
Trevira
An Indorama Ventures Company
WELCOME
to Trevira's Guben plant

Welcome

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Dear visitors,

Welcome to Trevira!

We are an innovative European manufacturer of high-value branded fibres and filament yarns for technical applications and hygiene products as well as for home textiles, automotive interiors and functional apparel.

Our company employs around 1,040 staff at our filament production site in Guben (Brandenburg), our staple fibre production centre in Bobingen (Bavaria) and our marketing and sales office in Hattersheim, (Hessen).

Trevira GmbH is owned by Indorama Ventures PCL, Thailand.

With this brochure, we would like to introduce you to our Guben site, where we manufacture filament yarn specialties for functional home textiles, the automotive industry and technical applications.

We hope you have an enjoyable and interesting visit!

Our Guben site

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CEO: Klaus Holz (r.)

Head of BU Filaments: Edo Lieven (l.)

Site Director: Thomas Rademacher

Guben production facts & figures: 4 shifts, 24 hours a day, 365 days a year.

Production capacity: 20,000t filaments, 63,000t polymers (of which 38,000t for Trevira own use).

Staff at Guben: c. 550

International certification: ISO 9001, ISO 14001, ISO 50001, Authorized Economic Operator, STANDARD100 by OEKO- TEX®, “Systematic Safety” seal of approval (certifies that Trevira fully meets the requirements of industry standard ISO 45001:2018), GRS-certified

Trevira Guben is unique in Europe in having a fully integrated production: starting from polycondensation to spinning, texturing, and warping on sectional beams.

Trevira places a particular value on innovation at all its sites. Our research department creates new polymers for filaments and staple fibres for pioneering new applications.

Our product development team works on new kinds of specialties and processes, creates innovative materials and customises products for specific applications and markets.

Trevira Guben is the home of our competence centre for filament yarns, equipped with special testing facilities for the development of flat and textured filament yarns.

We’re supported by our Bobingen site and its textile testing and chemical analysis labs. These facilities, which are also available for use by external customers, offer a comprehensive range of high-quality testing services.

Our product safety experts are at hand to assist at every stage of the product life cycle.

Step 1: Polyester manufacture (PET - Polyethylene terephthalate)

PET is manufactured on the basis of terephthalic acid (PTA) and ethylene glycol, producing water as a by-product. The two compound ingredients, PTA and ethylene glycol, are first mixed together before undergoing esterification followed by polycondensation, which eliminates the water. Through polycondensation of the monomers, polymerisation takes place, that is, the monomers join to form an increasingly long chain. Several reactors are needed to produce this chain structure, using pressure, temperatures over 270° C and the use of a catalytic converter.

The end product is called polyester (PET polyester).
Basic polyester can be given a range of different functionalities through the inclusion of various additives. These functionalities include UV stability, flame retardancy, visual characteristics or different melt properties.

The polymer produced by the above process is granulated to form chips before undergoing the next stage in the process - spinning.

Step 2: Spinning

The spinning machines process a variety of different raw materials. These are spun from granulates, usually produced by on-site polycondensation.
Before spinning can take place, the raw materials are first crystallised and dehydrated. The granulate is placed in an extruder and melted using friction and high temperatures. The resulting mass is then pressed through a spinnerette at high pressure. This process is known as melt spinning. One thread is made up of individual filaments, whose number is determined by the number of holes in the spinnerette. The product can be given other functionalities and/or colours through mixing in selected additives during the melting process. Once spun, the threads are extracted, treated with a chemical preparation and intermingled in order to make the next stages of processing easier. The end result of the spinning process can be POY (partially oriented yarn), FOY (fully oriented yarn) and/or FDY (fully drawn yarn).

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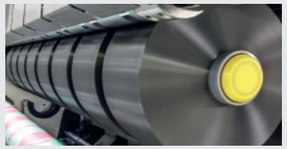
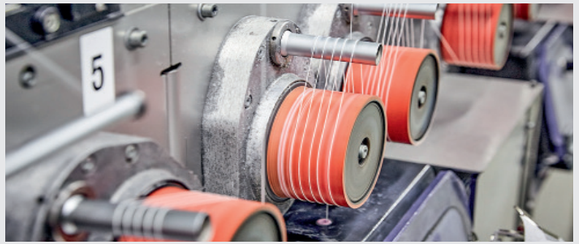


Step 3: Texturizing

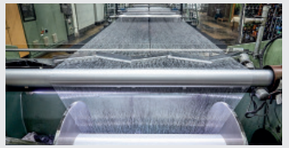
During the texturing process, the yarn is given a textile look and textile functionalities.
In Guben, we use the friction texturing process. This means that after the yarn has been warmed up and stretched, it is given twist and bulk through the use of the texturing machine. This process lends the yarn its textile qualities, high thermal retention and elasticity.



