

# DESKTOP ANISOPRINTING

TURNKEY CONTINUOUS FIBER  
3D PRINTING SOLUTION

HARDWARE | MATERIALS | SOFTWARE | TRAININGS

# HARDWARE: **COMPOSER**

## CONTINUOUS FIBER REINFORCED COMPOSITES

- 30** stronger than pure plastic
- 2** stronger & lighter than aluminum

## AVAILABLE FORMATS

- A4** 297x210x140mm
- A3** 460x297x210mm build volume

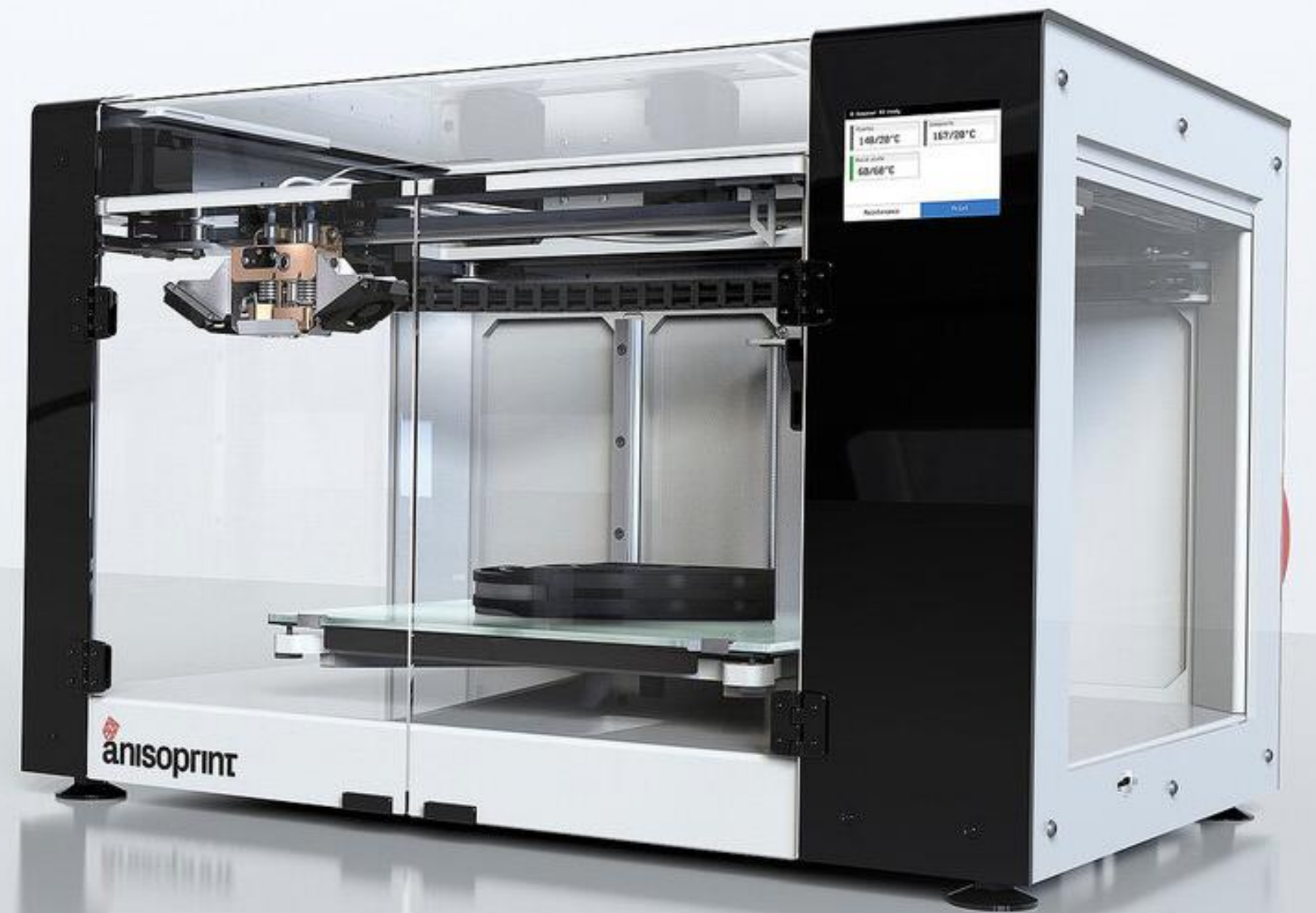
## OPEN SYSTEM

flexible materials choice, fiber volume ratio,  
parts complexity and fiber laying trajectories;

## OPTIMAL COMPOSITE STRUCTURES

Lattice reinforcement — minimum weight, price  
and production time for the required strength

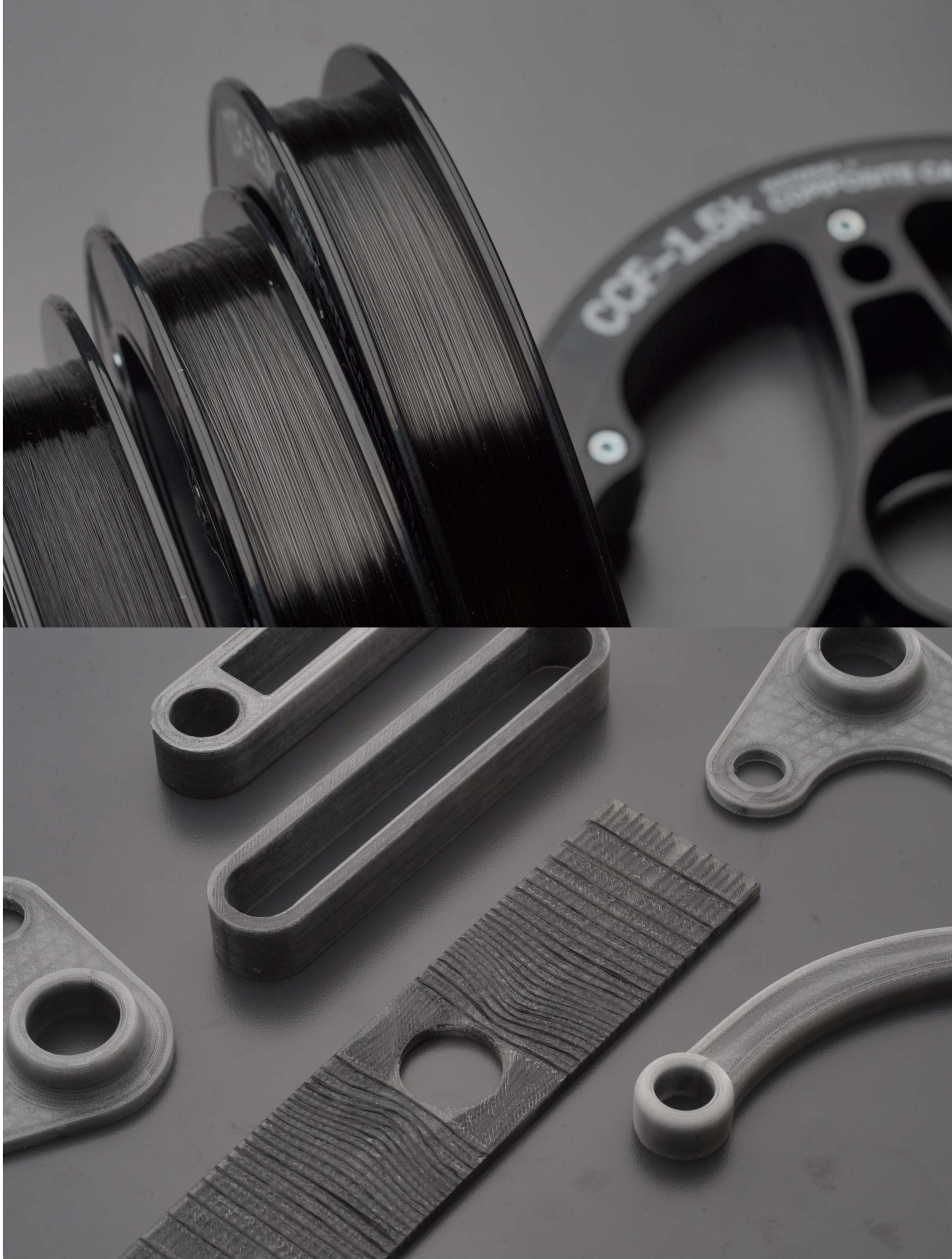




# MATERIALS: COMPOSITE CARBON FIBER

EFFECTIVE DIAMETER 0.35 MM  
FIBER VOLUME 60%  
ELASTIC MODULUS 150 GPA  
TENSILE STRENGTH 2200 MPA

	PETG + CCF
Density, g/cm3	1.4
Tensile modulus in fiber direction, GPa	64
Poisson ratio 21	0.36
Tensile ultimate stress in fiber direction, MPa	860
Tensile elongation in fiber direction, %	1.3
Compressive ultimate stress in fiber direction, MPa	290
Flexural strength, MPa	520



