

Prisma® 

Functionalized Yarn  
& Strand Coating  
Technology



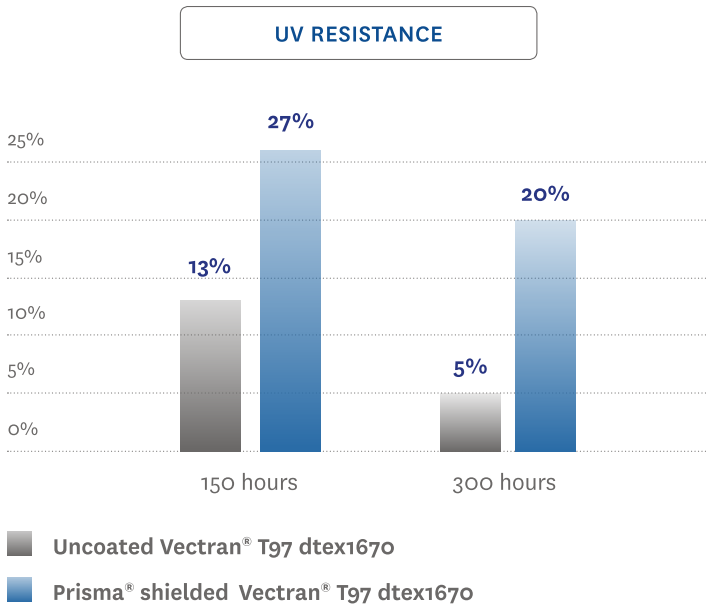


## Nobody's perfect

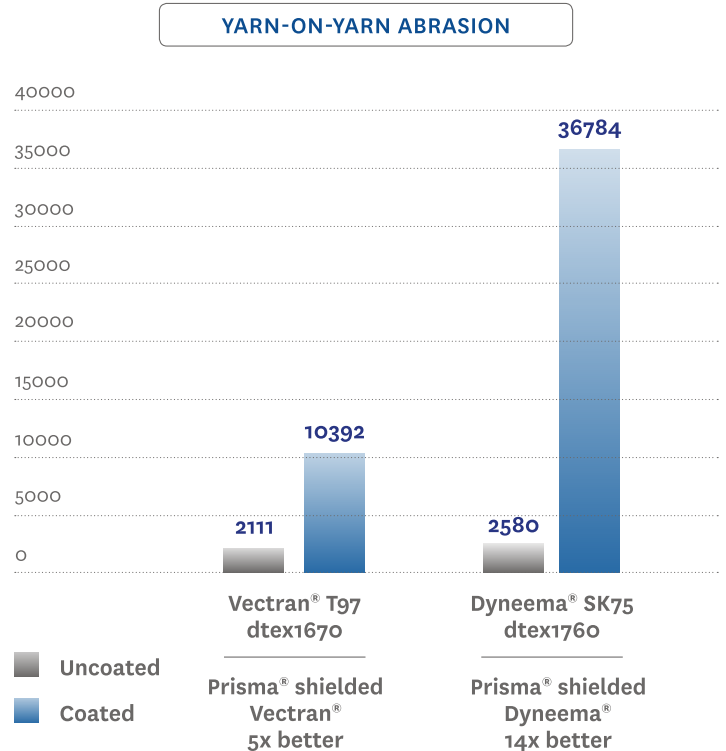
All High Performance Fibers have their specific and unique features, which make them 'High Performance'. On the other hand, every one of them has its specific disadvantages. Flip sides of the coin that make them great, but not perfect. Like Vectran®: high strength, excellent creep properties and a high temperature resistance. But at the same time a limited UV resistance. Or Dyneema®: strong, UV stable and chemically inert, but...only available in black and white. Too bad you can't get any Dyneema® yarn in striking red or distinctive blue.

## Until now

This fact got us thinking... Can't we change those negative characteristics by which the disadvantages of the yarn decrease or even disappear? This is why EuroFibers has invested in a state-of-the-art coating line and heat setting oven, which enables us to functionalize High Performance Fibers and strands. We continue to develop our Prisma® coating technology to create the perfect fit for your product.



Retained strength after UV exposure (60W/m<sup>2</sup>)



