

# Manufacture functional parts inhouse



with the industrial 3D printer

**XIONEER INDUSTRIAL**

**XIONEER**<sup>®</sup>  
SYSTEMS

Hybrid gear  
from carbon fiber reinforced PA12 and Polyamide-6X





# Get the most out of your Xioneer Industrial

## + **Print Functional Parts just-in-time:**

Utilizing a broad material range and intuitive in use, the Xioneer Industrial produces your functional parts from advanced thermoplastic materials like Nylon, Polycarbonate, TPU, or carbon fiber reinforced Nylon.

## + **Quality and Service „Made in Austria“:**

We provide highest product quality, German and English speaking customer service and application support directly from the manufacturer to ensure that you get optimal 3D printed results.

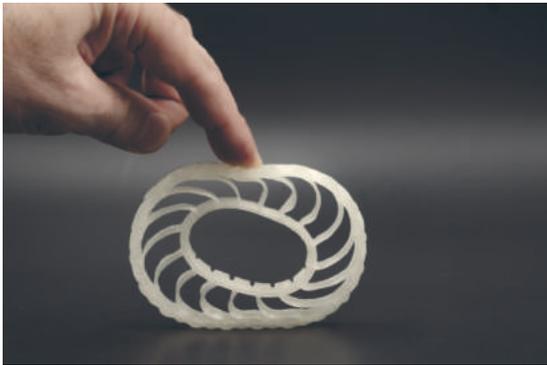
## + **Fast, flexible, efficient:**

Print functional parts and bring new products to market faster. Our innovative technologies produce impressive printing results and generate quick return on investment for your company.

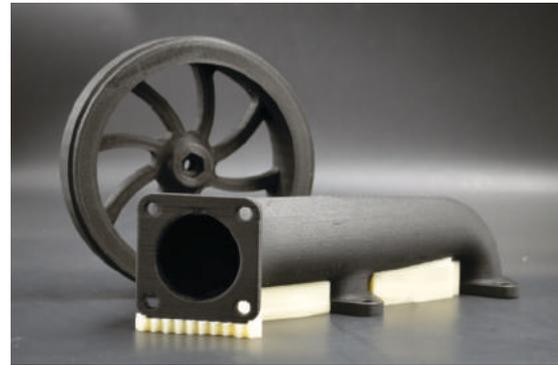
# Utilize Functional Materials

## + A wide range of possibilities:

The Xioneer X Industrial covers a wide range of engineering plastics for demanding applications. The printed parts can withstand mechanical, chemical and thermal stresses. Combining different materials in one part is also possible with the Xioneer Industrial.



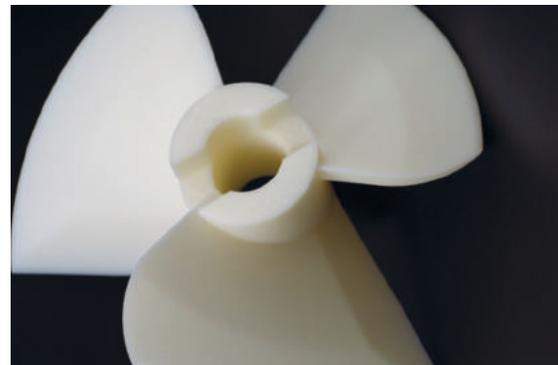
Flexible wheel model  
from soft thermoplastic Polyurethane (TPU)



Rim model and exhaust manifold  
from carbon fiber reinforced PA12



Thin-walled gear  
from durable Polycarbonate (PC)



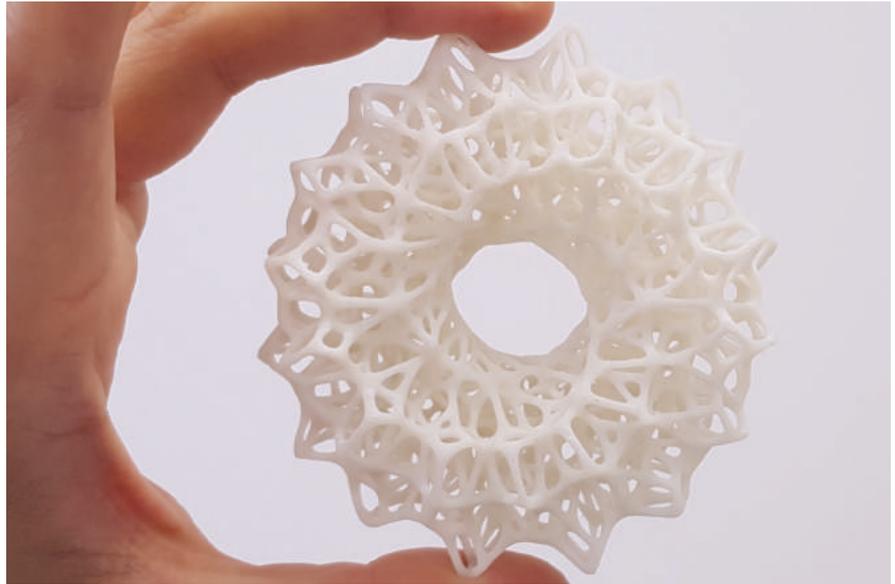
Propeller  
from ABS



Hybrid gear  
from carbon fiber reinforced PA12 and Polyamide-6X



Water-soluble support material  
from PVOH (PVA)