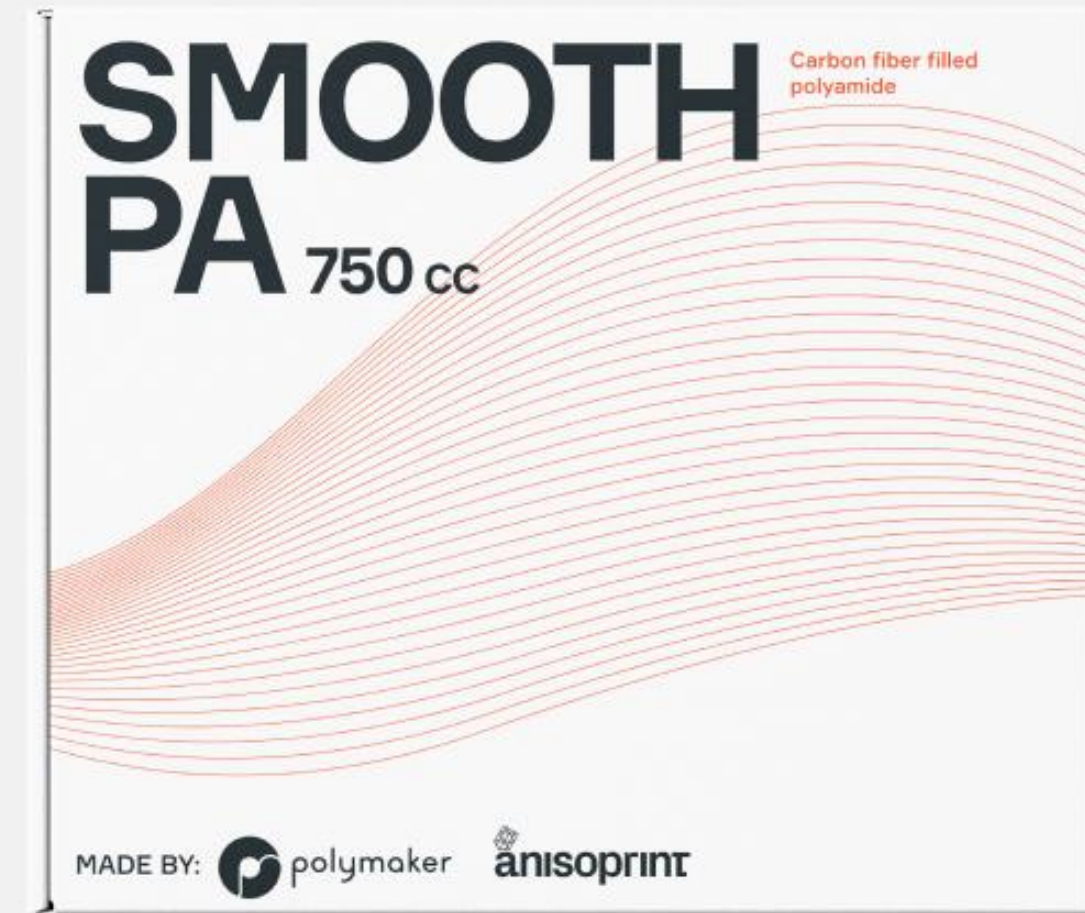
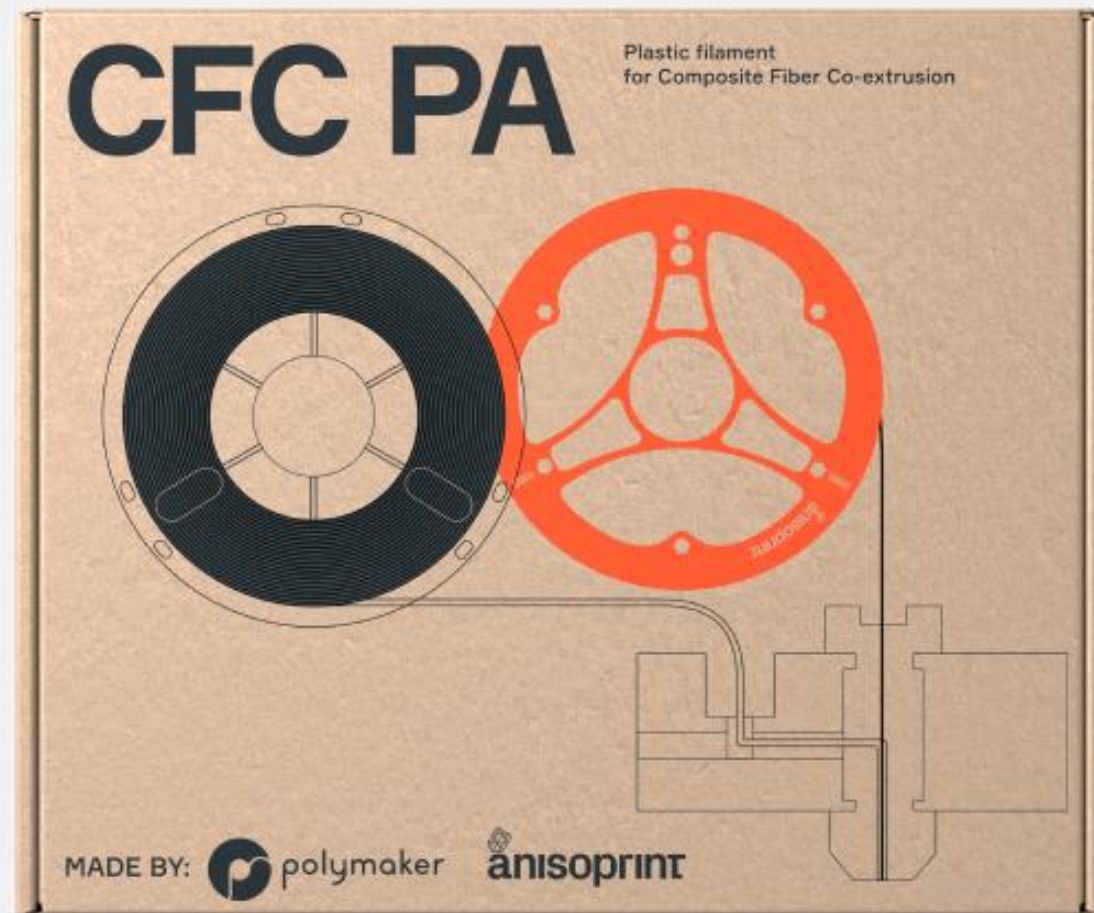
MATERIALS: COMPOSITE BASALT FIBER

