

# VICTREX™ PEEK BEARING SOLUTIONS

FOR LIGHTWEIGHT AND COMPACT WIND TURBINE APPLICATIONS



# TRENDS IN THE WIND ENERGY MARKET

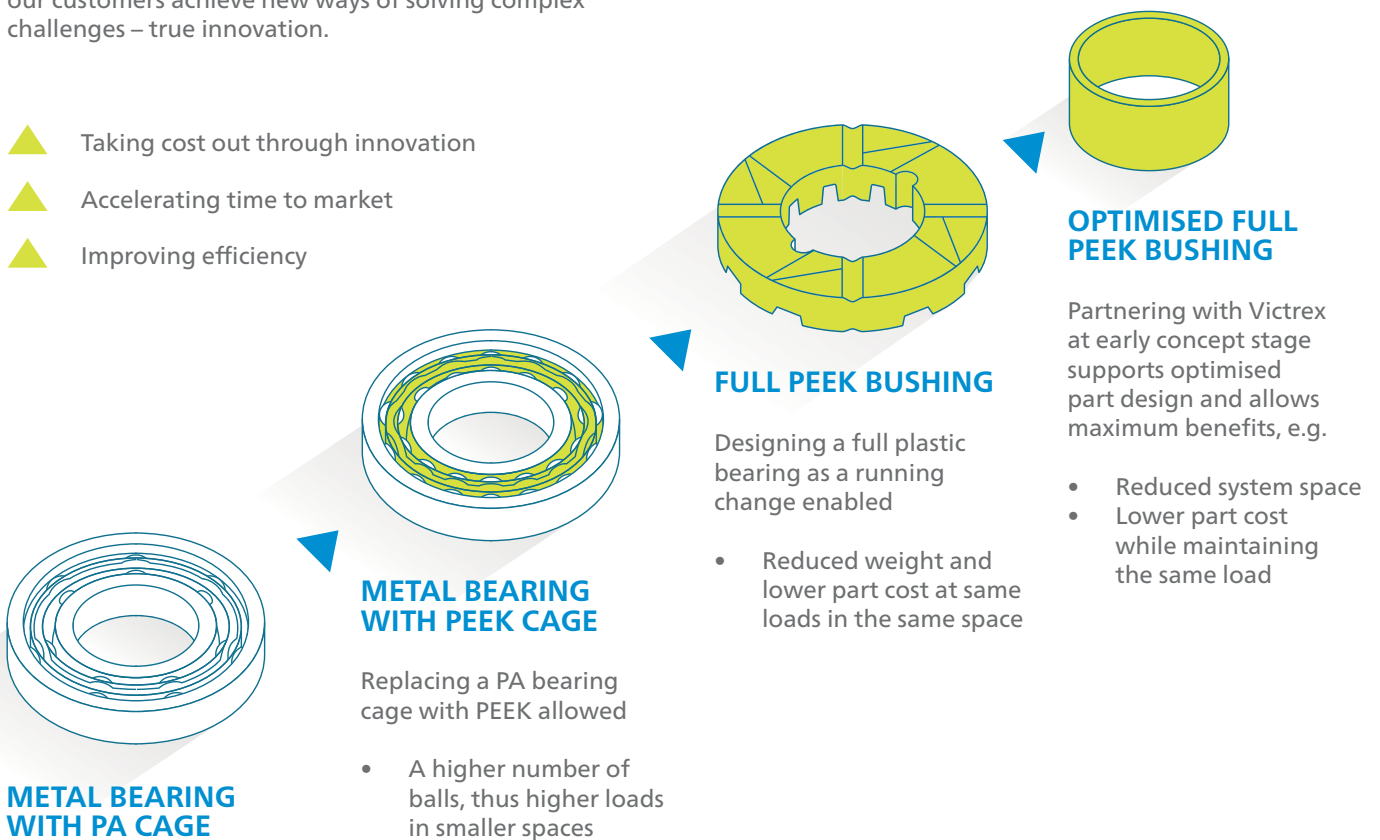
The wind energy market is faced with three critical challenges that are pushing the limits of metal in demanding turbine applications: larger wind turbines, location, and escalating operating costs. To compete more effectively in the global energy market, the wind turbine industry continues to seek to provide more power, less downtime and improved reliability.

## LIGHTWEIGHT AND COMPACT PEEK SLIDING BEARINGS

Victrex has a history of successfully developing high-performance wear components for the automotive, oil and gas, industrial, medical, and electronics markets which face similar needs for reliability, long service life, lighter weight, and improved operational efficiency.

We understand the characteristics and behaviours of PEEK right through the manufacturing process - help our customers achieve new ways of solving complex challenges – true innovation.

- ▲ Taking cost out through innovation
- ▲ Accelerating time to market
- ▲ Improving efficiency



# EXPERIENCE AND BENEFITS

Given our decades of experience in delivering innovative PEEK thermoplastic solutions for the energy industry, Victrex understands the need for reliability and efficiency in harsh environments. VICTREX™ PEEK polymers have been known to deliver:



## WEIGHT SAVINGS

Up to 80% weight savings vs. metal help to reduce stress on the mechanical system.



## NVH REDUCTION

Up to 50% reduction in noise, vibration and harshness (NVH) in rotating systems for a quieter operating environment.



## EXTREME ENVIRONMENTS

Excellent resistance to moisture, chemicals, and environmental elements in wet offshore locations.



## WEAR RESISTANCE

Excellent wear resistance even in poorly lubricated systems helps improve reliability and service life.

## YOUR BENEFITS

### ▲ SERVICE LIFE

VICTREX PEEK-based solutions provide durability even when operating in corrosive elements such as hydrocarbons, seawater, and harsh gases. Beyond chemical resistance, our polymeric solutions provide excellent erosion, creep and pressure resistance to deliver a long service life.

### ▲ EXTENSIVE PORTFOLIO

Victrex offers a customised portfolio of products to meet your key engineering requirements. Our solutions range from materials suited for cryogenic environments to extremely high temperatures. There is no one-size-fits-all solution – that's why we offer a portfolio.

### ▲ PROVEN RELIABILITY

In the oil and gas market, VICTREX PEEK polymer has been recognised for its performance in high temperatures and pressures and in corrosive conditions, offering over 40 years of proven track record.

## THE VALUE OF PARTNERING WITH VICTREX IN DEVELOPMENT

With 40+ years of experience, Victrex is here to assist with bringing your engineering dreams to life. Our experience in collaborating with market leaders across the globe on high-performance polymeric solutions is second to none. Rely on the largest database of PEEK application developments to get your designs over the finish line.

To find out more  
visit [victrex.com/wind](https://www.victrex.com/wind)

Confidence Through Reliable, Proven  
and Cost-Effective Material Solutions

#1

PEEK Experts

40+  
years

of collaboration with  
market leaders along  
the value chain

75+  
million

Victrex PEEK seals in use today



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As a global high-performance polymer solutions provider, Victrex serves more than 40 geographies worldwide across the automotive, aerospace, medical, electronics, industrial and energy markets. VICTREX™ PEEK is regarded as one of the highest performing engineering thermoplastics in the world, and is used by leading companies to develop fuel-efficient automobiles and aeroplanes, advanced medical devices, next generation technology and tools for the harshest environments.

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