



## TECHNICAL DATA SHEET - Carbon Fiber Nylon

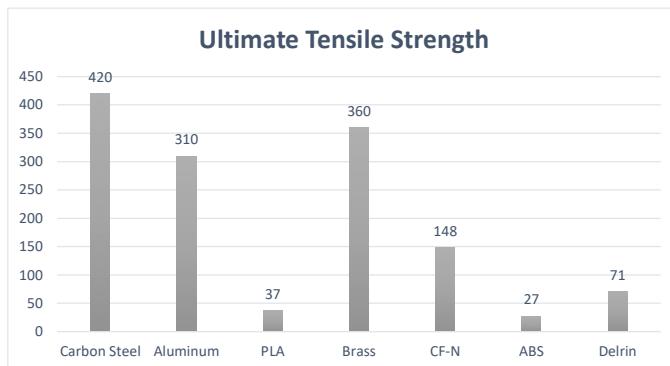
Raw Material Name: Carbon Fiber reinforced polyamide  
 Application: Rotary Components  
 Manufacturer: Covalo Industries

### Material Specifications

Mechanical Property	Value	Unit	Test Method
Ultimate Tensile Strength	148	MPa	ISO 527-2
Tensile Modulus	16	GPa	ISO 527-2
Strain at Break	1.4	%	ISO 527-2
Flexural Strength	184	MPa	ISO 178
Flexural Modulus	11.4	GPa	ISO 178
Notched Izod Impact Strength	9.2	kJ/m <sup>2</sup>	ISO 180/A
Specific Gravity	1.32	g/cm <sup>3</sup>	ISO 1183
HDT B @ 0.45 MPa	219	MPa	ISO 75
HDT A @ 1.8 MPa	182	MPa	ISO 75
Continuous use Temperature @ 20,000 hrs	150	-	IEC 60216

### Strength Comparison

Material	Ultimate Tensile Strength (Mpa)
Carbon Steel	420
Aluminum	310
PLA	37
Brass	360
CF-N	148
ABS	27
Delrin	71



Disclaimer: The technical data contained on this data sheet is furnished without charge or obligation and accepted at the recipient's sole risk. This data should not be used to establish specifications limits or used alone as the basis of design. The data provided is not intended to substitute any testing that may be required to determine fitness for any