

ADVANCE PRODUCTS & SYSTEMS, INC.

Complete pipeline solutions to
protect your equipment, personnel
and investment.



TECNOLOGÍA TOTAL
www.tecnologiatotal.net



Cost of Corrosion

2015 Projected Cost of Corrosion:

3.1% of GDP

Exceeding \$500 billion

Averaging \$1760 per person

Flange Isolating Gasket Kits

Why use them?



- Provide long-term, leak-proof seal
- Cathodically & electrically isolate pipeline from other structures
- Separate dissimilar metals
- NACE Standard RP0286 recommends the use of Flange Isolating Gasket Kits



Flange Isolating Gasket Kits

Comprised Of:

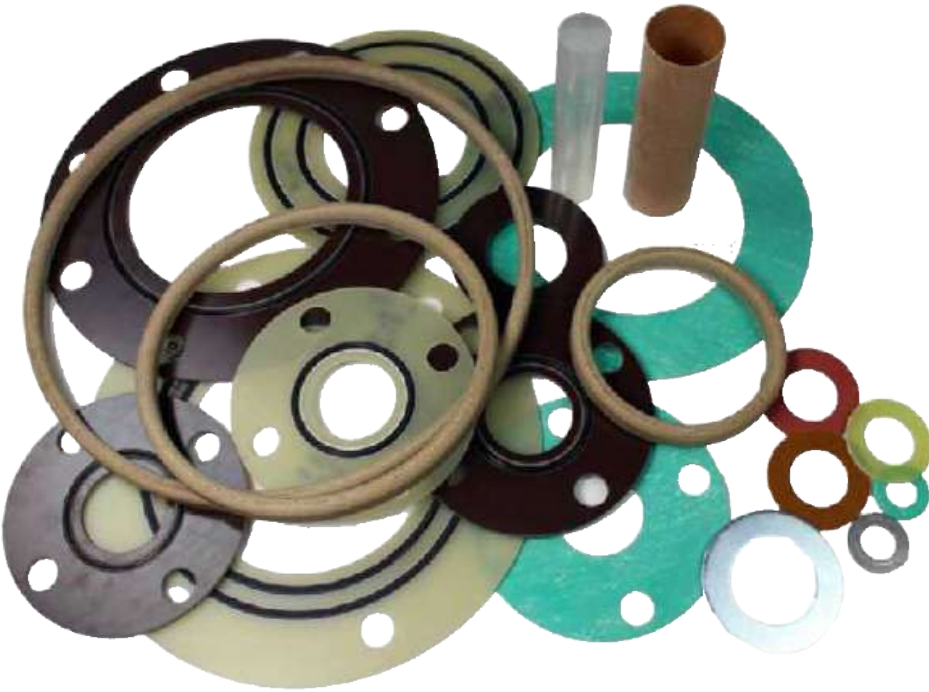


- Isolating Gasket
- Isolating Sleeves
- Isolating Washers
- Steel Backup SAE Washers, cadmium, plated or stainless steel



