

# Projects on Carbon Fiber, Carbon Fiber Composites, Graphite Fibre and Carbon Fiber Reinforced Polymer-Investment Opportunities

## Description:

Carbon fiber is composed of carbon atoms bonded together to form a long chain. The fibers are extremely stiff, strong, and light, and are used in many processes to create excellent building materials. Carbon fiber material comes in a variety of "raw" building-blocks, including yarns, uni-directional, weaves, braids, and several others, which are in turn used to create composite parts.

Carbon fiber is extremely strong. It is typical in engineering to measure the benefit of a material in terms of strength to weight ratio and stiffness to weight ratio, particularly in structural design, where added weight may translate into increased lifecycle costs or unsatisfactory performance. The stiffness of a material is measured by its modulus of elasticity. The modulus of carbon fiber is typically 33 msi (228 GPa) and its ultimate tensile strength is typically 500 ksi (3.5 Gpa). High stiffness and strength carbon fiber materials are also available through specialized heat treatment processes with much higher values.

## Carbon Composite Fiber

Carbon Composite fibre is produced from the raw material used PAN, pitch etc. Quality of composite carbon fibre produced from PAN is much better than the product produced from the pitch. It is one of high technology base product with fair market demands in India. Carbon fibers are black fibers used as yarns felt or powder like short mono filaments with diameters smaller than 10 mm. They are mainly applied to reinforce polymers, much like glass fibers have been used for decades in fiber glass. It has special used in the special type industries like aeronautical industry, automobile industry.

## Carbon Fiber

Carbon fibers have been under continuous development for the last 50 years. The properties of carbon fibers, such as high stiffness, high tensile strength, low weight, high chemical resistance, high temperature tolerance and low thermal expansion, make them very popular in aerospace, civil engineering, military, and motorsports, along with other competition sports. However, they are relatively expensive when compared to similar fibers, such as glass fibers or plastic fibers. Carbon fibers are usually combined with other materials to form a composite.

**For more details download PDF file.**

**Keywords:** Commercial Carbon Fiber Manufacture, Carbon Fiber and Carbon Fiber Composites, Making of Carbon Fiber, Manufacturing Process of Carbon Fiber, Carbon Fiber Manufacturing Process, Carbon Fiber Process Line, Manufacturing of Carbon Fibers, Carbon Fiber Process, Carbon Fiber Manufacturing, Carbon Fiber Production Process, Carbon Fiber Production Line, Carbon Fiber Manufacturing and Production, Carbon Fiber Processing, Carbon Fiber Manufacture, Process for Production of Carbon Fiber, Production Proce

**Created At:** 14 Jul, 2017