EFFECTIVE DIAMETER 0.28 MM  
FIBER VOLUME 60%  
ELASTIC MODULUS 54 GPA  
TENSILE STRENGTH 1557 MPA

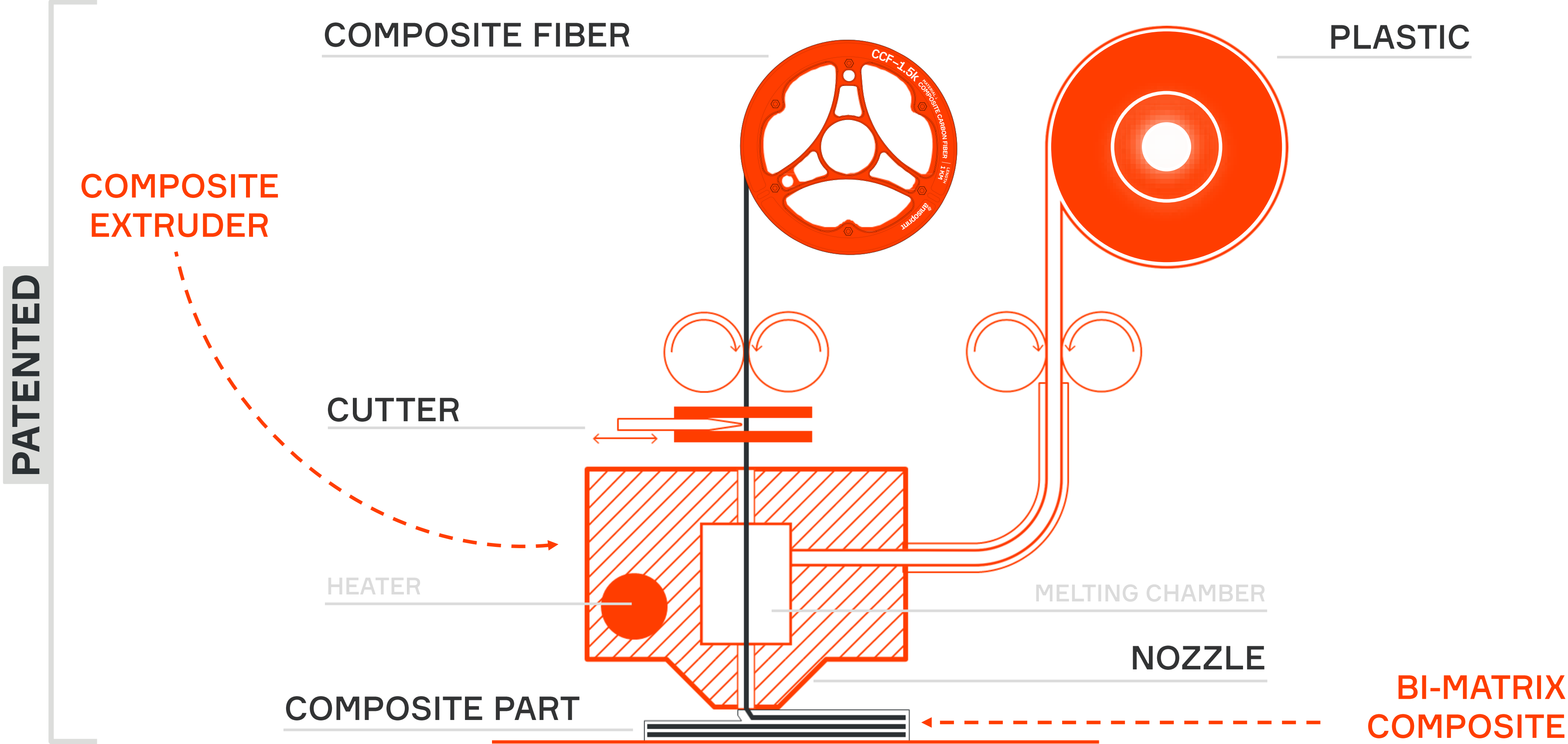
	PETG + CBF
Density, g/cm3	1.7
Tensile modulus in fiber direction, GPa	22
Poisson ratio	0.34
Tensile ultimate stress in fiber direction, MPa	600
Tensile elongation in fiber direction, %	2.8
Compressive modulus in fiber direction, GPa	20
Compressive ultimate stress in fiber direction, MPa	195
Compressive elongation in fiber direction, %	1.2