Flange Isolating Gasket Kits

Gasket Material

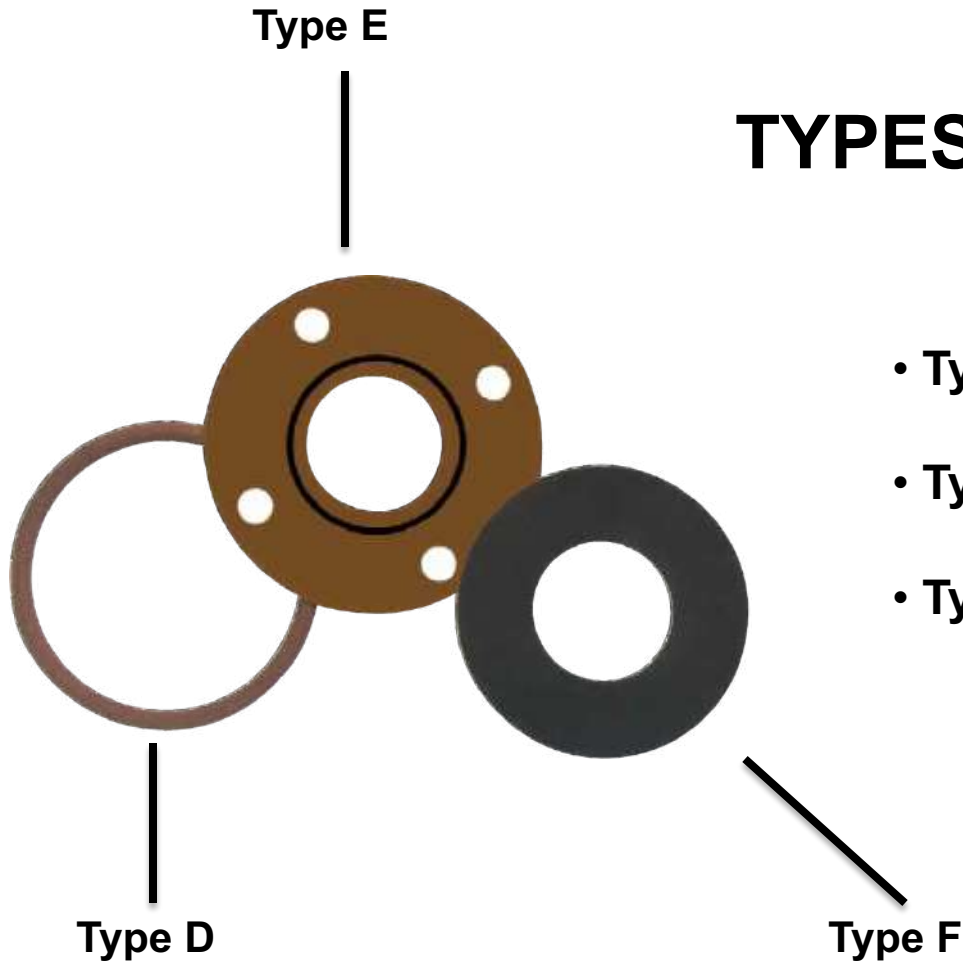


- Buna-N laminated-faced Phenolic
- Glass Reinforced Epoxies
 - G-3, G-5, G-7, G-10. G-11
- Plain-face Phenolic
- Durlon
- Durabla



Gaskets

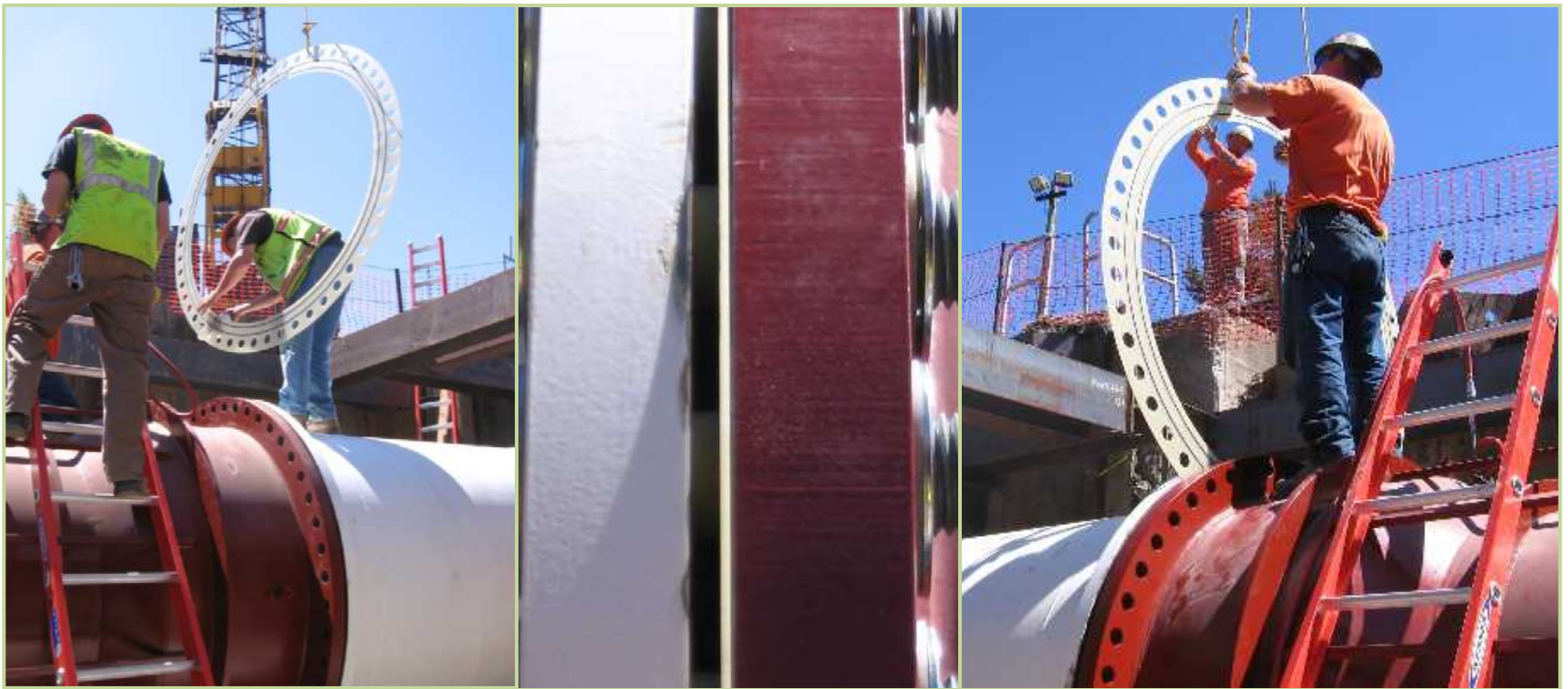
TYPES



- **Type E** - Full-face
- **Type F** - Raised-face
- **Type D** - Ring Joint Flange

Flange Isolating Gasket Kits

Crystal Springs 96 Bypass, SFPUC
60" G-10 Gasket



TECNOLOGÍA TOTAL
www.tecnologiatotal.net



Isolating Sleeves and Washers

Materials

Washers available in:

- Laminated Phenolic
- Glass epoxies
 - G-3, G-5, G-7, G-10, G-11
- Special orders

Sleeves available in:

- Mylar
- Glass epoxies
 - G-3, G-5, G-7, G-10, G-11
- Minlon (Mineral filled nylon)
- Laminated Phenolic
- Nomex

