

IDEAS INSIDE



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The EPC Group is certified according to DIN EN ISO 9001:2008

Spinning Plants for Filaments, Staple Fiber and Technical Yarn

„EPC offers process technology, engineering services and equipment supply for the construction of modern and cost-effective spinning plants for filaments, staple fiber and technical yarn. We meet our customers' requirements for both small capacities and large direct spinning plants. EPCs filament spinning systems are designed for the production of POY and FDY. Technical yarn feature highest strength, excellent durability and form stability. EPCs staple fiber technology is applicable to a wide range of applications.“



EPC variYARN®
Filaments | Staple Fiber | Technical Yarn

Today, man-made fibers are found are being used for many applications, in modern apparel, home furnishings, medicine, aeronautics, energy, industry and more. EPC Engineering Consulting GmbH is offering complete production facilities based on long-time experience and expertise. The combination between EPCs technology and proven equipment from well-known manufacturers is the basis for excellent quality fibers and filaments for a wide range of applications at low production costs.

Filaments and fibers can be produced in direct spinning plants starting from polymer melt or in extruder spinning plants from chips. POY (Partially Oriented Yarn) is manufactured using the godet process; it is further processed into draw textured or air textured yarn. FDY (Fully Drawn Yarn) is made on spin-draw-machines in one step at high speeds and can be directly used for flat yarn applications.

Large capacity direct spinning lines with capacities of 200 tons/day are being utilized for the production of staple fibers. The polymer is melt spun and the bundle of continuous filaments is collected into a tow. The tow is further processed in consecutive steps such as drawing, crimping, spin finish application, drying and then cut into defined lengths to get cut fibers almost equal in length and properties to natural fibers such as cotton or wool.

For the production of Technical Yarn EPC offers different process routes starting from monomer to the final yarn. Rheologically optimized polymer distribution pipes ensure an even melt distribution and melt homogeneity for better spinning performance.

Spin packs are designed for easy handling and ensure in connection with the annealer and the quenching system a uniform yarn formation that is a condition for high tenacity yarn. The draw-winding machine is designed for 3, 4 or 6 ends per position for a high productivity. The heated godets allow a precise temperature and speed control.

TYPICAL FINAL PRODUCTS FOR TECHNICAL YARN:

- Conveyor belt yarn
- Tire yarn and dipped card fabric
- V-belt yarn
- Yarn for hoses
- Belt and rope yarn

CONTACT PERSON

For general questions around EPCvariYARN® please contact:

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EPC AS A TURNKEY CONTRACTOR

Highest product quality and short delivery time

- Engineering (basic, detail, turnkey) out of one hand
- Customer-oriented and complete solutions
- Flexibility to meet all customers demands in shortest time
- High productivity and low operation costs
- Highest product quality consistency and reproducibility for each product lot

- Multiple number of variYARN®-modules per spinning line, for example 2,4,6,8,10 or 20 modules to meet the demand of our customers
- Required utility plants / labs can be engineered and supplied
- Individual Masterbatch production units can be supplied shortening the supply chain and reduce delivery time

PET FILAMENT PRODUCTION RANGE

PET Filament Production range
 POY ... 56 – 330 dtex ... 44 – 192 Filaments
 FDY ... 33 – 330 dtex ... 10 – 144 Filaments

PA6 Filament Production range
 POY ... 8 – 210 dtex ... 3 – 96 Filaments
 FDY ... 17 – 220 dtex ... 5 – 48 Filaments

PA6.6 Filament Production range
 POY ... 4 – 220 dtex ... 3 – 192 Filaments

PP Filament Production range
 FDY ... 33 – 110 dtex ... 10 – 34 Filaments

STAPLE FIBER TYPES

