

Composite-Based Additive Manfacturing (CBAM)





High mechanical strength properties at high temperatures.

Why choose Glass Fibre/PEEK?

- True glass fibre composite
- High tensile strength
- Excellent temperature performance (melting point 340°C)
- High strength-to-weight ratio
- Superior wear and abrasion resistance
- Compatible with autoclave sterilisation
- Chemical resistance (organics, acids and bases)
- Fine surface finish
- Excellent flatness
- Exceptional part tolerances
- Machinable and paintable

Applications:

- Aerospace
- Drones
- Automotive
- Tooling
- Structural parts
- Weight reduction
- Metal replacement
- Propellers and spinning geometries
- Industrial tooling
- Gears and bell cranks
- Impellers and connectors
- High temperature surface mount tools
- Parts requiring machining or joining adhesives

Glass Fibre/PEEK thermoplastic composite



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Properties		Value (XY Axis)	Test method
General	Density	1.25 g/cm ³	ASTM D792
	Colour	Grey	Visual
Thermal	Melting temperature	340°C	ASTM D3418
Mechanical	Tensile strength (ultimate)	135 MPa	ASTM D638
	Tensile modulus	8.5 GPa	ASTM D638
	Elongation at break	1.5%	ASTM D638
	Ultimate Flexural Strength	225 MPa	ASTM D790
	Flexural modulus	8.5 GPa	ASTM D790
	Flexural strain to failure	2.5%	ASTM D790

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 an online quote at <u>rapidfab.ricoh-europe.com</u>
Have a question? Call our friendly team on +44 (0) 800 304 7196

