

VSP Technologies Inpherno[®] Gaskets
Fire Tested, Field Proven PTFE Spiral Wound Gaskets



Style RW



Style RWI



Edge[®] (Oxygen Cleaned)



Edge[®] Dual Flange

*Universal chemical resistance, high tightness, purity/non-contaminating, low stress to seal and **FIRE SAFE**.*

The Inpherno[®] gasket is the only, cost effective PTFE (TEFLON[®]) gasket that can be safely and reliably used in flammable or fire-safe services. This patented gasket design* has been engineered to provide the following performance:

☞ Maintained Seal Integrity Before, During, and After Fire Exposure:

The Inpherno[®] gasket has successfully passed both the MTI developed Fire Integrity Tightness Test (FITT) and the API 607 4th edition fire test.

☞ Full Range Chemical Inertness:

With process compatible metal windings, the Inpherno[®] gasket is chemically inert and is ideal for use in all chemical services where PTFE is required (pH 0-14).

☞ High Purity and Non-Contaminating:

The patented design feature using flexible graphite only as a back-up fire resistant sealing element allows only the GORE-TEX[®] expanded PTFE and inner metal windings to come in contact with process fluids.

☞ Low Stress To Seal:

Soft, highly compressible expanded PTFE windings are easily deformed. Design compression of the gasket element requires significantly lower bolt loads than conventional PTFE or flexible graphite spiral wound gaskets. Ideal for use on ASME class 150 flanges.

☞ High Tightness/Low Emissions:

Sealing of flammable or otherwise hazardous fluids requires a gasket that develops extremely high tightness at moderate bolt loads. PVRC developed room temperature Operational Tightness Testing (ROTT) results for the Inpherno[®] gasket confirms tightness levels superior to PTFE or flexible graphite gaskets.

☞ Excellent Thermal Cycling Performance:

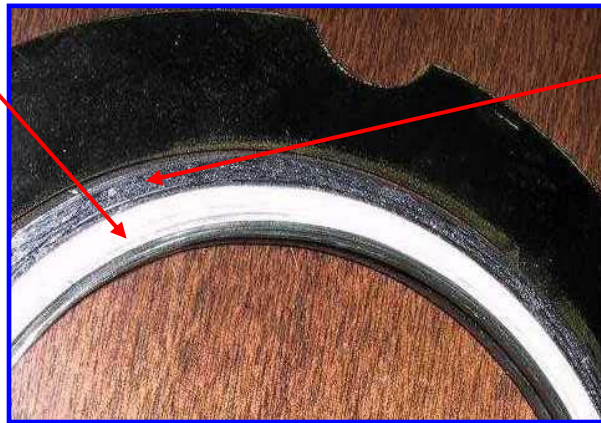
The Inpherno[®] gasket's low compressive modulus insures design compression down to the outer compression stop guide ring. The resulting metal to metal contact between the flange faces and the guide ring provides a rigid piping joint that prevents excessive gasket creep, and maintains a constant load on the gasket during thermal, pressure or load cycling.

Standard Construction:

316L stainless steel windings, GORE-TEX® ePTFE inner filler & flexible graphite outer filler, traditional carbon steel outer guide ring with protective paint or enamel coating.

Expanded-PTFE

Provides chemical compatibility and superior sealability



Flexible Graphite

Provides a fire tested seal

Inpherno® Gaskets are available in a wide range of styles and guide ring configurations including: (see front page)

Windings: 316L stainless steel, 304 stainless steel, Monel, Alloy 20, Titanium, Hastelloy C

Inner rings: 316L stainless steel, 304 stainless steel, Monel, Alloy 20, Titanium, Hastelloy C, PTFE

(NOTE: Inner rings are not necessary unless strict conformance with design standards is required)

Outer Guide Rings: DUAL-FLANGE (ASME class 150 and 300) design

In cooperation with Garlock Metallic Gasket Division, the Inpherno® gasket is also available in the Garlock EDGE® with Stabl-Lock® construction.

Technical and Performance Data

Maximum continuous process temperature: 600F

Pressure resistance: Full vacuum to maximum flange rating (constructed for pressure rating of flange)

Chemical resistance: pH = 0-14, (except molten alkali metals, elemental fluorine, and tri-fluoride compounds)

Fire testing: Fire Integrity Tightness Test (performed by Ecole Polytechnique) report available

API 607, 4th edition Fire Test (performed by Southwest Research Institute) report available

ASME gasket factors: m= 2.5, Y= 4,500 psi

PVRC gasket factors: Gb= 1,607 psi, a= 0.214, Gs= 4 psi

Tightness & sealability: Max. gasket tightness >50,000 @ 15,000 psi gasket stress,
(<0.001 ml/min He leakage @ 400 psig)

**VSP Technologies is the exclusive licensee for
manufacturing and supplying the GORE Inpherno® spiral wound gasket**

For Additional Information or To Place an Order Call, (800) 334-6013 or (804) 541-0812

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*Inpherno® gaskets are manufactured pursuant to license from W.L. Gore under U.S. Patent #5,527,047

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