Complex Geometry  
from ABS printed with FINE nozzle

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## MATERIALS\*

model materials  
support materials

ABS, ASA, PA-6X, PA-CF, PA-GF, PC-X, TPU, PETG, ModelPlus (and more)  
soluble: PVOH, HIPS (and more)  
Break-away: GeckoPeel (and more)

*\*Upon request, we can certify your material as well.*

# Print Professionally

## + **Material Usage Control:**

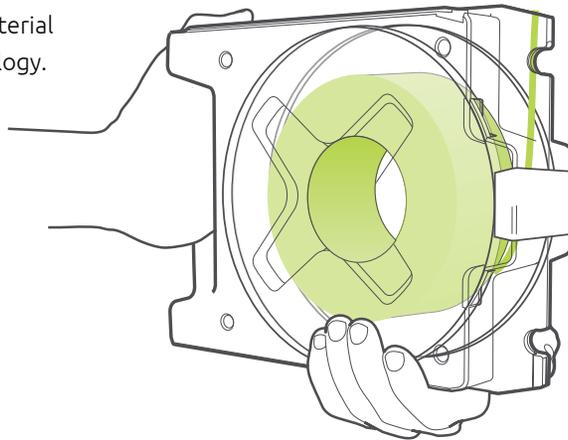
The Xioneer Industrial monitors the amount of material in the cartridge in real time. The user interface displays the remaining quantity of material while the system notifies you whether there is sufficient material for the next print job.

## + **Integrated Material Dryers**

The Xioneer Industrial has integrated drying units for moisture-sensitive materials such as polyamide or water-soluble support material. A continuous, temperature-controlled airflow dries the material during printing to ensure consistent results and strong layer bonding.

## + **Plug-and-Play Material Handling:**

The use of our cartridge ensures proper feeding and respooling of the material. Print parameters and material status are transmitted to the printer via NFC technology.



# Be Flexible

## + Quick-change nozzle units:

The nozzle requirements can change with each print job. Therefore, your 3D printer should be able to adapt quickly to the new requirements. Our swappable nozzle units can cover a wide range of requirements. Whether you want to produce a fine precision part, a quick design draft, or a small series production - the Xioneer Industrial leaves almost no wishes unfulfilled.



### **STANDARD** *Allrounder*

Special coating for consistent material flow and high reliability.



### **FINE** *Finest details*

Specially formed nozzle tip for printing fine details.



### **BOLD** *High material throughput for fast prints.*

Fast and high flow of material with a wide nozzle and high heat.



### **HARD** *Toughest parts*

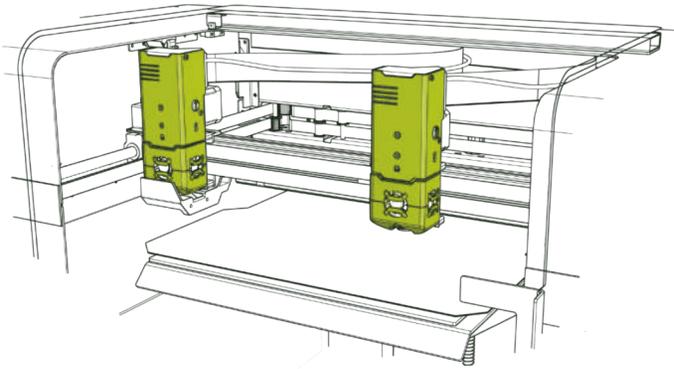
Abrasive-resistant ceramic nozzle for printing fiber-reinforced materials

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## NOZZLE UNITS

Type	Replaceable nozzle units with integrated memory
Calibration	Automatic z-offset
Sizes	0.30 / 0.40 / 0.60 / 0.80 mm
Models	STANDARD, FINE, BOLD, HARD

# Save Time with Newest Technology



## + **Reliable Dual Printing:**

The Xioneer Industrial uses our patented Twin-Head technology with two independent printheads. This allows you to quickly and easily use a second material, for example a water-soluble support material. The automatic offset calibration of both nozzles as well as the active water cooling of both print heads ensure additional process reliability for your print jobs.