Trojan Sealing Gaskets

Types

Phenolic



G-7



NSF-61
Water Meter



G-11

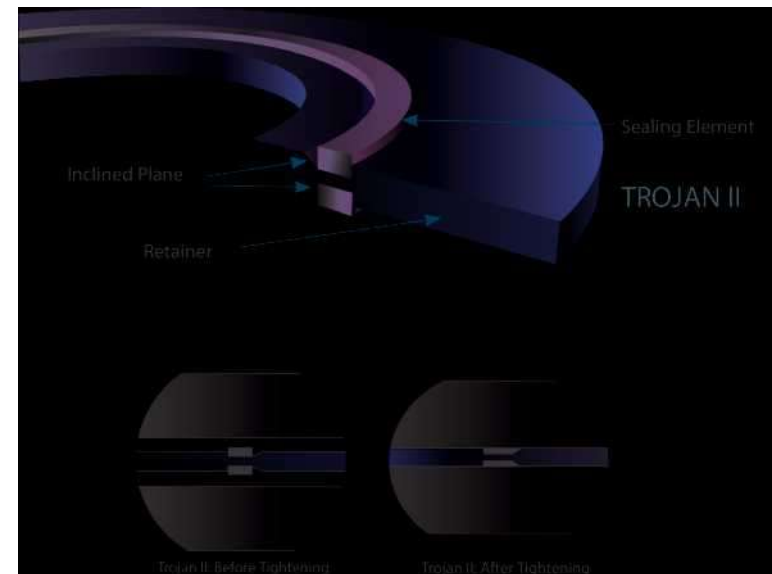
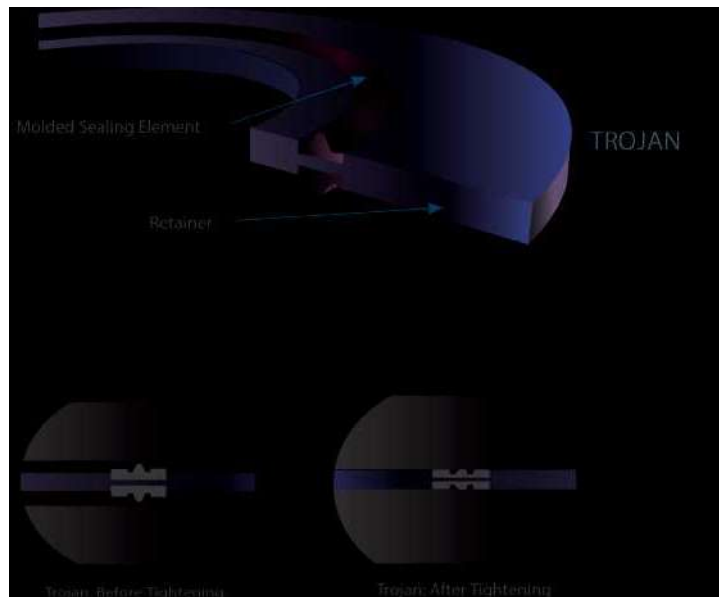


G-10

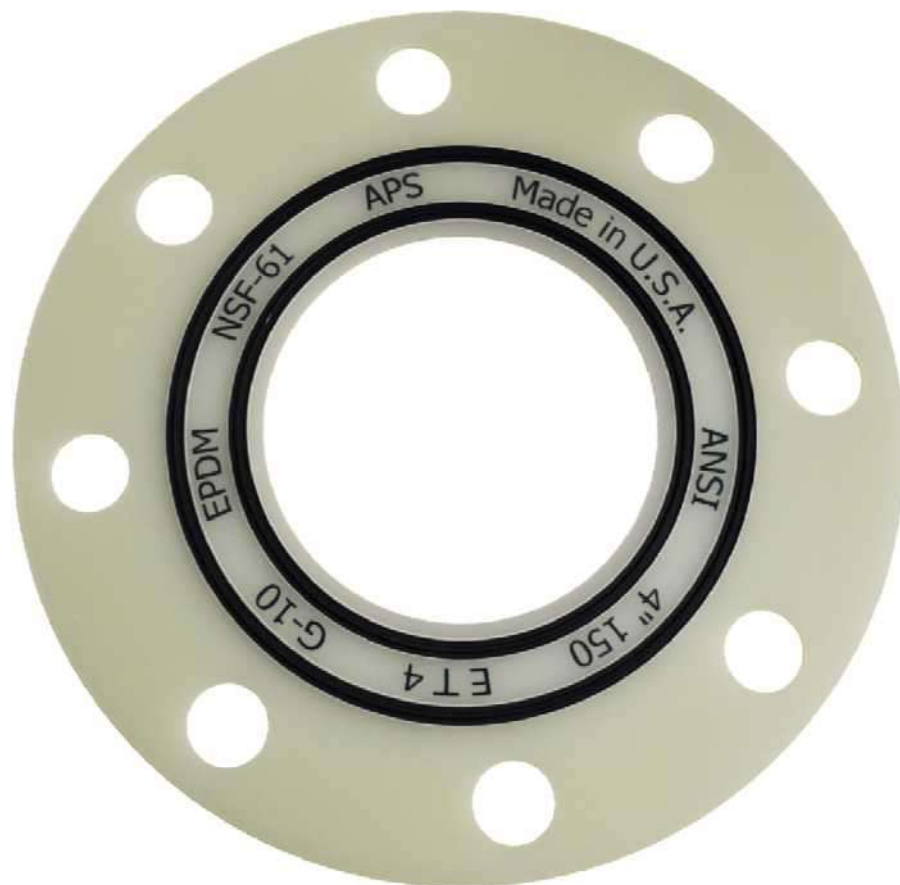


Trojan Series

Forms a quick, static seal and is often the reasonable alternative to flange replacement



