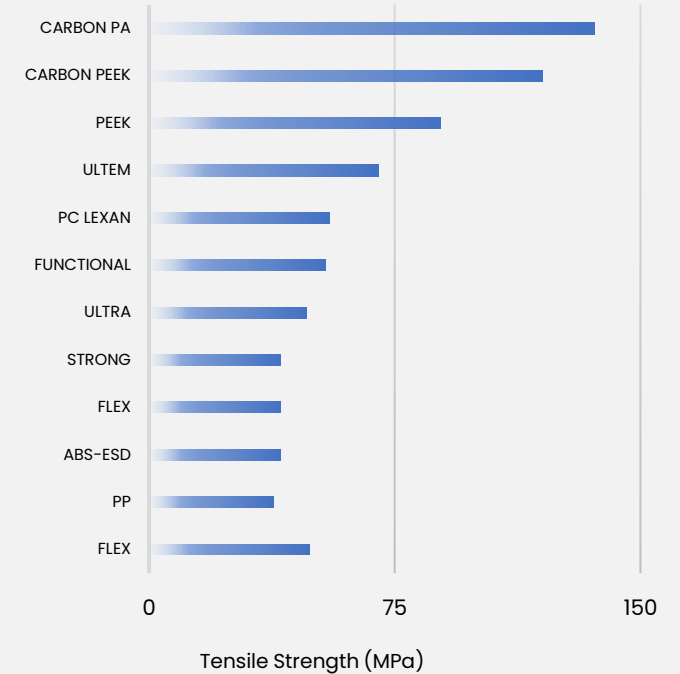
# Engineered for Production



1. High-Heat resistance



2. Mechanical Properties



# Roboze Materials



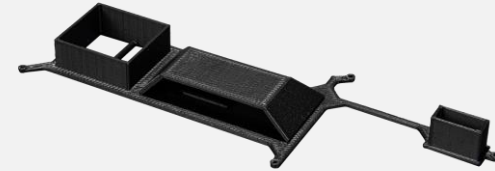
**PC-LEXAN™ EXL AMHI240F**  
Polycarbonate + Siloxane

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  $10^7 \Omega$  (the typical range is  $10^6$ - $10^9 \Omega$ )



**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

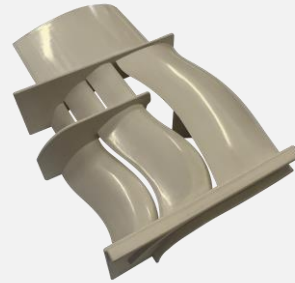
Good processability  
Impact resistance  
Low water absorption



**ULTRA-PLA**  
Polylactic Acid

High surface quality  
Easy to print  
Sustainable and hypoallergenic

# 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**

# BARI, IT

HEADQUARTERS EMEA

Roboze S.P.A.

Via Vincenzo Aulisio 31/33  
70124 Bari-Italy  
roboze.com

(+39) 080 505 7559

# HOUSTON, TX, US

HEADQUARTERS US

Roboze Inc

7934 Breen Drive  
77064 Houston, TX, Stati Uniti

(+1) 346 229 5675

