

TOKAREC

Tokarec CC composite is a material with strong carbon fibre and carbon matrix. This composite has excellent mechanical properties and is suitable for a wide range of high temperature applications.

Features:

High Specific Strength and High Specific Modulus
 Excellent Heat and Thermal Shock Resistance
 Low Coefficient of Thermal Expansion
 Low Thermal Conductivity
 High Purity
 Low strength to weight ratio
 Strength increases with Increasing Temperature

Applications:

Components for single and multi Crystal Pullers
 Structural Parts for Heat Treatment Furnaces
 Heaters
 Jigs and Fixtures
 Carriers for Silicon Solar Cells

Typical Properties

Property	Unit	CC26NF	CC27MFP	CC28MF	CC28NF
		6K Cylinder	12K Crucible	12K Plates	6k Plates
Apparent Density	g/cm ³	1.4	1.62	1.48	1.48
Flexural Strength	MPa	100	170	110	140
Tensile Strength	MPa	100	150	100	100
C.T.E.(450 ⁰ C)	×10 ⁻⁶ /K	0.8	0.8	0.8	0.8
Thermal Conductivity	W/mK	2.6	8	2.8	2.8
Specific Resistance	μΩm	28	22	26	26

Typical Impurities Analysis

	Metallic Element							
	Al	Ca	Cr	Cu	Fe	K	Na	Ni
ppm	< 0.08	0.2	< 0.07	< 0.08	0.6	< 0.1	< 0.05	< 0.1