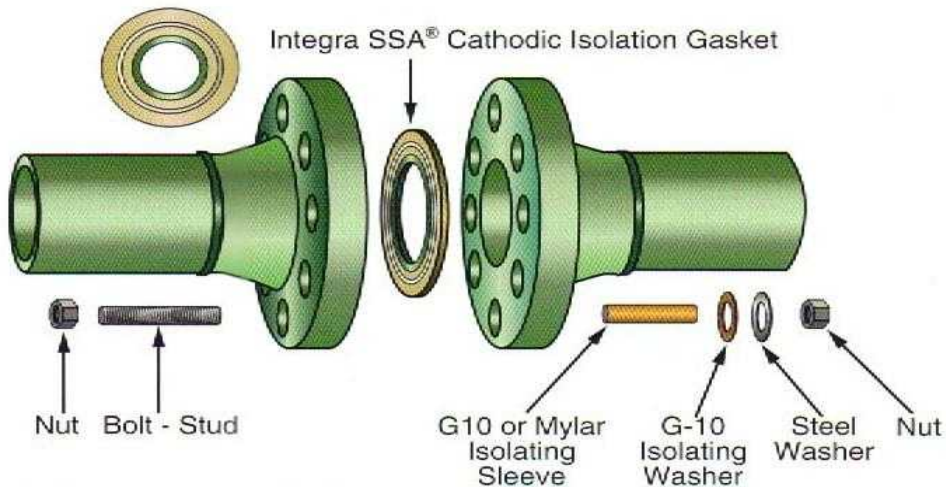
Duplex-Seal Trojan



- Four Seals on the Duplex-Seal Trojan further ensure the integrity of the sealing capability of the gasket.
- Used for areas where absolute zero leakage is a must.

Integra SSA® Cathodic Isolation Gaskets

The Ultimate Sealing Gasket



The Integra SSA® Cathodic Isolation Gasket is manufactured from proprietary **G-FORCE 2000®**, a special glass epoxy material with an impressively high compression strength; these materials are proprietary materials produced only for **Advance Products & Systems**.

Integra SSA® Cathodic Isolation Gaskets

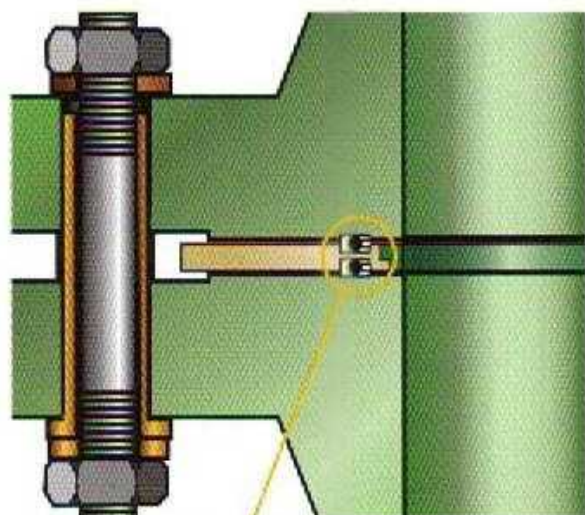
Features and Benefits

SEVERE SERVICE

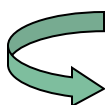
TEFLON SEALING

VERSATILITY

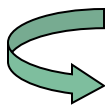
SEVERE SERVICE CATHODIC ISOLATION



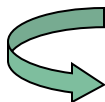
Spring Teflon® Seals



When used with isolating sleeves and washers, the **Integra SSA®** is effective in eliminating electrical conductivity and also in preventing corrosion that results from contact between two dissimilar metals.



Electrically isolates effectively for all pipeline and piping applications.



The gasket is designed for severe pressure and temperature applications, and ensures a stringent seal in volatile applications.

Integra SSA® Cathodic Isolation Gaskets

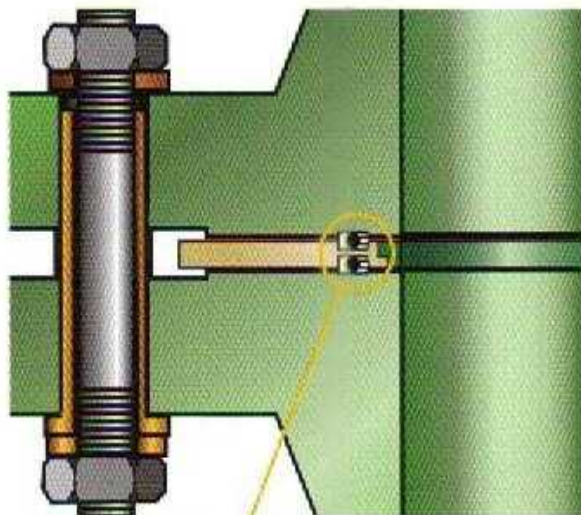
Features and Benefits

SEVERE SERVICE

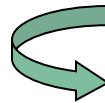
TEFLON SEALING

VERSATILITY

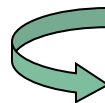
SPRING ENERGIZED TEFLON SEALING CHARACTERISTICS



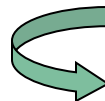
Spring Teflon® Seals



The strength and reliability of the **Integra SSA®** makes it a perfect replacement for a missing or faulty RTJ gasket.