ASTM D-6611



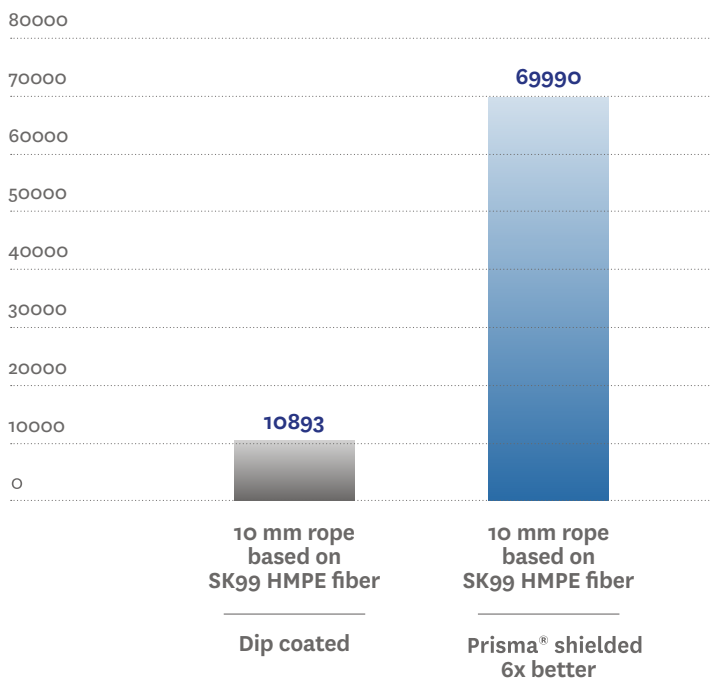
## Custom made

The applications of High Performance Fibers are numerous and are getting more and more accepted and used within every industry. By specialized and more customer-oriented processing of our range of High Performance Fibers we can now tailor the features of the fibers to the specific need of our customers and end users. Tell us which feature you want to change and we will take care of it.

## With business benefits

Not only are the technical reasons worthwhile trying our technology, there are also some interesting business benefits. Prisma® coating technology helps to improve performance and lifetime of end products. Buying ready coated fiber or rope yarn can reduce your production lead time and occupied working capital. In addition, there are no costs on hardware or stock levels and you need less investments and personnel to operate the machinery. So... What are you waiting for?

NUMBER OF BENDING CYCLES



Research by IFT Stuttgart, Germany

### Available functionalized High Performance Fibers:

 **Dyneema®**

 **OBLIX™**

 **Twaron®**

 **Technora®**

 **Vectran™**

 **ZYLON®**

Dyneema® is a registered trademark of DSM.

OBLIX™ is a registered product of EuroFibers BV.

Twaron® and Technora® are registered trademarks of Teijin Aramid B.V..

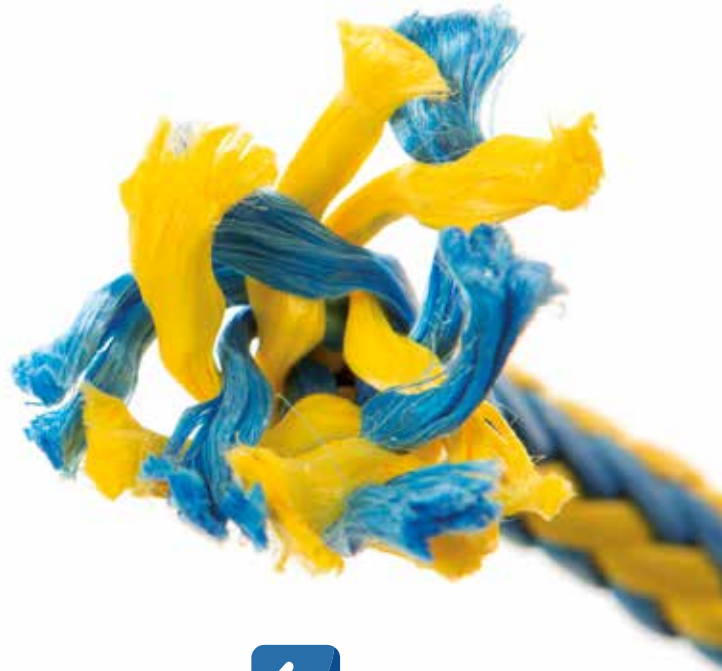
Vectran® is a registered trademark of Kuraray Co., Ltd..

Zylon® is a registered trademark of Toyobo Co., Ltd..

*One step ahead*

# Technologies

We enhance features of High Performance Fibers by using our Prisma® coating technology



## MULTICOLOR ROPE

Applying different colored High Performance Fibers in a single rope does not only make for good aesthetics; they also have a functional use. It helps you to easily identify torque in a rope, which causes a significant reduction of tensile strength.



## FRICITION COEFFICIENT

Reduction of the Coefficient of Friction leads to better Yarn-on-Yarn abrasion properties of the fiber or rope yarn. This will significantly improve lifetime of a rope when internal abrasion or bending fatigue is the failure mechanism.



## ABRASION RESISTANCE

With the right coating, the risk of snagging of a rope and ingress of particles will be reduced. While improving the abrasion resistance the yarn or strand can also be colored and heat set.



## TENSILE STRENGTH

Rope efficiencies increase up to 20% by heat setting of rope yarns based on High Performance Fibers like Dyneema®, Vectran® or Technora®.



## UV RESISTANCE

UV resistance of Vectran® can be doubled or even quadrupled by applying Prisma® coating technology. This significantly extends the lifetime of your rope, fabric or net.



## WATER REPELLENCY

To guarantee superior water repellency we apply Teflon EcoElite™ finish, the first renewably sourced, non-fluorinated treatment produced by Chemours.



Teflon™ is a trademark of The Chemours Company FC LLC