The yarn is then prepared for further processing through the application of coning oil and/or intermingling. The yarns are wound on bobbins and set up to feed the next stages of processing.

Step 4: Warping

Sometimes yarns need to be configured on specific yarn carriers to produce certain textile fabrics.
In the warping process, the yarn is 'warped' onto what are known as sectional beams. The German word for warping, schären, derives from the word 'Fadenschar' literally meaning 'a crowd of threads' and referring to the huge number of threads that are wound in parallel onto large cylinders. As many as 1,800 threads can be wound in parallel onto our warping machines.



Steps are taken at every stage of production to monitor customer requirements such as yarn dyeability, and to ensure that these are met.

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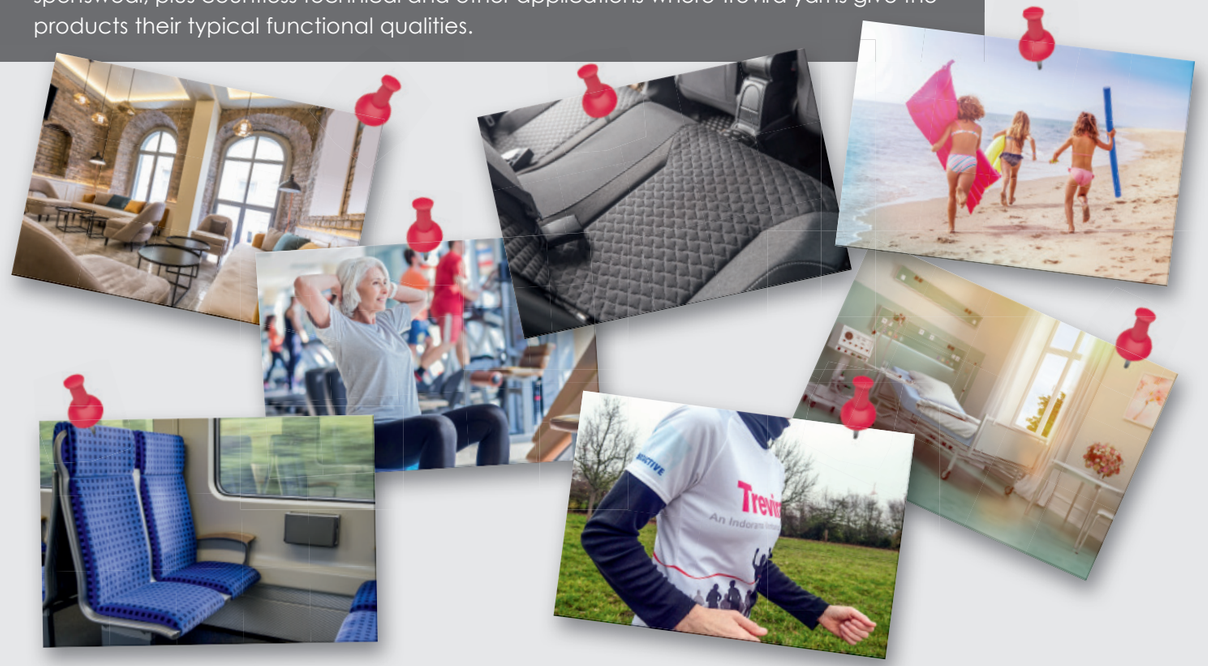
Every day, you're likely to come across at least one of our filament yarns without even knowing it. On a train or at a meeting? The seats are probably made with our flame retardant polyester. Driving home? The interior of your car almost certainly contains Trevira yarns. What about clothes? We provide special yarns for functional apparel and sportswear, plus countless technical and other applications where Trevira yarns give the products their typical functional qualities.



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Thomas Rademacher,
Manager Guben Plant

"Since I first came to work at Trevira 30 years ago, personal development has always been an important aspect of my career. That's something I really appreciate here. And through my work for Trevira in Guben, I can also play a part in Brandenburg's development as a region."

We're looking forward to your visit!

Questions? You can get in touch with us at:

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