Composition is of proprietary **G-FORCE 2000®** material with a compressive strength of *91,000 PSI*.



APS **Integra SSA®** gaskets have no metal core substrate material as part of its sealing and mechanical application. It costs less and weighs less than other gaskets with a metal core.

Integra SSA® Cathodic Isolation Gaskets

Product Performance



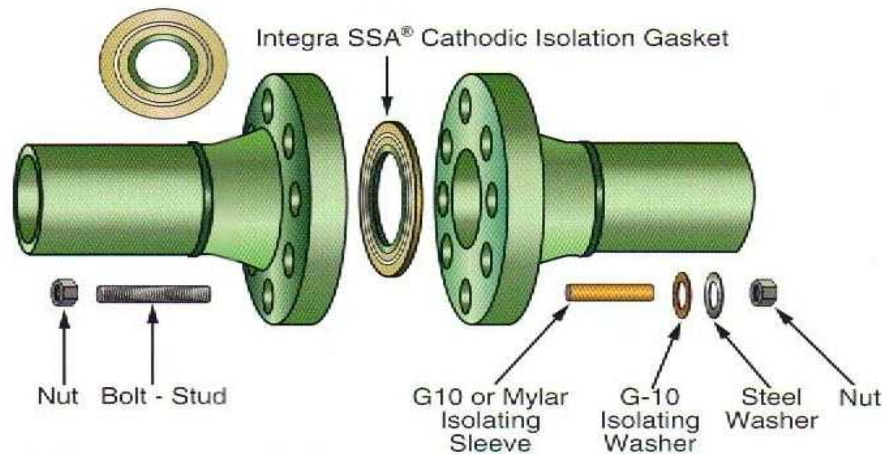
TYPICAL PROPERTIES

<u>GENERAL PHYSICAL PROPERTIES</u>	<u>UNITS</u>	<u>VALUE</u>
Rockwell Hardness	M SCALE	111
Moisture Absorption	%	0.12
Flexural Strength	PSI	80,000
Tensile Strength LW	PSI	61,000
Compressive Strength Flatwise	PSI	91,000
Maximum Operating Temperature	°C	190 ^{1,2}

The continuous operating temperature is 374 °F, 190 °C in mechanical applications. This material meets NEMA Fiberglass and MIL-1-24768/3, Type GEB. Material Tested: 0.250 thickness.

Integra SSA® Cathodic Isolation Gaskets

Product Components



The standard thickness of the gasket is 1/4".

Integra SSA® gaskets are manufactured to accommodate RTJ, full and raised face flanges.

Integra SSA® includes either G-10 or Mylar sleeves and G-10 isolating washers.

Integra II SSA[®] Cathodic Isolation Gaskets

Features

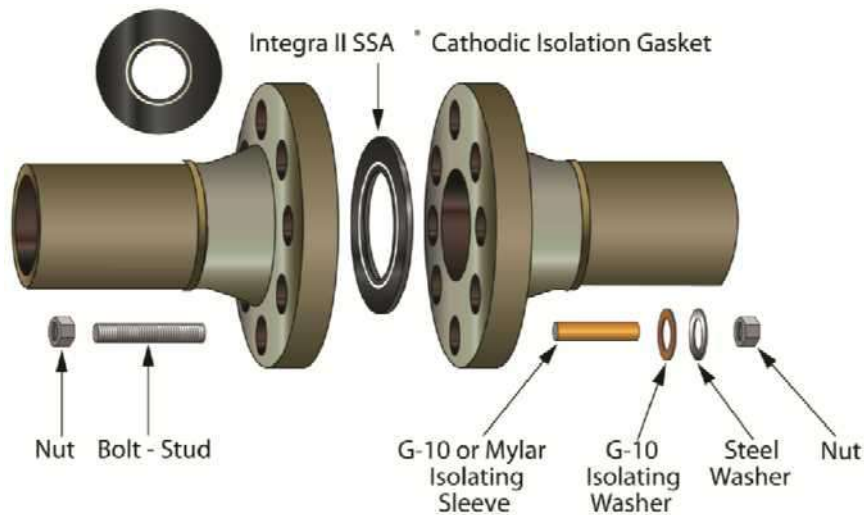


- Exceptionally dependable for insulating and sealing purposes for severe service applications.
- Highly suitable for all severe service applications up to and including ANSI 2500# and API 15,000# classes.
- Zero-free leaks for high sulfur content crude oil or H₂S gas fugitive emissions, proven through multiple applications.



