



Carbon Fiber Composite (CFC) CC-19

Our high strength composites can be used in applications exceeding 2,500°C with sheet sizes available +6" thick x 75" Length x 60" Wide. These composites are stiffer and lighter than metals, and possess excellent strength properties that make them a more effective alternative and a better solution for different components.

Product Advantages Include:

- Exemplary strength and stiffness to very high temperatures in non-oxidizing atmosphere
- Very lightweight
- Can be produced with low or high thermal conductivity

Current Applications Include:

- Protective liners and melt covers
- "L" and "U" channels
- Reflectors and heat shields for CZ pullers
- Fasteners (nuts and bolts)
- Structural components for fixtures

Property	Unit	Value
Heat treatment	°C	2000
Max Operating temp	°C	2850
Bulk Density	g/cm ³	1.46
Porosity, open	%	7
Flexural Strength	(⊥) Mpa	142
Flexural Modulus of elasticity	(⊥) Gpa	60 -
Tensile strength	(//) Mpa	320
Resistivity at 20°C	(//) ΩμM	35
CTE (20-1000C)	(//) x10 ⁻⁶ /K	0.5
	(⊥) x10 ⁻⁶ /K	7
Interlaminar shear strength	Mpa	8
	PSI	1200
Thermal Conductivity	(//) W/mK	32
	(⊥) W/mK	7

(⊥) Measured perpendicular to the plane of the laminate

(//) Measured parallel to the plane of the laminate

(-) Data available upon request

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