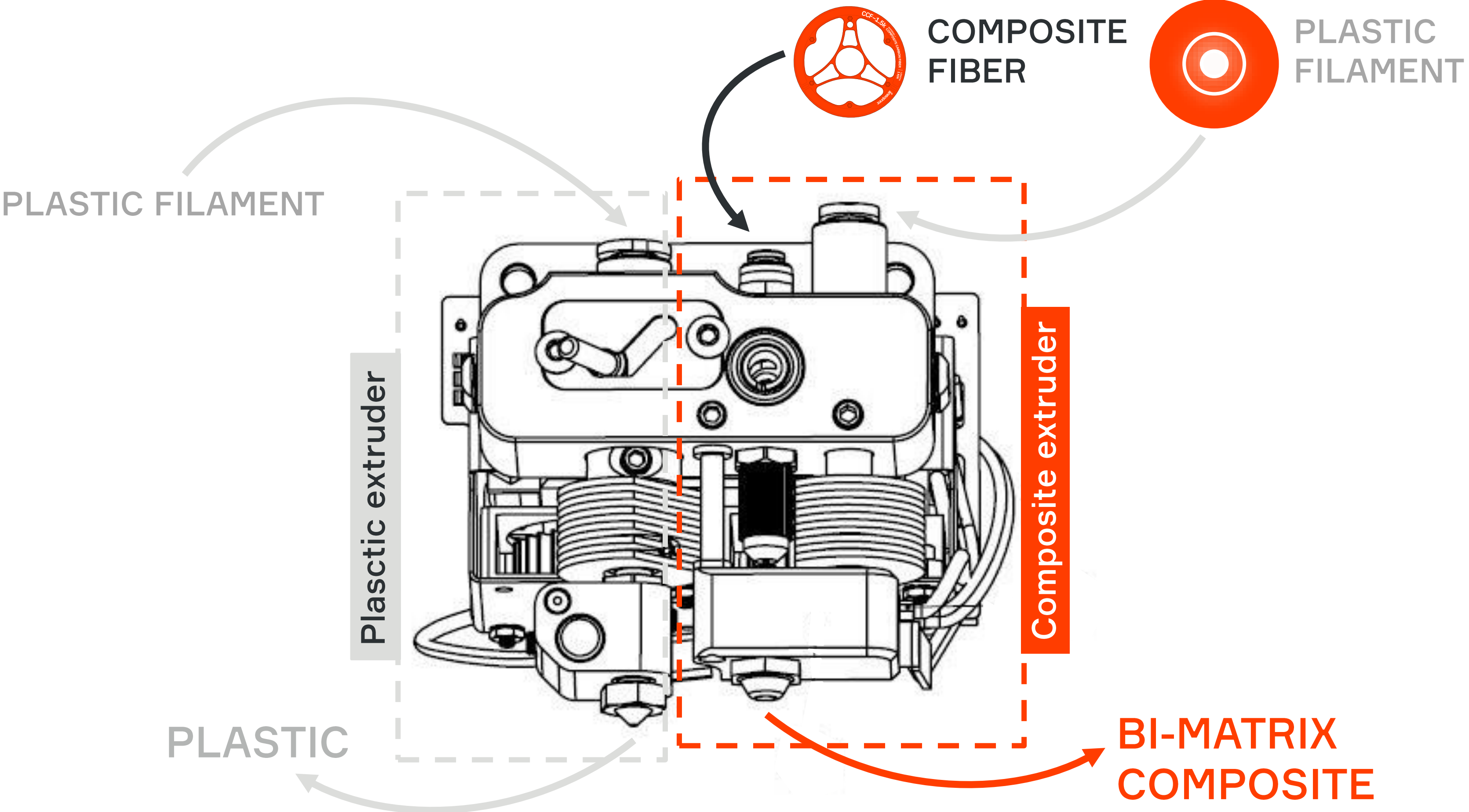


# MATERIALS: **PLASTICS**



SPECIALLY FORMULATED FOR THE TECHNOLOGY





SMOOTH PA



COMPOSITE  
FIBER



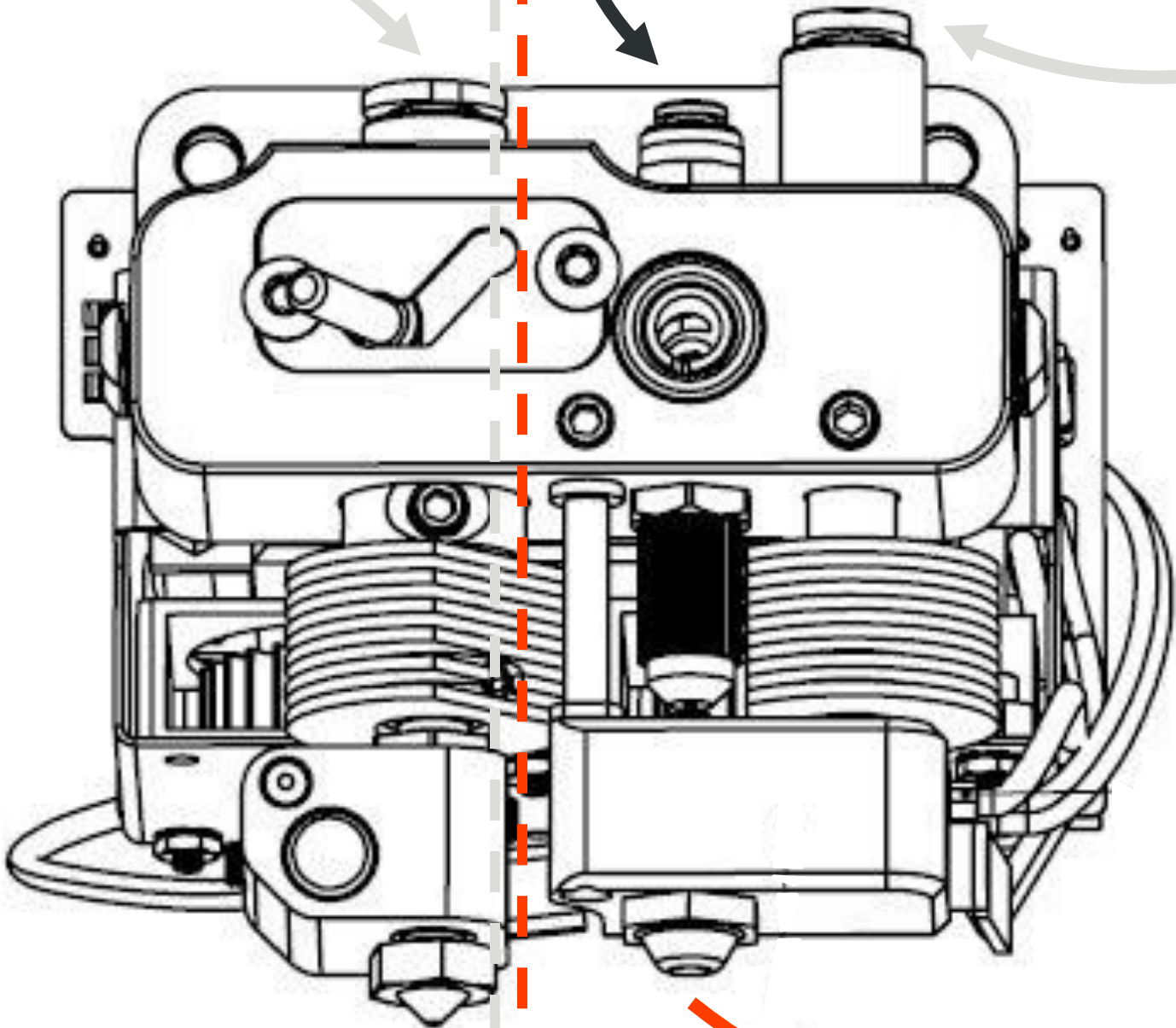
CFC PA

Plasctic extruder

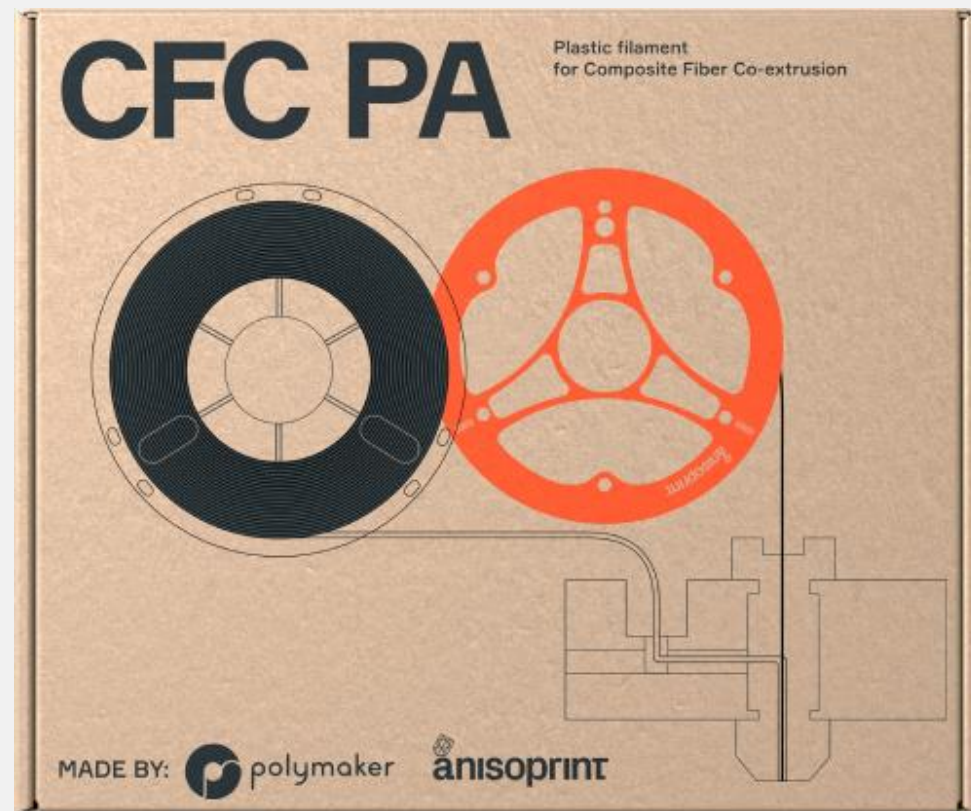
Composite extruder

PLASTIC

BI-MATRIX  
COMPOSITE