Integra II SSA[®] Cathodic Isolating Gaskets

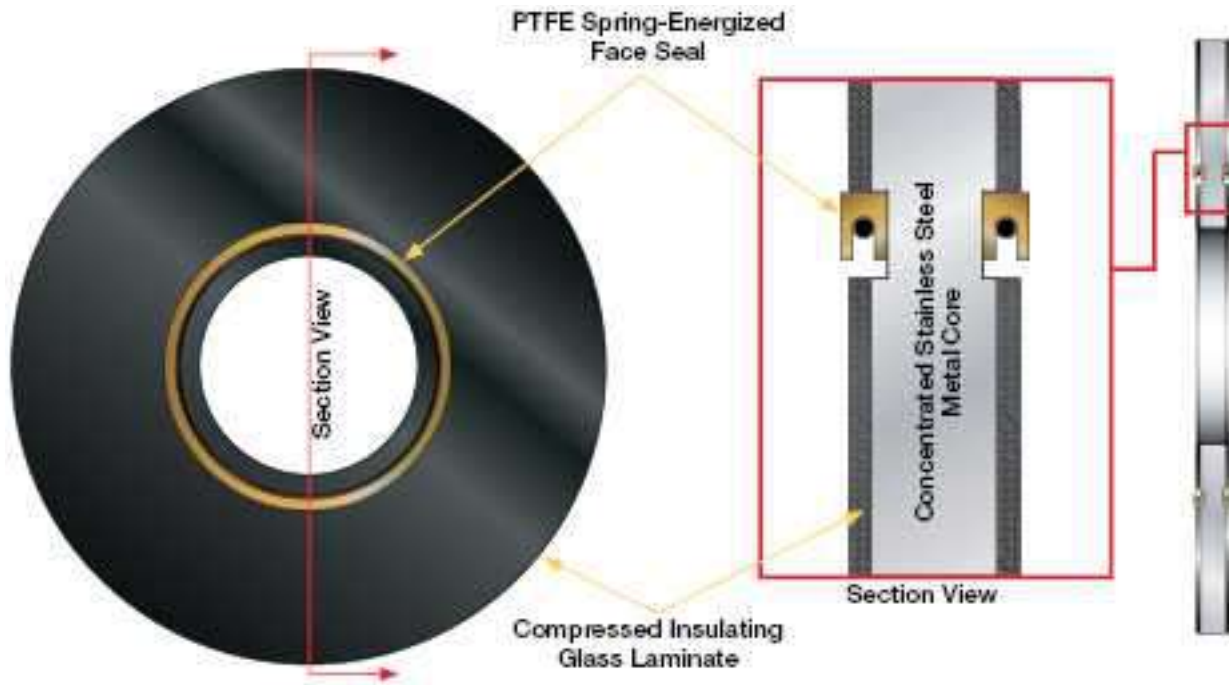
Product Components



- All Integra II gaskets are manufactured in **1/4"** thickness for all diameters.
- Gaskets for API 10,000# flanges and higher require **dual seals**.

Integra II SSA® Cathodic Isolating Gaskets

Product Components



Dual spring energized PTFE seals are available for very high pressure or large diameters.

Integra II SSAFS® Cathodic Isolation Gaskets

Features



- Dependable insulating and sealing for severe service and fire safe applications.
- Suitable for all severe service applications up to and including ANSI 2500# and API 10,000# classes.
- Zero-free leaks for high sulfur content crude oil or H₂S gas fugitive emissions, proven through multiple applications.
- Incorporates high temperature sealing characteristics of kammprofile with a highly dielectric mineral secondary seal.

