



# INTRODUCING VICTREX CT™ POLYMERS

Improve your sealing vs. PCTFE  
in cryogenic conditions

Liquefied Natural Gas (LNG) provides a range of low temperature engineering challenges to the energy industry. To address these challenges and offer an alternative sealing material solution, Victrex has developed a family of PAEK (Polyaryletherketone) polymers known as VICTREX CT polymers which:

- ▶ Extend the temperature range of cryogenic valves
- ▶ Increase sealing reliability through improved mechanical and thermal properties

Compared to PCTFE, VICTREX CT polymers offer:



**Higher elongation** coupled with comparable modulus results in more ductility across a wider range of temperatures; testing at  $-269^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$  indicates better sealing capabilities which could also extend to higher temperatures in the range of  $+260^{\circ}\text{C}$  depending on service conditions.



**Lower and constant coefficient of thermal expansion** ensures more dimensional stability 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  $-196^{\circ}\text{C}$ , 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.

Given our decades of experience in delivering innovative PEEK polymer solutions for the Energy industry, Victrex understands the need for reliability and efficiency in harsh conditions. Victrex sealing material solutions are designed and tested for proven performance in cryogenic environments offering more consistent and reliable sealing across a broad temperature range compared to fluoropolymers.

Find out how VICTREX CT polymers can improve reliability in cryogenic sealing components, visit [victrex.com/ctpolymers](https://victrex.com/ctpolymers)

We collaborate with customers  
from concept to commercialisation  
to improve performance, reliability  
and operational efficiency

#1  
PEEK  
Expert

40+  
years  
proven performance  
in extreme  
environments



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