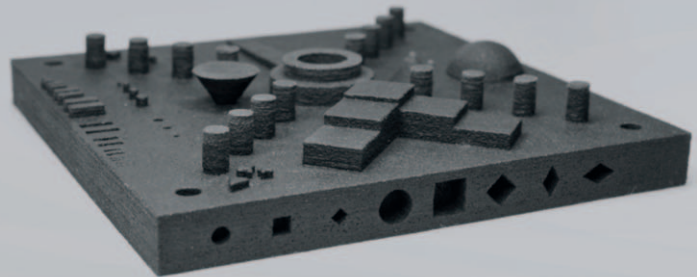


Carbon Fibre/Nylon 12 thermoplastic composite



Excellent surface resolution and feature detail.

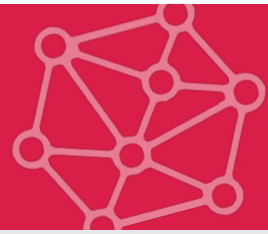
Why choose Carbon Fibre/Nylon 12?

- True carbon fibre composite
- Lightweight
- High tensile strength
- Outstanding mechanical strength properties
- High strength-to-weight ratio
- Superior wear and abrasion resistance
- Chemical resistance
- Good surface resolution and feature detail
- Fine surface finish
- Excellent flatness
- Exceptional part tolerances

Applications

- Aerospace
- Drones
- Tooling
- Automotive
- Structural parts
- Weight reduction
- Metal replacement
- Propellers and spinning geometries
- Enclosure cases, electrical connectors and instrument panels
- Unmanned air vehicle structures and components
- Assembly and fabrication industrial tooling
- Clips, brackets and protective covers
- Spare and custom parts
- Parts requiring machining or joining adhesives

Carbon Fibre/Nylon 12 thermoplastic composite



Properties		Value (XY Axis)	Test method
General	Density	1.10 g/cm ³	ASTM D792
	Colour	Black	Visual
Thermal	Melting temperature	186°C	ASTM D3418
	Heat deflection temperature (0.45MPa)	161°C	ASTM D648
Mechanical	Tensile strength (ultimate)	104 MPa	ASTM D638
	Tensile modulus	9.38 GPa	ASTM D638
	Elongation at break	1.20%	ASTM D638
	Ultimate flexural strength	132 MPa	ASTM D790
	Flexural modulus	9.05 GPa	ASTM D790
	Impact strength (notched)	7.10 kJ/m ²	ASTM D256
	Impact strength (un-notched)	20.9 kJ/m ²	ASTM D4812

Specifications are subject to change without notice

The technical data indicated above is an average value of the test result of a part created under proper management and appropriate conditions. The value is for reference and is not guaranteed.

Get a quote for your parts at rapidfab.ricoh-europe.com
Have a question? Call our friendly team on
+44 (0) 800 304 7196