

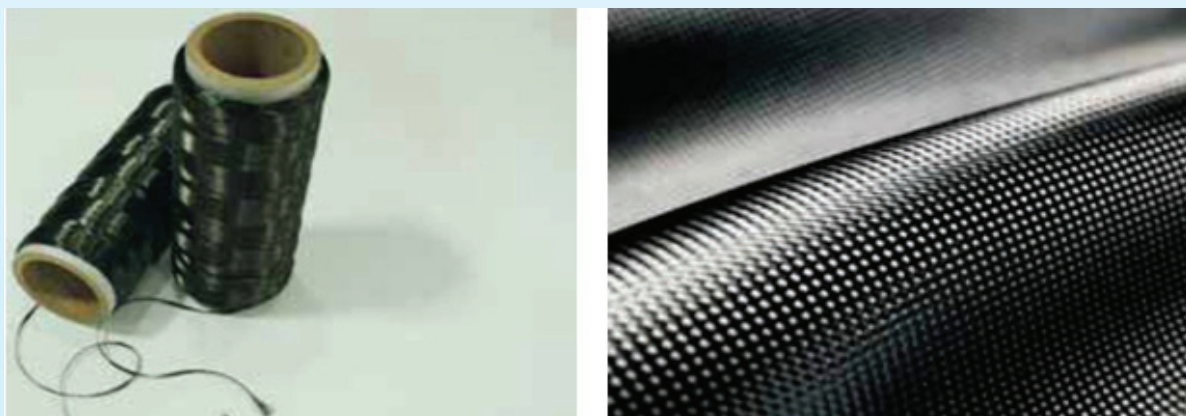
Carbon fiber is a high strength, high-stiffness but low weight material, used extensively in manufacture of aircraft, missiles, launch vehicles and satellites. It is also an important raw material in many vital industrial applications such as wind energy, infrastructure, sports and transportation, to name a few.

CSIR-NAL established carbon fibre Facility in 2003. This facility is an integrated facility and is capable of producing special acrylic precursor fibres (SAF), carbon fibres and carbon/epoxy prepregs. The carbon fibre R&D activity was started in CSIR-NAL at a time when carbon fibres were not easily available due to sanctions and denial regimes. CSIR-NAL pioneered the development of carbon fiber technology and demonstrated the same on a pilot plant of 10 TPA capacity. Subsequently, CSIR-NAL successfully transferred the technical know-how to Kemrock Industries and Exports Limited, Vadodara, for the production of carbon fiber on commercial scale up to 300 TPA; Kemrock commissioned India's first commercial scale carbon fiber manufacturing facility on May 9, 2010. Type certified by Centre for Military Airworthiness and Certification (CEMILAC), Bangalore on September 21, 2011.

MoU with MIDHANI, Hyderabad for development of production technology for aeronautical grade carbon fibers.



Carbon fibre plant at NAL



Carbon fibre

Technical details:

Base material : Carbon Fibre **Grade:** 3K, 6K and 12K

End Use: Manufacturing of prepregs commonly employed in the construction of aeronautical structures.

Storage life: 12 months (from date of application of sizing/finish) when stored at room temperature with adequate protection from dust.

For more information please contact:

Director, CSIR-National Aerospace Laboratories, PB 1779, HAL Airport Road, Bangalore 560 017, India.

Tel: 91-80-25086000, 25270584; email: director@nal.res.in; www.nal.res.in