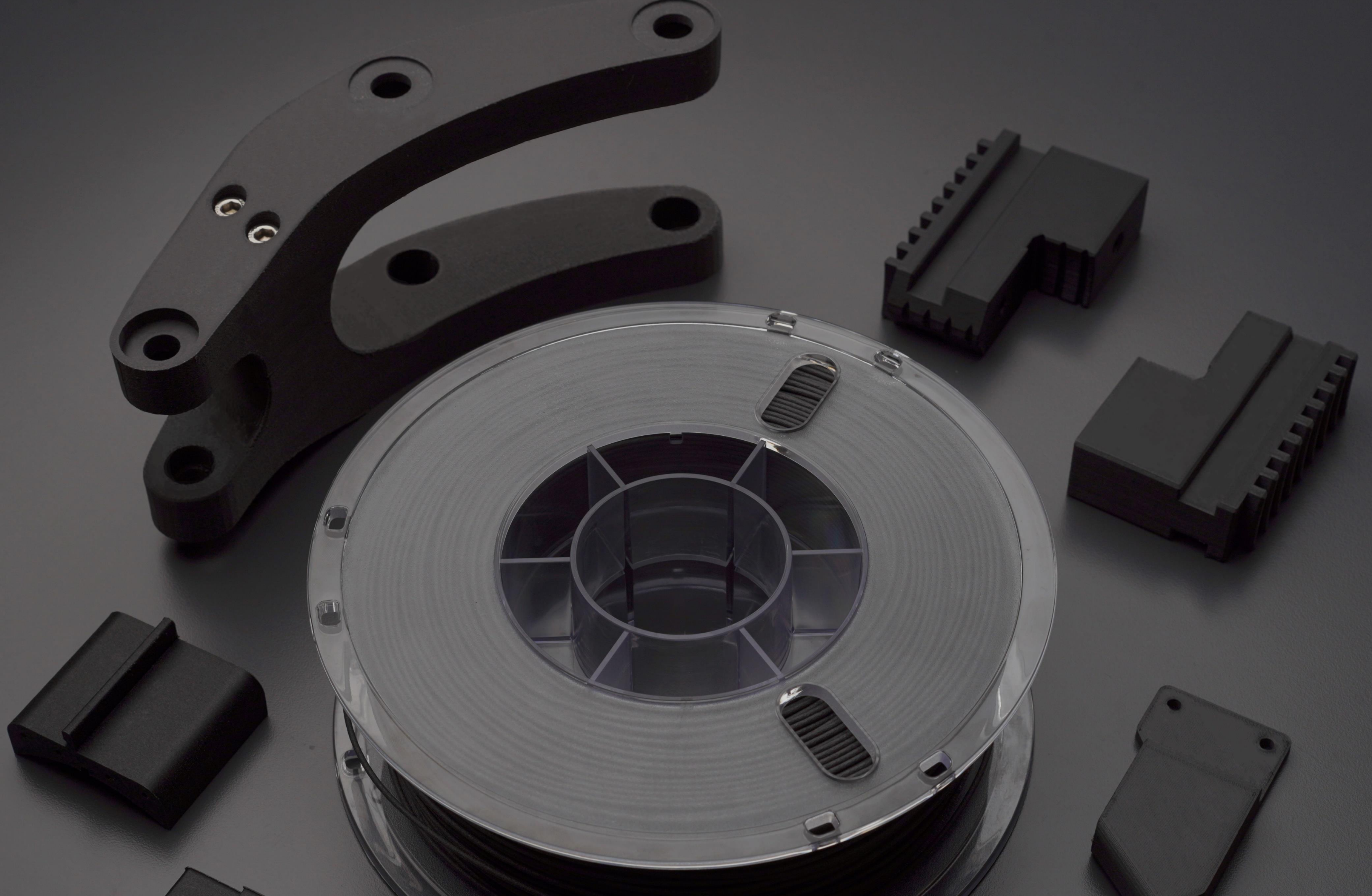
# MATERIALS: **PLASTICS**

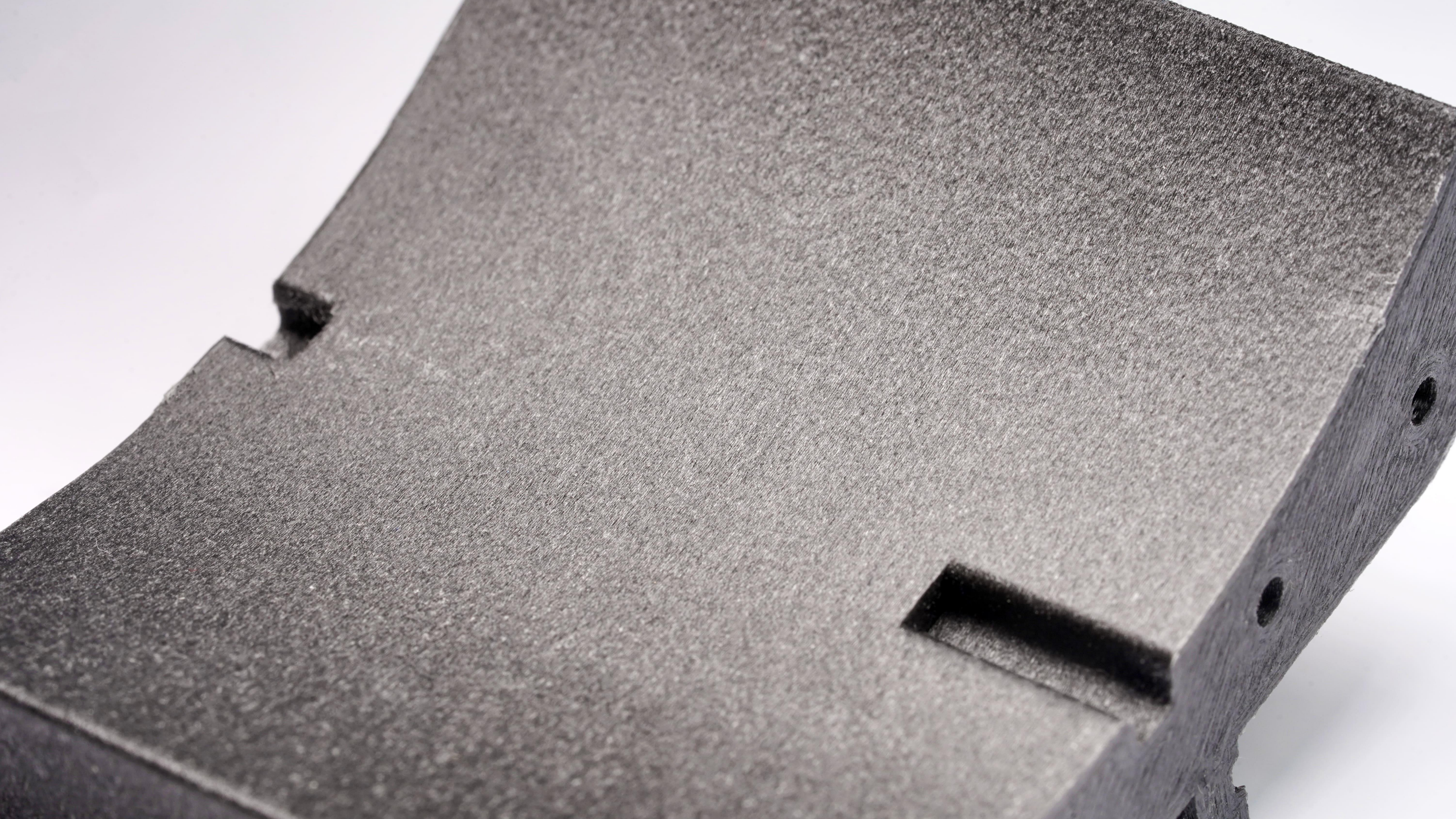


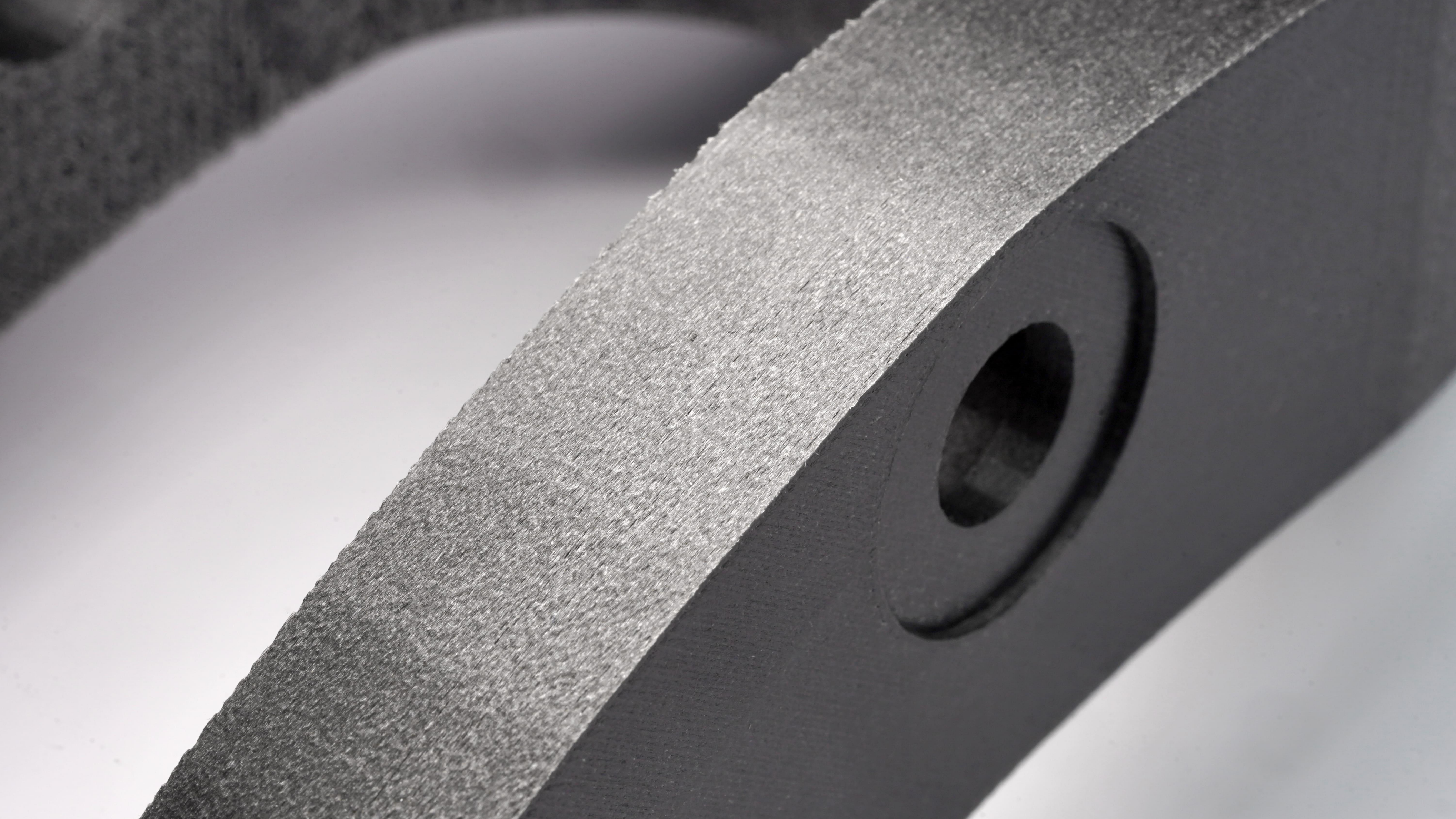
For better composite mechanics and perfect adhesion to reinforcing fiber



Carbon fiber filled polyamide.  
For perfect surface quality and ease of use. Can be printed without a dryer.

