

Inermet

Specifications

(Nominal Values)

Temperature Range:

-450 °F to +600 °F

Pressure Range:

Full vacuum to 3000 ps

Chemical

Compatibility: ePTFE is 0 to 14 pH cepting elemental orines and molten

ils 316 ss standard, ners as required)

ROTT Test Data: Gb = 348 a = .276

Gs = 4.0E-09 Tp Max = 29,669

Tp Min = 6,902

S<sub>1000</sub> = 1241 S<sub>1000</sub> = 2343

S<sub>10000</sub> = 4425

Max Crush Resistance: >25,000 psi HOBT 2: @ 1000 psi 628 F (test 1) 677 F (test 2) >700 F (test 3)

INERTEX® Inermets are made with a corrugated metal insert (typically 24 gauge 316ss) sandwiched between

two layers of INERTEX" SQ-S Isotropic Expanded PTFE gasket sheets. Typically the ePTFE sheet thickness is 1/16" (1mm also available.)

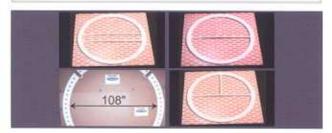
## TIGHTEST SEALING GASKET PLUS THERMAL CYCLING CAPABILITIES

INERTEX® SQ-S Isotropic Expanded PTFE gasket sheets are the tightest sealing ePTFE under 600°F! When coupled with the corrugated metal insert, these gaskets are "energized" allowing the gasket to compensate for extreme temperature variations while still providing the tightest seal.

### EXTREMELY RESISTANT TO BLOW OUT

The thin profile of the highly compressible INERTEX ePTFE Sheet plus the reinforcement of the corrugated metal insert makes this an ideal product for steam lines, blow lines, hand hole and manway gaskets, or other applications where blowout resistance is critical.

## ANY SIZE / ANY CONFIGURATION



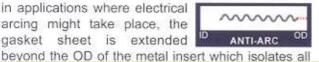
Inermets can be fabricated into nearly any style and shape of gasket including oval manways, ribbed heat exchangers, strips, plates, or others as required.

#### INERMET PITA STYLE

The PITA style Inermet (as illustrated) has the metal inserted in the expanded PTFE sheet as a one piece construction.

The ID of the ePTFE is solid (not split) which isolates the metal from the fluids. As a further enhancement,

in applications where electrical arcing might take place, the gasket sheet is extended



INERTEX INERMET GASKET VS. 1/16" EXPANDED PTFE SHEET GASKET DIMENSIONS: D.D. 5 875"-1 D. 4 875" ROTT TEST 10000 at 3000 pel Gasket Stress Sg [psi] Stream. Leek Rate of 1/16" Expanded PTFE Gasket at 3000 pei Gasket Stress Gniket

> Data Produced by TTRL (Tightness Testing and Research Laboratory) Ecole Polytechnique, University of Montreal

Suggested Torque Values (ASME/ANSI Raised-Face Flanges) Flat Ring Gasket for ASME/ANSI B16.5 Pipe Flanges and Flanged Fittings

Class	Tightness Class								
150	T1	T2	Т3	T4	T5				
Flange Size (NPS)	MINIMUM TORQUE VALUE per bolt								
(Inch)	(ft-lb)								
2	17	377	20	37	70				
2-172	20	20	23	43	82 120 67				
3	29	29	34	64	7.20				
3-172	17	17	19	36	67				
4	21	21	24	45	85				
5	33	33	36	67	127				
5 6 8	43	43	45	85	161				
8	61	61	61	115	218				
10	61	61	61	109	207				
12	83	83	83	145	275				

Above Torques are Typical Values for an Internal Pressure of 150psi

Suggested Torque Values (ASME/ANSI Raised-Face Flanges) Flat Ring Gasket for ASME/ANSI B16.5 Pipe Flanges and Flanged Fittings

Class	Tightness Class							
300	T1	T2	T3	T4	T5			
Flange Size (NPS)	MINIMUM TORQUE VALUE per bolt							
(inch)	(ft-lb)							
2	10	10	12	22	42			
2-1/2	14	14	17	31	59			
3	21	21	24	46	87			
3-1/2	25	25	27	52	98			
4	31	37	35	52 65	7.24			
5	41	41	43	82	154			
6	36	36	36	69	730			
8	61	61	61	109	203			
10	70	70	70	114	214			
12	108	108:	108	170	32			

Above Torques are Typical Values for an Internal Pressure of 300psi

# Inertech, Inc.

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GOODYEAR

We Ship