

## DESCRIPTION:

Roboze Carbon PA is a composite material. It's nylon 6 matrix is reinforced with 20% carbon fiber, that produces excellent mechanical properties and makes the material capable of replacing metal alloys such as aluminum.

These extraordinary properties are the result of in-depth R&D of the materials, from the selection of its polyamide matrix to the deep analysis of the length and nature of the chopped fiber.

## MATERIAL SPECIFICATION:

Property	Operating Conditions	Units	Orientation				Test Method
			XZ	XY 0°	XY 45°	ZX	
Tensile Strength	25°C	MPa	138	136	n/a	n/a	ASTM D638
Tensile Modulus	25°C	GPa	14.7	15.5	n/a	n/a	ASTM D638
Property		Units	Value				Test method
Specific Density		g/cm <sup>3</sup>	1.4				ASTM D792
Colour		N/A	Black				N/A
Continuous use temperature		°C	150				ASTM D3045
Heat Deflection Temperature (at 1.82 MPa)		°C	180				ASTM D648

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