

Produce parts with super polymers and composites

# Roboze ARGO 350



**GORDIUSZ  
ALFA**

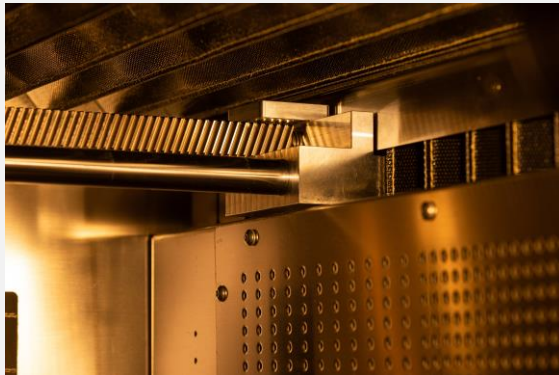
*Célhoz az eszköz*

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.



## Roboze **ARGO 350**

**Produce parts with super polymers and composites**

Produce your parts in a few hours, with  
the ARGO 350 on your shop floor



**HIGH-PERFORMANCE  
MATERIALS**

**LARGE-SCALE  
FINISHED PARTS**

**REPEATABILITY  
PROCESS OVER TIME**

**10  $\mu$ m POSITIONING  
ACCURACY**

Production Series

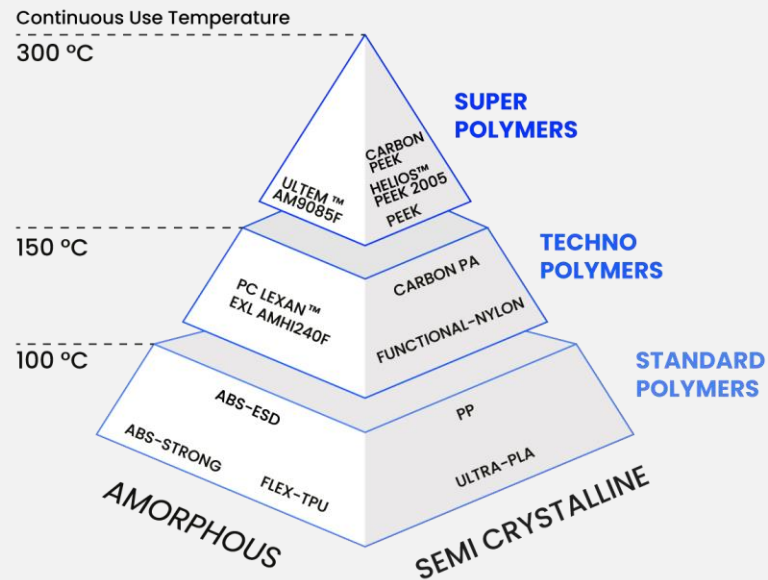
# Roboze Solution



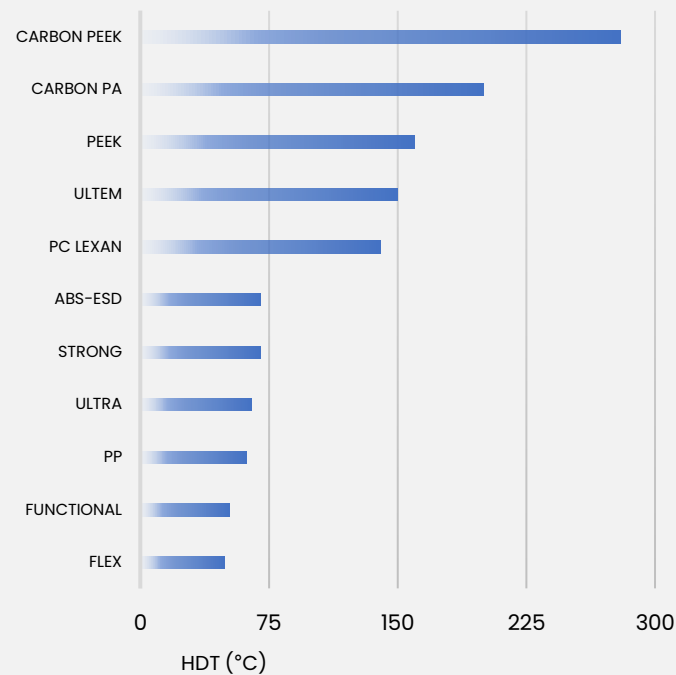
| Production Series    |                                      |
|----------------------|--------------------------------------|
| Roboze ARGO 350      |                                      |
| Build Volume         | 350 x 300 x 300 mm                   |
|                      | 13.8 x 11.8 x 11.8 in                |
| 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                                    |



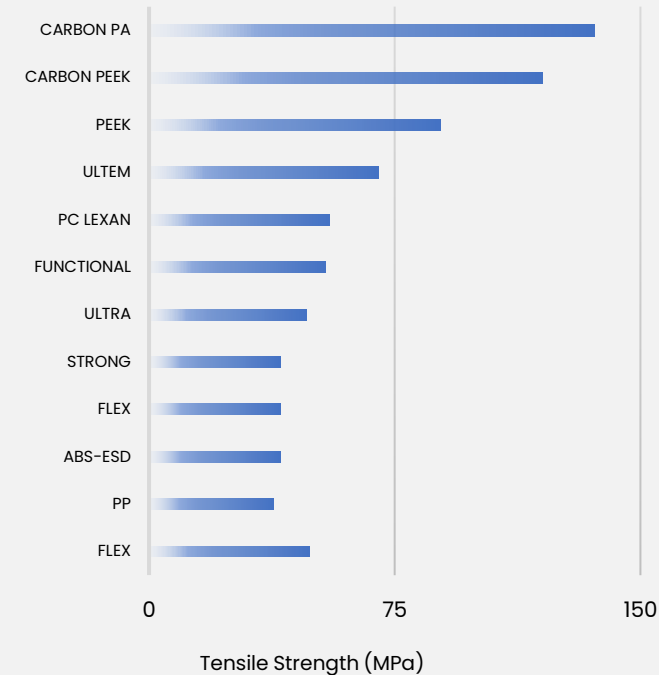
#PrintStrongLikeMetal



1. High-Heat resistance



2. Mechanical Properties





**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

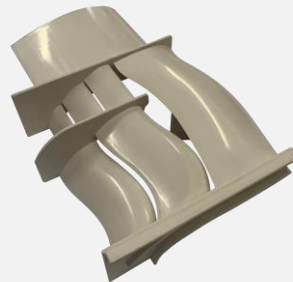
Good processability  
Impact resistance  
Low water absorption



**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**

Roboze 3D Printing to be competitive and generate profits

# Industrial Production Challenges

## FLUID OSCILLATOR FOR FLUID DYNAMIC STUDIES

EDUCATION



PEEK



5.94 g

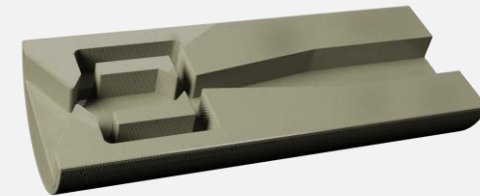


5.346 €



18 min

100% Infill



## MANIFOLD

MOTORSPORT



CARBON PEEK



297.5 g



291 €



12 h 45 min

100% Infill





Our official reseller:



**GORDIUSZ  
ALFA**

[www.gordiuszalfa.hu](http://www.gordiuszalfa.hu)

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