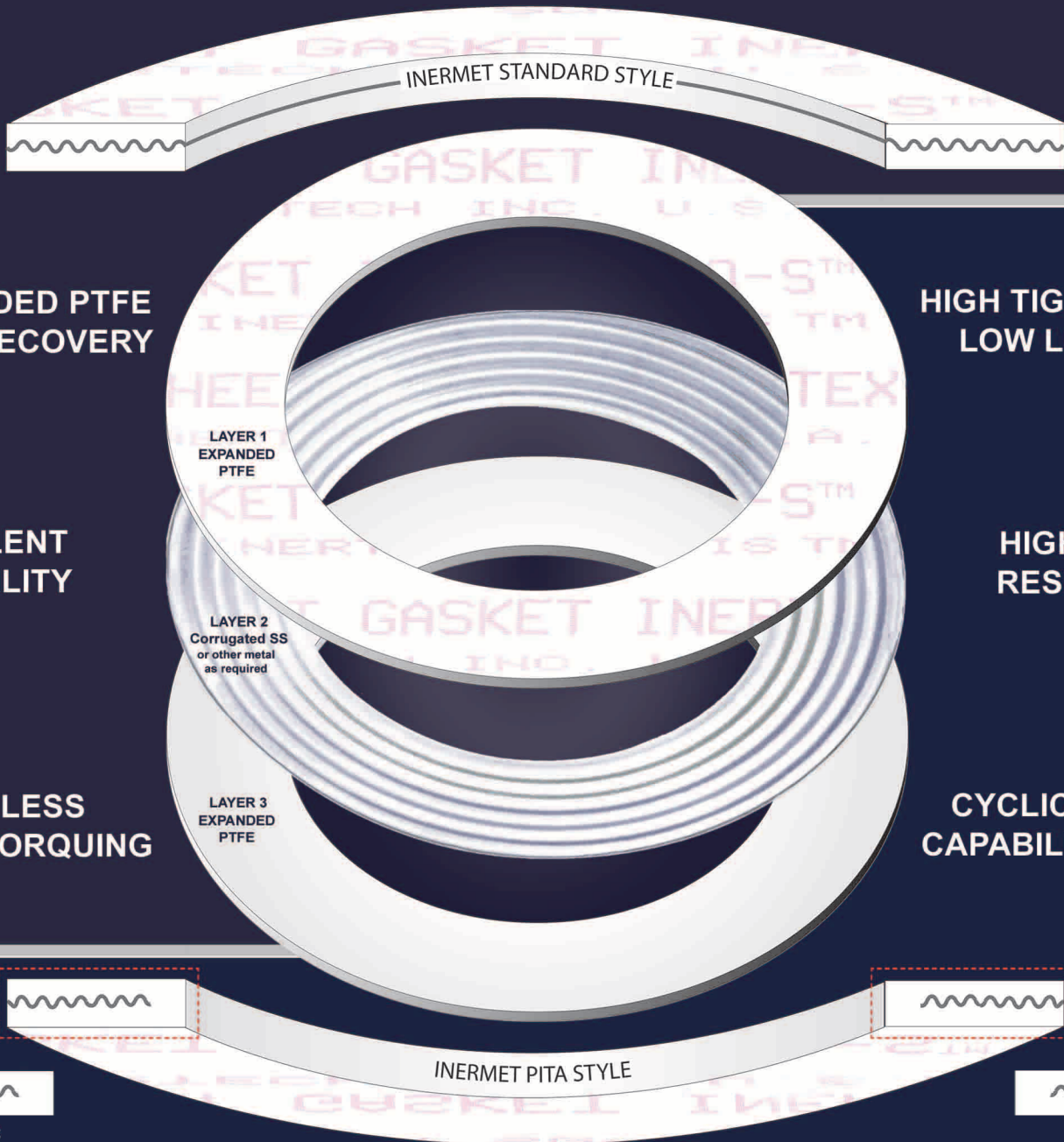


INERMET

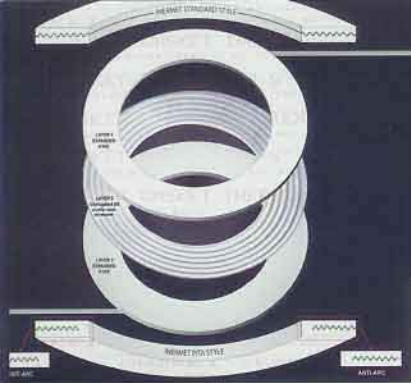
INSERTABLE EXPANDED PTFE GASKET WITH CORRUGATED METAL INSERT

THERMAL CYCLING GASKETS AT THEIR BEST.™



Inertex
Tested. Proven.