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## MATERIAL PROCESSING

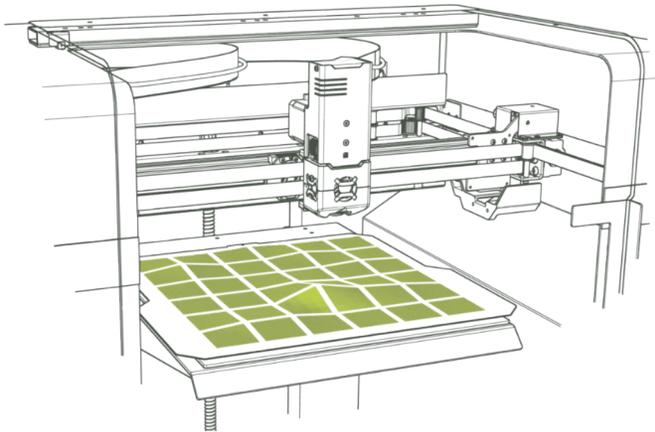
Dual material print  
Hybrid print  
Material desiccation  
Material management  
Material identification

With Twin-Head technology and active water cooling system  
Printing with two different model materials in one printed part  
Inline drying units up to 60°C (up to 6 additional pre-drying units available)  
Automatic loading and respooling  
Material parameter transmission via NFC

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**+ Heated Chamber and Auto Calibration:**

Our patented topographic calibration system scans the surface of the entire print platform and compensates surface tilts and curvatures fully automatically. This shortens the set up time of your Xioneer Industrial and allows utilizing the entire print area. Thanks to the active chamber heating, you can process advanced engineering plastics to solid and precise functional components.



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## PRINT PLATFORM

Calibration	Fully automatic with 50 point topographic scanning
Print Plate	Removable, magnetic, flexible, reusable
Heated Bed	Heating capacity - 500 W, up to 110°C
Heated Chamber	Heating up to 70°C / Cooling down to room temperature

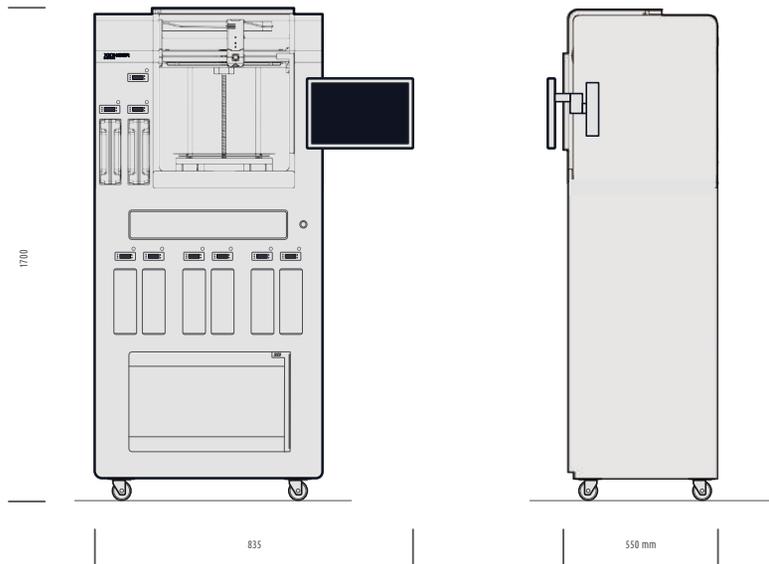
# Technical Specifications

## DIMENSIONS

Printer size	1700 x 835 x 550mm
Weight without material	ca. 100 kg
Access to build chamber	Sliding door, therm. isolated
Power input	240V / 3600 W (max.)

## BUILD CHAMBER

Maximum print area	295 x 275 mm
Maximum print height	305 mm
Layer height	0.05 - 0.65 mm (adaptive layer adjustment)
Printhead positioning	Core-XY-Drive with 4 motors
Accuracy	0.05 mm



## SOFTWARE

Slicing software	Simplify3D (for up to 2 workstations)
CAD file formats	.stl .amf .obj
System requirements	Windows, MacOS, Linux

## CONTROL

User interface	13" touchscreen
Main control	ARM Cortex M3, Xioneer Nebula Board
Internal server	1,5GHz, 2GB RAM, Linux-based
Connections	WLAN, LAN (also access point)

## USER INTERFACE

- Control of temperature, extrusion, print speed
- Manual control
- Print interruption
- G-code editor
- Remote control
- Print status notification
- File directory with image gallery
- Remote maintenance and software update via Network
- Material and Nozzle management

# XIONEER<sup>®</sup>

## SYSTEMS

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### **SAFETY INFORMATION**

Please read the manual carefully to make sure you operate your Xioneer product safely and securely.

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