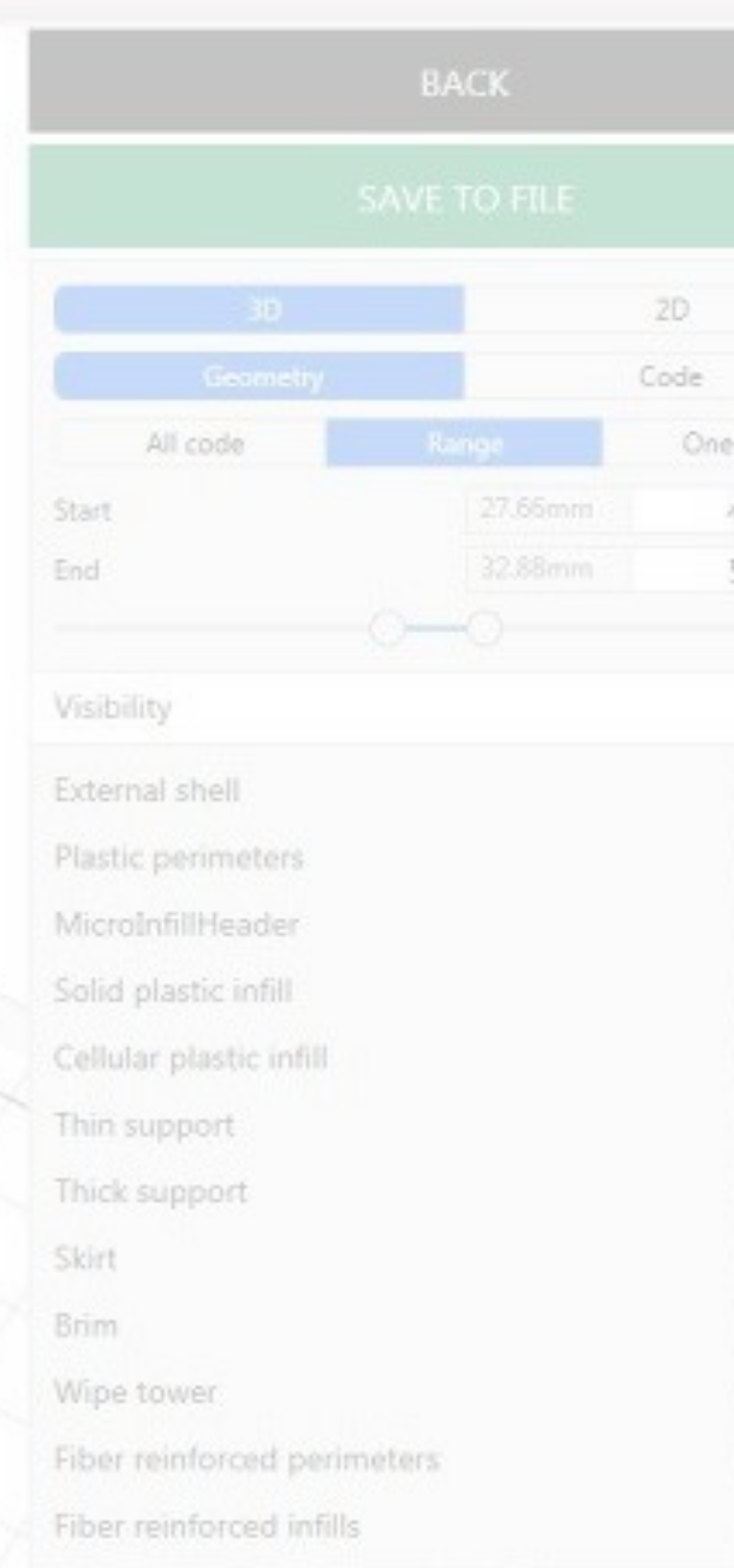






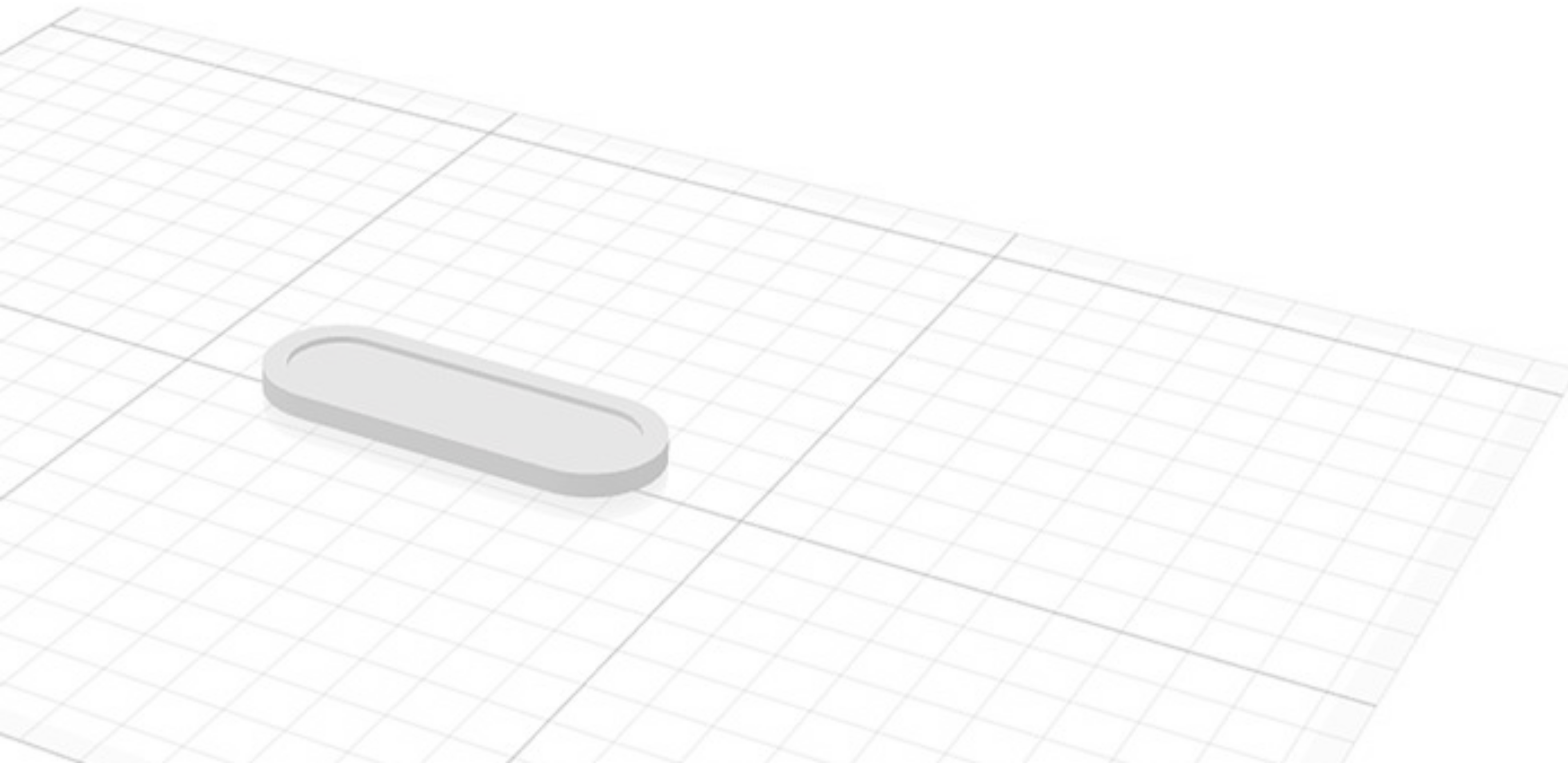
## SOFTWARE: AURA

- for FFF and CFC printers;
- support for STL and CAD formats: .stp, .3ds, .obj;
- model saved on a local PC;
- G-code generalization, geometry-view;
- separate setting and combining of printers, plastics and profiles;
- layer masks.



