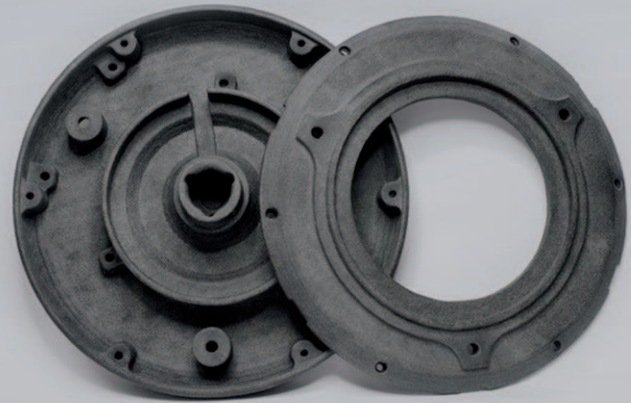


## Carbon Fibre/PEEK thermoplastic composite



**High mechanical strength properties at high temperatures.**

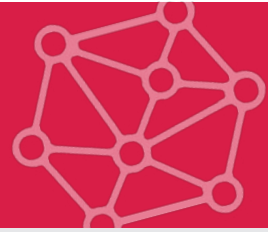
### **Why choose Carbon Fibre/PEEK?**

- True carbon 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

# Carbon Fibre/PEEK thermoplastic composite



Properties		Value (XY Axis)	Test method
General	Density	1.40 g/cm <sup>3</sup>	ASTM D792
	Colour	Black	Visual
Thermal	Melting temperature	340°C	ASTM D3418
	Heat deflection temperature (0.45MPa)	>300°C	ASTM D648
Mechanical	Tensile strength (ultimate)	132 MPa	ASTM D638
	Tensile modulus	12.4 GPa	ASTM D638
	Elongation at break	1.04%	ASTM D638
	Ultimate flexural strength	176.7 MPa	ASTM D790
	Flexural modulus	12.4 GPa	ASTM D790
	Impact strength (notched)	4.90 kJ/m <sup>2</sup>	ASTM D256
	Impact strength (un-notched)	13.2 kJ/m <sup>2</sup>	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.

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