

CARBON-CARBON COMPOSITE MATERIALS (CCCM) FOR INDUSTRY



Areas of Application

Mechanical engineering, chemical industry, metallurgy, automobile and aircraft industries

Specification

Density, g/cm ³	1.4–1.8
Ultimate strength at 20 °C, MPa:	
compression strength	150–400
bending strength	100–160
tensile strength	50–120
Heat conductivity, W/m · deg ⁻¹ :	
at 20 °C	5–7
at 500 °C	7–11
at 1000 °C	10–15
CLTE $\alpha - 10^{-6} \cdot \text{deg}^{-1}$:	
20–1000 °C	3–4
20–1500 °C	3.5–4.5

IPR Protection

IPR1

Advantages

The technology and equipment for production of carbon-carbon compound materials are unique for Ukraine; high mechanical strength; resistance to mechanical and thermal shocks; chemical and radiation resistance; long service life; low weight of product

Stage of Development.

Suggestions for Commercialization

IRL8, TRL8
Customized manufacture,
manufacture of unit orders

Contact Information

Igor V. Gurin, National Science Center “Kharkov Institute of Physics and Technology”;
+38 067 712 16 74, +38 057 349 10 61, e-mail: Igor@kipt.kharkov.ua