Integra II SSAFS®

Cathodic Isolation Gaskets

API 6FB Testing

<p><u>Fire Test Report</u></p> <p>In Accordance with</p> <p><u>API Standard 6FB, Third Edition</u></p> <p>Performed for</p> <p>Advance Product & Systems Inc.</p> <hr/> <p>6 inch Class 300 Integra II Fire-Rated Isolation Gasket CS Flange/ B7 Studs/ 2H Nuts Dielectric Sleeves/ Coated Hardened Steel Washers</p> <p>Start Date: October 28, 2015 End Date: October 28, 2015</p> <hr/> <p>Performed by</p> <p>United Valve</p> <p>9916 Gulf Freeway Houston, TX 77034 Phone: 713-944-9852 Fax: 713-944-5964 www.unitedvalve.com</p>
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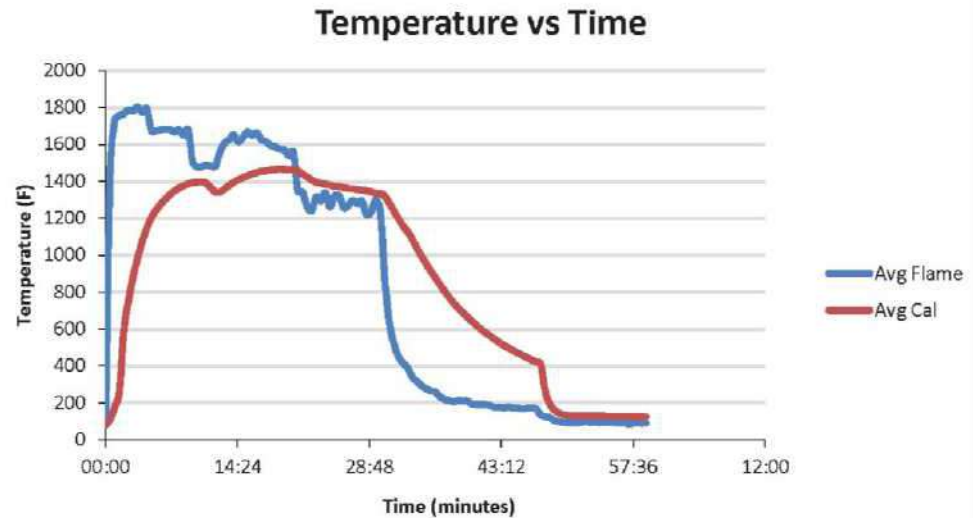
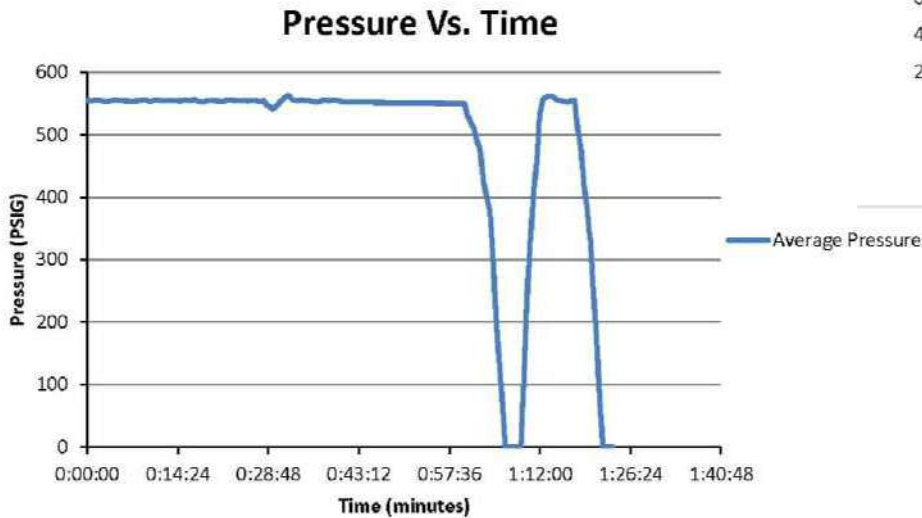
- According to the API standard 6FB, non-bending, on-shore or open off-shore fire test, the SSAFS gasket kit was able to maintain a Fire Safe connection throughout the entire test.
- Test was performed with a 6" 300# Integra II SSAFS® gasket kit with G10 sleeves and coated hardened-steel washers.
- The measured leakage rate during the burn and cool down periods was 13.63 ml/min compared to an allowable leakage rate of 24.73 ml/min.



