Sealing Solution Improved performance vs. PCTFE under cryogenic conditions

- Extend the temperature range of cryogenic valves
- Increase sealing reliability through improved mechanical & thermal properties
- Deliver potential cost savings





NEW POLYMER

VICTREX CTTM (Cryogenic Temperature)

IMPROVE YOUR SEALING VS. PCTFE IN CRYOGENIC CONDITIONS



Higher tensile strength coupled with lower modulus confirms more ductility across a wider range of temperatures; testing at -196°C to +150°C indicates better sealing capabilities which could also extend to higher temperatures in the range of +200°C.



Lower and constant coefficient of thermal expansion ensures more dimensional stability and minimizes the shrinkage at low

and minimizes the shrinkage at low temperatures.



Higher thermal conductivity permits a faster reaction to temperature changes allowing the seat seal to keep interference with the steel counter-surface at all time – contributing to more consistent sealing.



VICTREX CT[™]100

offers outstanding ductility at -196°C, higher tensile elongation and slightly lower compressive modulus.

VICTREX CT[™]200

offers a lower static and dynamic coefficient of friction which helps minimizing torque and wear allowing smaller actuators and saving space and weight.

> READ MORE





VICTREXTM PEEK SOLUTIONS FOR ENERGY APPLICATIONS

Enabling Changes Towards Sustainable Energy Solutions

Enhancing equipment to survive and thrive in extreme environments



zero emissic

/drogen

Victrex polymers is a material of choice for components and parts inside equipment and tools to explore, secure, store and transfer energy source - **typically exposed to a combination of multiple complex engineering requirements.**

Addressing ongoing **materials challenges such as PCTFE**, PEEK polymer's multi-faceted material performance including VICTREX CT[™] polymers designed specifically with these requirements in mind, enables proven performance and reliability in extreme environments where failure is not an option for business, and for the planet.

Let us help you change what's possible.

Let's make change.



& BENEFITS

VICTREXTM PEEK SOLUTIONS FOR **ENERGY APPLICATIONS**



The many strengths of PEEK under stress

A unique combination of VICTREX[™] PEEK properties for Energy Applications

EXTREME TEMPERATURE RESISTANCE

Stable operation from -196°C up to 260°C



MECHANICAL STRENGTH

100% retention of tensile strength after 1,000 hours in A3-Phase aromatic Norsok system with gas phase of 100% H2S at $175^{\circ}C$ (347F)

EXCELLENT WEAR RESISTANCE

Both in lubricated and non-lubricated systems which helps improve reliability and service life



ENVIRONMENTAL RESISTANCE

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

Excellent radiation resistance and electrical properties across a wide range of temperatures

There's more at victrex.com/Energy

