

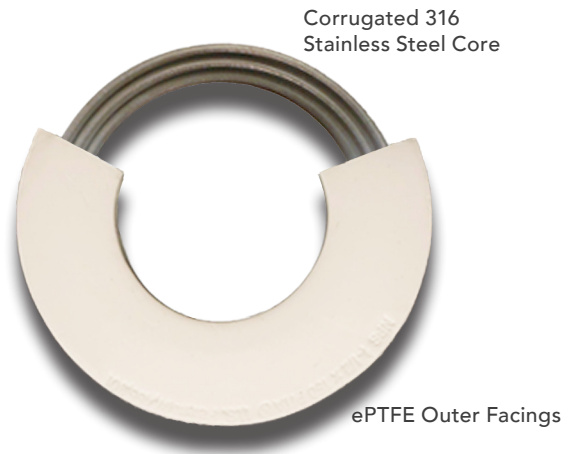


VSP PITA®
Expanded PTFE/Encapsulated Insert
U.S. Patents 7,455,301 & 8,066,843

PITA

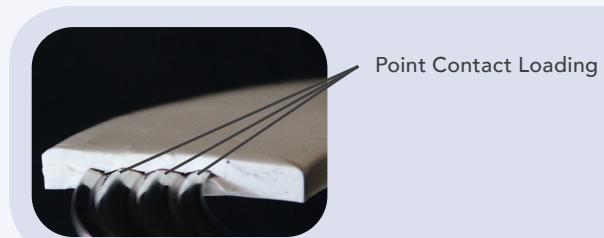
Combines expanded PTFE for low stress to seal with a 316 corrugated stainless steel insert/spring, providing unmatched sealing and pressure resistance performance in steady or cycling conditions.

The patented encapsulated design uses no adhesive for zero process contamination, which provides complete chemical inertness.



Complete encapsulation of the 316SS insert allows the PITA gasket to retain the chemical inertness of ePTFE.

- ▶ High thermal cycling/operating tightness
- ▶ Increased mechanical integrity at high temperatures
- ▶ 2X blow-out resistance
- ▶ Lower relaxation & torque loss
- ▶ Unlimited shelf life
- ▶ Zero process contamination
- ▶ Low torque sealing
- ▶ ePTFE seals against rough flanges
- ▶ Ideal for cryogenic service
- ▶ Corrugated peaks—defined contact points result in lower stress to seal than conventional virgin, filled PTFE or ePTFE gaskets

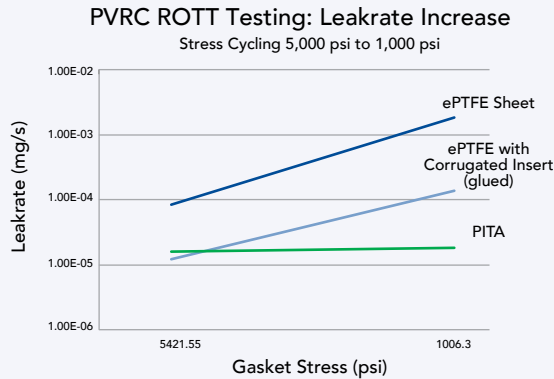


VSP Technologies deploys a team of Engineers and Fluid Sealing Specialists who provide engineered solutions for your unique sealing requirements.

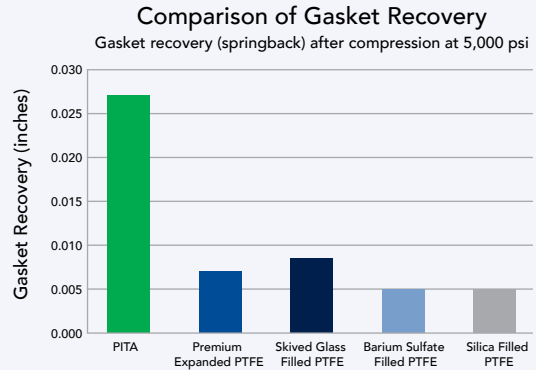
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SPRING ENERGIZED CONSTRUCTION

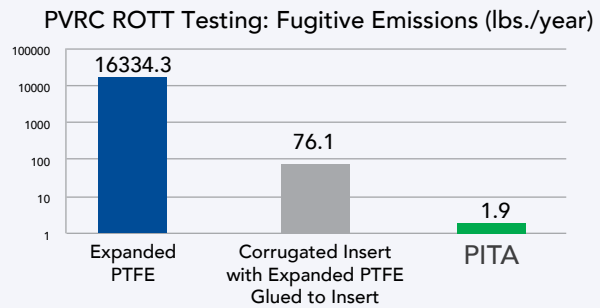
PITA Maintains Low Leakage During Thermal/Stress Cycling



PITA Exhibits Significant Gasket Recovery (5X Other PTFE Constructions)



Comparative Annual Fugitive Emissions (300 NPS 12 Class 150 LJ Flanges @150 psi)



Product Specifications

Temperature Range	Max= 600°F Min= -330°F
Pressure Resistance	Full vacuum to maximum flange rating
Chemical Resistance	All chemical services (pH 0-14) except molten alkali metals, elemental fluorine and aggressive tri-fluoride compounds
ASME Gasket Factors	m=2.5 y=1,200 psi
PVRC Gasket Factors (PVRC ROTT)	$G_B=263$ psi a=0.299 $G_S=2.93E-10$ psi
Tightness & Sealability (PVRC ROTT)	$T_{p(max)}=33,749$ $T_{p(min)}=13,454$
Stress Required to Achieve Helium Leak Rate of 1.02E-04 (mg/sec) @ 150 psig (NPS 4x150 Ring Gasket)	2,078 psi
Safe Reserve Operating Temperature (HOBT2 with Cycles)	500°F ASME Class 150 Service 450°F ASME Class 300 Service
Standard Thickness	1/8" nominal, 1/4" per request

PITA Capabilities & Performance

VSP's PITA provides the highest level of sealing performance, chemical compatibility and long-term reliability for bolted flange connections.

Sealability

- ▶ Low minimum seating stress
- ▶ Lowest leak rate fluctuation possible with PTFE gaskets
- ▶ Increased blow-out resistance

Available in standard ASME/ANSI 16.21 Class 150–300 for metallic and lined piping flanges

Ensure complete mechanical and specification compliance with VSP's PITA Torq-Kit



All Flange rework components in one box with assembly instructions to ensure reliable performance
Contact VSP for ordering information