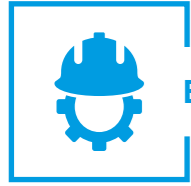




TECHNOLOGY LICENSING



ENGINEERING SERVICES



PLANT CONSTRUCTION

IDEAS INSIDE ^{EPC}



Carbon Fiber Pilot Plants

PAN Polymerization, Precursor Spinning, Oxidation & Carbonization.
All process steps under one roof.

CONTACT

EPC Engineering & Technologies GmbH

Dr.-Bonnet-Weg 1
99310 Arnstadt
Germany

Phone: +49 3628 660 48 - 2900
Fax: +49 3628 660 48 - 2925
Email: mail@epc.com
Web: www.epc.com



Carbon Fiber Technology – Demonstration facilities for newcomers and established players.

During the past decades EPC has recognized the growing demand for carbon fiber products in the global market. Carbon fiber is valued for its high strength and light weight characteristics. EPC offers a complete turnkey solution for the realization of tailor-made carbon fiber production facilities. In addition to industrial-scale production plants, EPC offers lab-scale and pilot production plants, ideal for staff training, recipe development and product optimization.



EPC Group is certified per DIN EN ISO 9001

IDEAS INSIDE ^{EPC}



EPC's Carbon Fiber Technology Pilot Plants and Demo Plants

Carbon fiber is an exciting material with multiple applications in automotive, aviation, sports and many other growth markets. Carbon fiber has the advantage of being strong with light weight and high chemical resistance and temperature tolerance. The market demand for carbon fiber grows continuously.

Investing in a lab-scale or pilot plant is the logical first step for newcomers in the carbon fiber industry, but also offers added value for existing players.

EPC Group is internationally renowned for industrial engineering and plant construction across the polymer and fiber industry. The German family-owned company has successfully completed more than 1000 projects in over 40 different countries. EPC Group offers a functional turnkey package including technology, engineering know-how and product guarantees for carbon fiber production facilities.

EPC has vast experience in constructing large scale carbon fiber plants and also smaller scale pilot plants and demonstration facilities. We offer tailor-made pilot plants that specifically match the product specifications required by each individual client.

Pilot Plant - Advantages

- Staff training
- Raw material testing and approval
- Recipe development & trials
- Lab based optimization of process & product
- Product trials (polymerization, spinning, carbonization)
- Analysis – analytical research



FROM MONOMER TO HIGH QUALITY CARBON FIBER ALL STEPS UNDER ONE ROOF

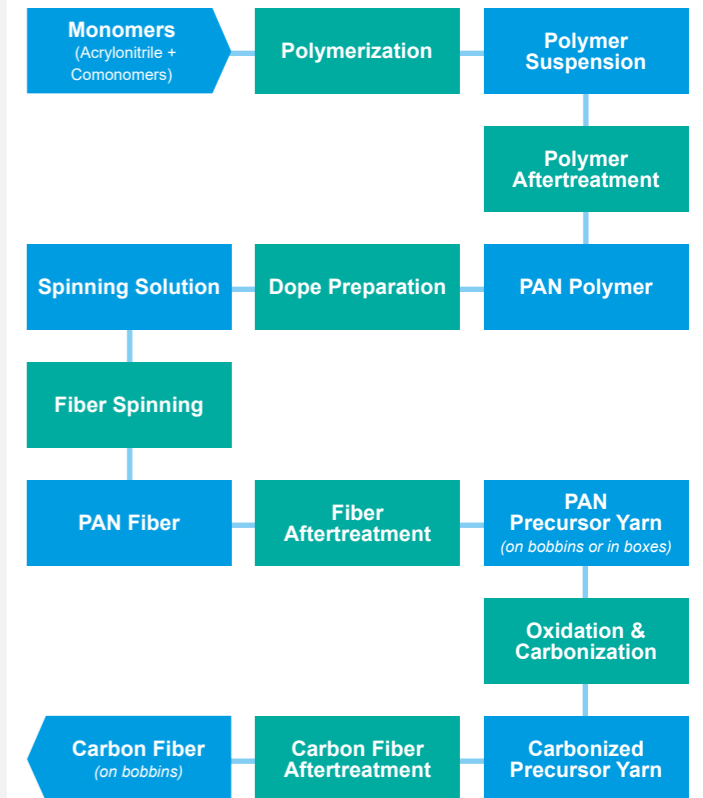


A CARBON FIBER PILOT PLANT ENABLES:

- **Product trials**
Including polymerization, spinning and production of carbon fiber.
- **Raw material testing and approval**
Different raw materials can be used for production of samples; resulting polymer precursor and carbon fiber quality can be analyzed and evaluated.
- **Recipe development**
- **Lab based process and product optimization**
Pilot plant design allows simulation of different process parameters.
- **Staff training**
Prior to the start-up of a carbon fiber plant.
- **Analysis – analytical research**

A CARBON FIBER PILOT PLANT CONSISTS OF:

- PAN polymerization technology
- Dope (*spinning solution*) preparation
- Precursor spinning technology
- Carbon fiber production (*oxidation and carbonization*)



Visit our Carbon Fiber Demonstration Facility in Germany

We have a fully functional carbon fiber demonstration facility in Germany which includes PAN polymerization, precursor spinning and carbon fiber production.

CONTACT



Karol Kerrane
Business Development Director
Phone: +49 3628 66048 - 29 00
Email: karol.kerrane@epc.com



Dipl.-Ing. / MBA
Michael Streng
Member of the Managing Board
Phone: +49 6023 5017 - 21 20
Email: michael.streng@epc.com

