

EROSION-RESISTANT CARBON-CARBON COMPOSITE MATERIALS (CCCM)

Areas of Application

The erosion resistant CCCM are used in rocket, space, aeronautical, and mechanical engineering for manufacturing the critical elements of solid-fueled, liquid-propellant, and electrothermal rocket engines (critical sections, chambers, heat exchangers, heaters, etc.)

Specification

Density, g/cm ³	1.3–1.85
Mechanical strength, MPa	100–400
Low open porosity, %	3–4...8–12



Carbon-carbon parts

Advantages

The proprietary techniques and manufacturing technologies enable kicking the dependence on imported dual-use materials. The materials are weldable to metallic (titanium) elements, operable at a high temperature (up to and above 3000 °C) and at considerable thermal and mechanical shocks



Production of carbon-carbon materials

Stage of Development.
Suggestions for Commercialization

IRL7, TRL8
Manufactured and supplied, upon request

IPR Protection

IPR1

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