# SOFTWARE: PRINTING PROFILES

Verified printing settings  
for certain plastic filaments:  
just pick from database and print



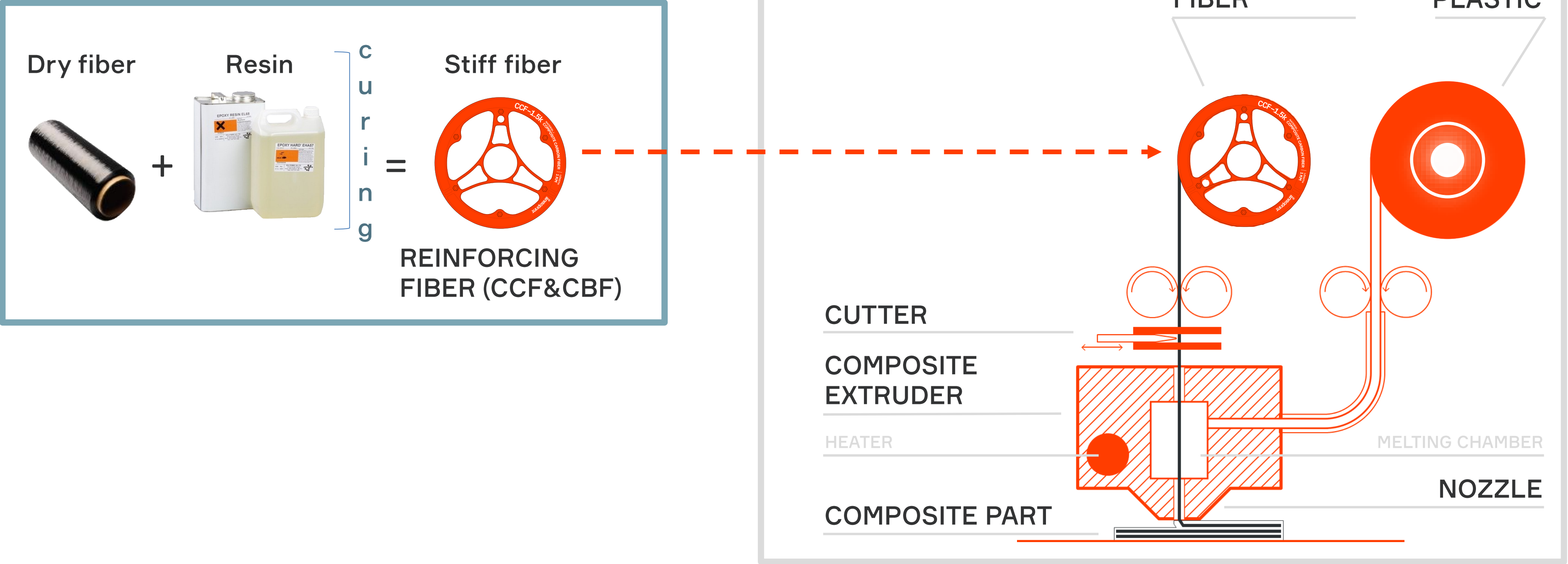
Add new profile		Support
		Plastics
Carbon-P [MCP] (0.4) <sup>AP</sup>	<	Fibers
Carbon-P [MCP] (0.6) <sup>AP</sup>	<	Printers
Carbon-P [MCP] + CCF 1.5k <sup>AP</sup>	<	Profiles
PETG [ESUN] <sup>AP</sup>	<	Models
PETG [ESUN] + CBF <sup>AP</sup>	<	Slicing
PETG [ESUN] + CCF 1.5k <sup>AP</sup>	<	
PETG [Generic] <sup>AP</sup>	<	
PETG [Generic] + CCF 1.5k <sup>AP</sup>	<	
PET-G [MCP] <sup>AP</sup>	<	
PET-G [MCP] + CBF <sup>AP</sup>	<	
PET-G [MCP] + CCF 1.5k <sup>AP</sup>	<	
PLA [Generic] <sup>AP</sup>	<	
PLA [Generic] + CCF 1.5k <sup>AP</sup>	<	
PolyMax PC [Polymaker] <sup>AP</sup>	<	
PolyMax PC [Polymaker] + CBF <sup>AP</sup>	<	
PolyMax PC [Polymaker] + CCF 1.5k <sup>AP</sup>	<	
PolyMax PETG [Polymaker] <sup>AP</sup>	<	
PolyMax PETG [Polymaker] + CCF 1.5k <sup>AP</sup>	<	
PolyMax PETG [Polymaker] + CCF 1.5k <sup>AP</sup>	<	

# TRAINING COURSES **FROM THE TECHNOLOGY DEVELOPERS**

- Introduction to anisoprinting
- Composite basics and design
- Slicing software
- Plastics
- Hardware operation



# BASED ON COMPOSITE FIBER CO-EXTRUSION TECHNOLOGY



# SCOTT GAMBLER DOWNHILL BIKE ROCKER

40% manufacturing costs decrease, 35% weight decrease, smart load-oriented reinforcement