inertech, Inc.
Phone: 800.463.7839 626.282.2000
Fax: 888.463.7839 626.282.7569
web: www.inertech.com info@inertech.com



Inermet Specifications

(Nominal Values)

Temperature Range:
-450 °F to +600 °F

Pressure Range:
Full vacuum to 3000 psi

Chemical Compatibility:
ePTFE is 0 to 14 pH (excepting elemental fluorines and molten alkali metals)
(Metals 316 ss standard, others as required)

ROTT Test Data:
Gb = 348
a = .276
Gs = 4.0E-09
Tp Max = 29,669
Tp Min = 6,902
S₁₀₀ = 1241
S₁₀₀₀ = 2343
S₁₀₀₀₀ = 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

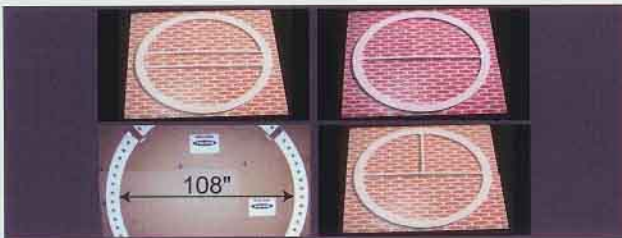
INERTEX SQ-S Isotropically expanded PTFE gasket sheet is the tightest sealing PTFE under 600°F! When coupled with the corrugated metal insert, these gaskets are "energized" allowing the gasket to compensate for extreme temperature variations while still providing the tightest seal.

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 blow-out 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



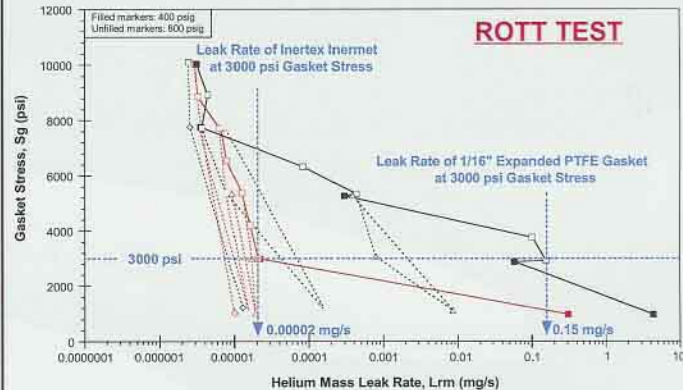
The PITA style Inermet (as illustrated) has the metal inserted in the expanded PTFE sheet as a one piece construction. The ID of the ePTFE is solid (not split) which isolates the metal from the fluids. As a further enhancement, in applications where electrical arcing might take place, the gasket sheet is extended



beyond the OD of the metal insert which isolates all metal areas from possible electrical arcing.

INERTEX INERMET GASKET VS. 1/16" EXPANDED PTFE SHEET

GASKET DIMENSIONS: O.D. 5.875"; I.D. 4.875"



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 150	Tightness Class				
	T1	T2	T3	T4	T5
Flange Size (NPS)	MINIMUM TORQUE VALUE per bolt				
(inch)	(ft-lb)				
2	17	17	20	37	70
2-1/2	20	20	23	43	82
3	29	29	34	64	120
3-1/2	17	17	19	36	67
4	21	21	24	45	85
5	33	33	36	67	127
6	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 300	Tightness Class				
	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	31	35	65	124
5	41	41	43	82	154
6	36	36	36	69	130
8	61	61	61	109	205
10	70	70	70	114	214
12	108	108	108	170	321

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

inertech, Inc.

641 Monterey Pass Road
Monterey Park, CA 91754
P: 800.463.7839 F: 888.463.7839
www.inertech.com info@inertech.com