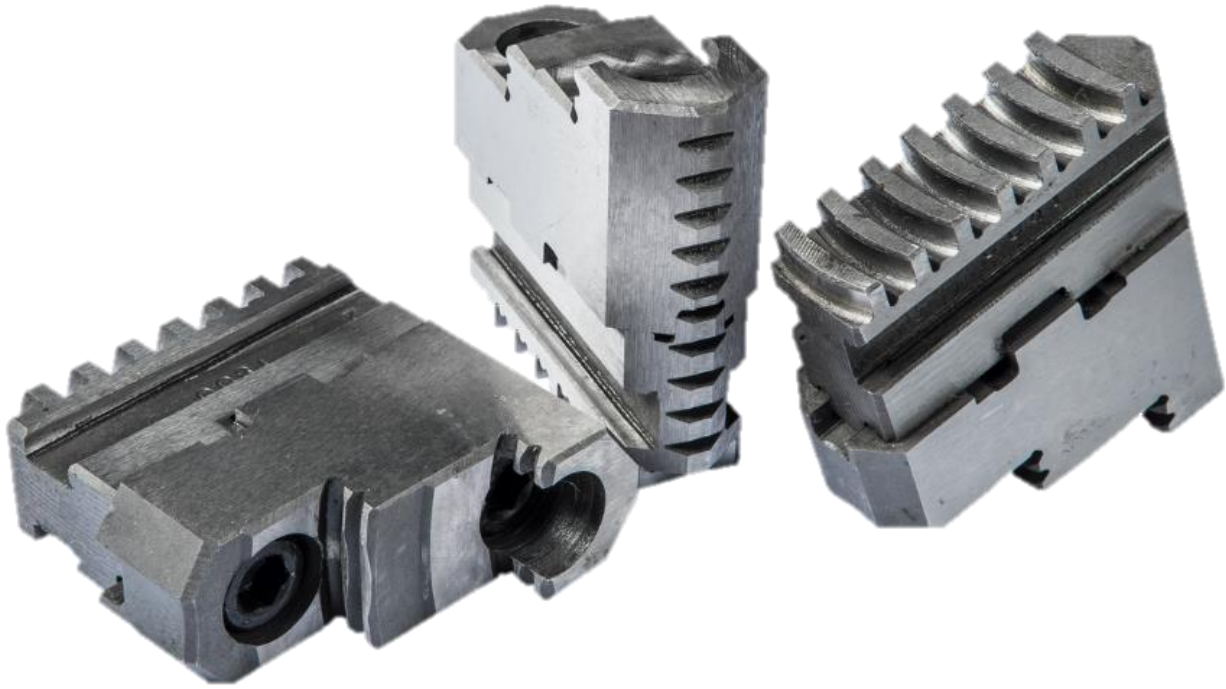
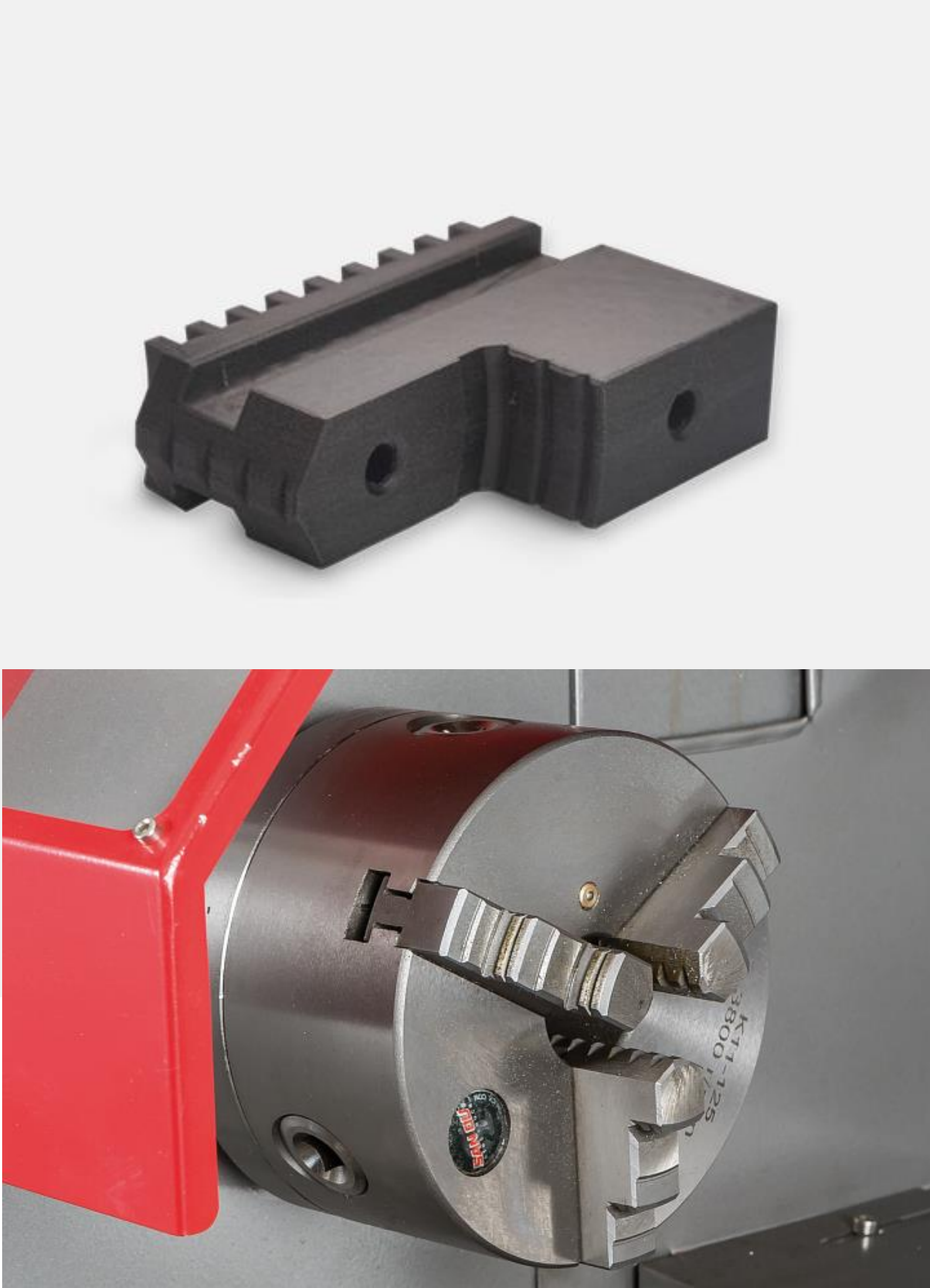
	CNC metal	Anisoprinting (CCF + Smooth)
Weight	500 g	325 g
Prince	€380	€250



# SOFT JAWS

60% weight decrease in comparison to metal

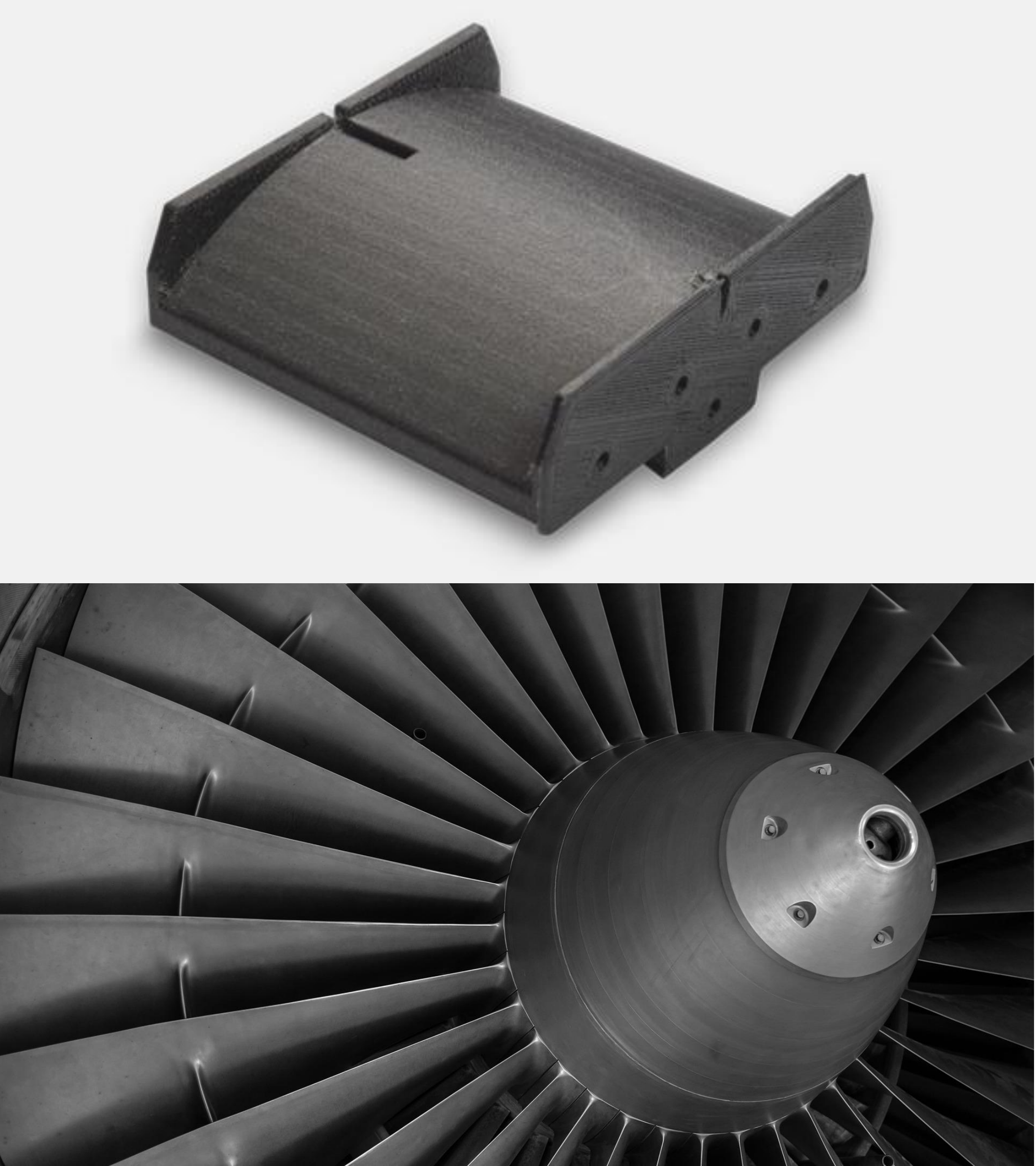
	Metal	Anisoprinting (Smooth PA + CBF)	Savings
Weight	600 g	250 g	60%



# TOOL FOR TURBINE BLADE PRODUCTION

8 times weight reduction, 40% cost savings in comparison to metal tool, precise production timing

400 bar pressure	Metal	Anisoprinting (Smooth PA + CBF)	Savings
Weight	31 kg	4 kg	87%
Price	€1200	€700	40%



# LEGS OF MOBILE ROBOT FOR SENSING, INSPECTION, AND REMOTE OPERATION

Robotic legs: flexible prototyping, 70% weight reduction, 40% lower manufacturing costs

	Aluminum	Anisoprinting (Smooth PA + CCF)	Savings
Weight	1225 g	350g	70%
Price	€460	€260	40%