Integra II SSAFS®

Cathodic Isolation Gaskets

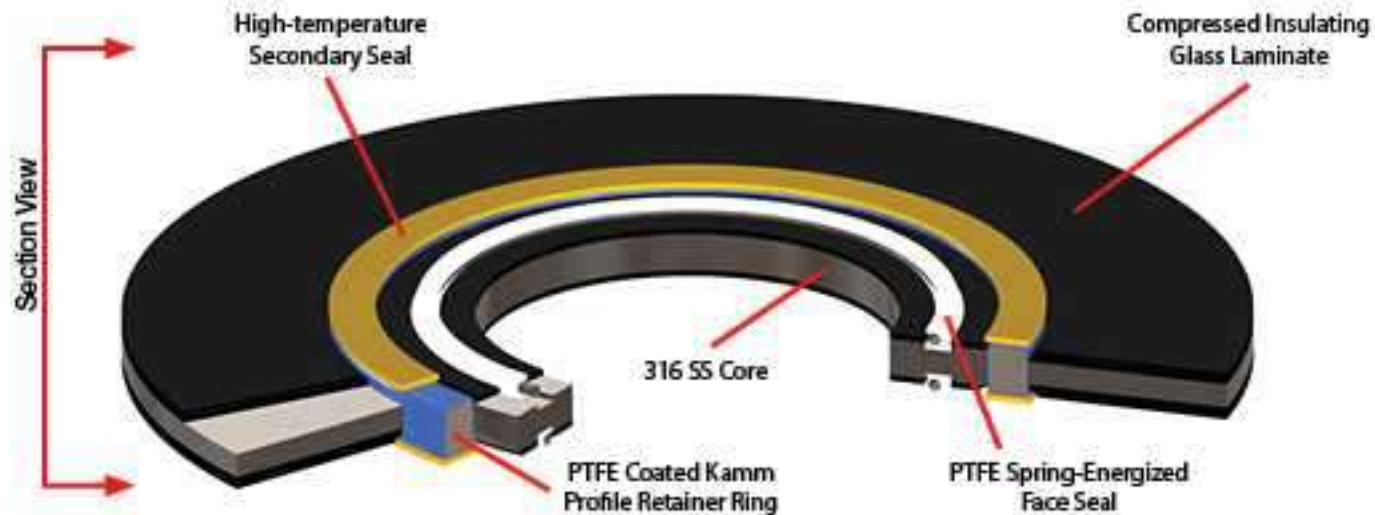
API 6FB Testing



Integra II SSAFS®

Cathodic Isolating Gaskets

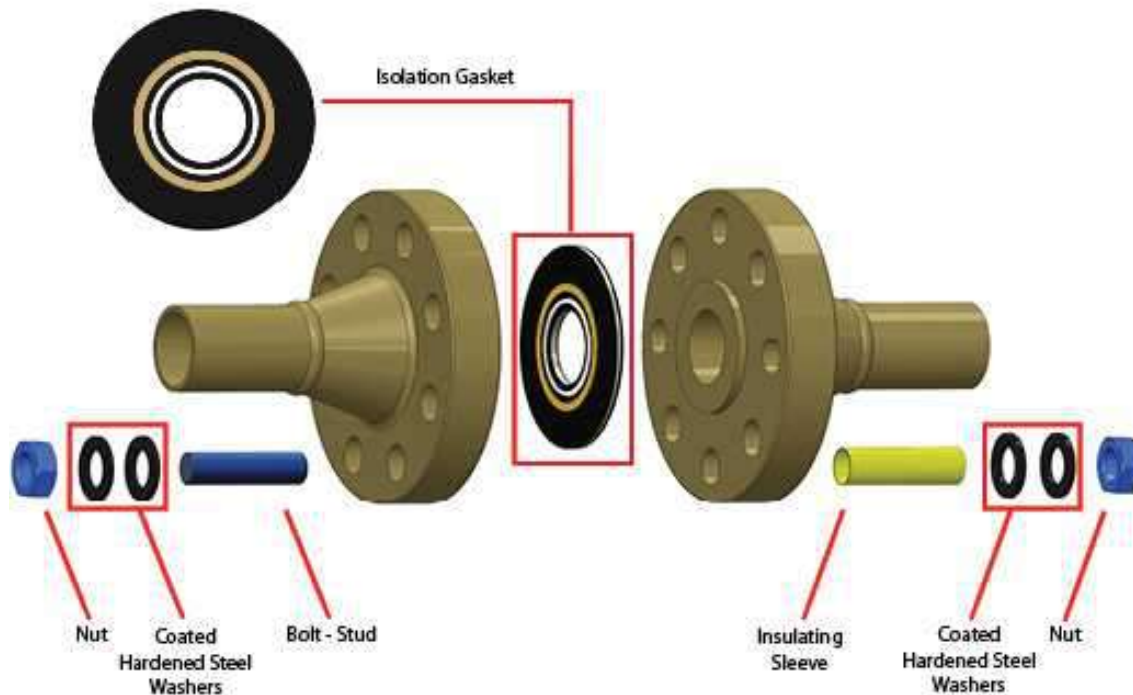
Gasket Components



Combines PTFE pressure-energized spring seal, as the primary seal, with the high temperature sealing of a kammprofile design with a high dielectric mineral seal as the secondary seal

Integra II SSAFS® Cathodic Isolating Gaskets

Gasket Kit Components



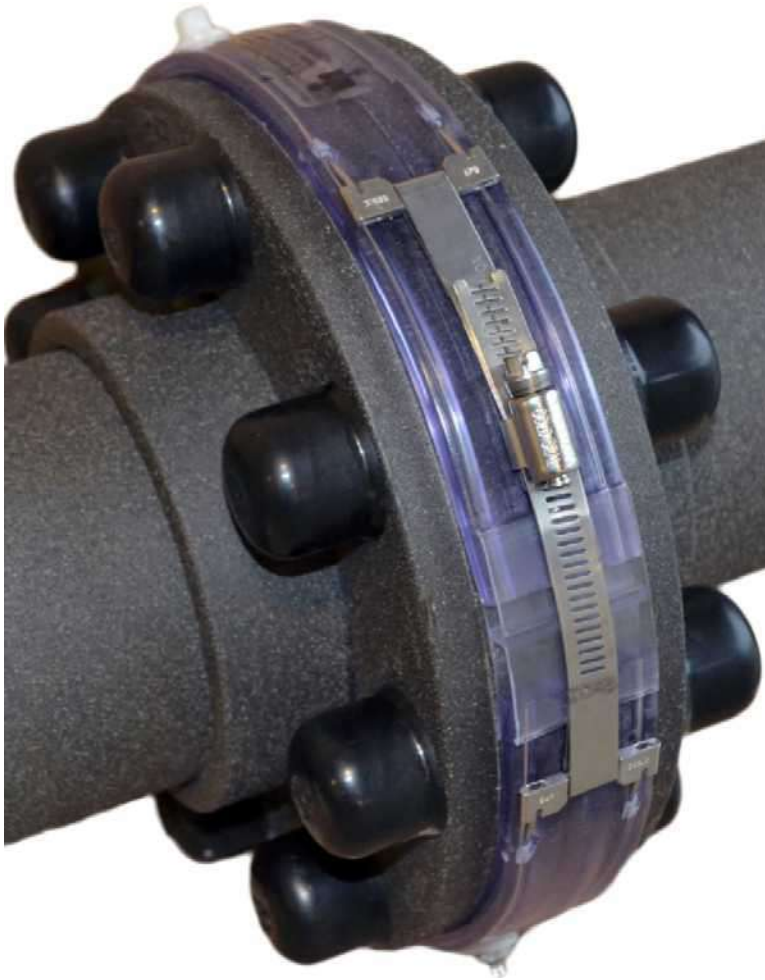
- G-10 Standard, G-11 Optional SSA S/S Retainer Material
- Standard PTFE Spring-Energized Seal Material
- Phyllosilicate High Temperature Secondary Seal Material
- G-10 Insulating Sleeves
- Coated, Hardened Steel Isolating Washers

Kleerband® Flange Protectors

Flange Corrosion Protection



Kleerband® Flange Protectors

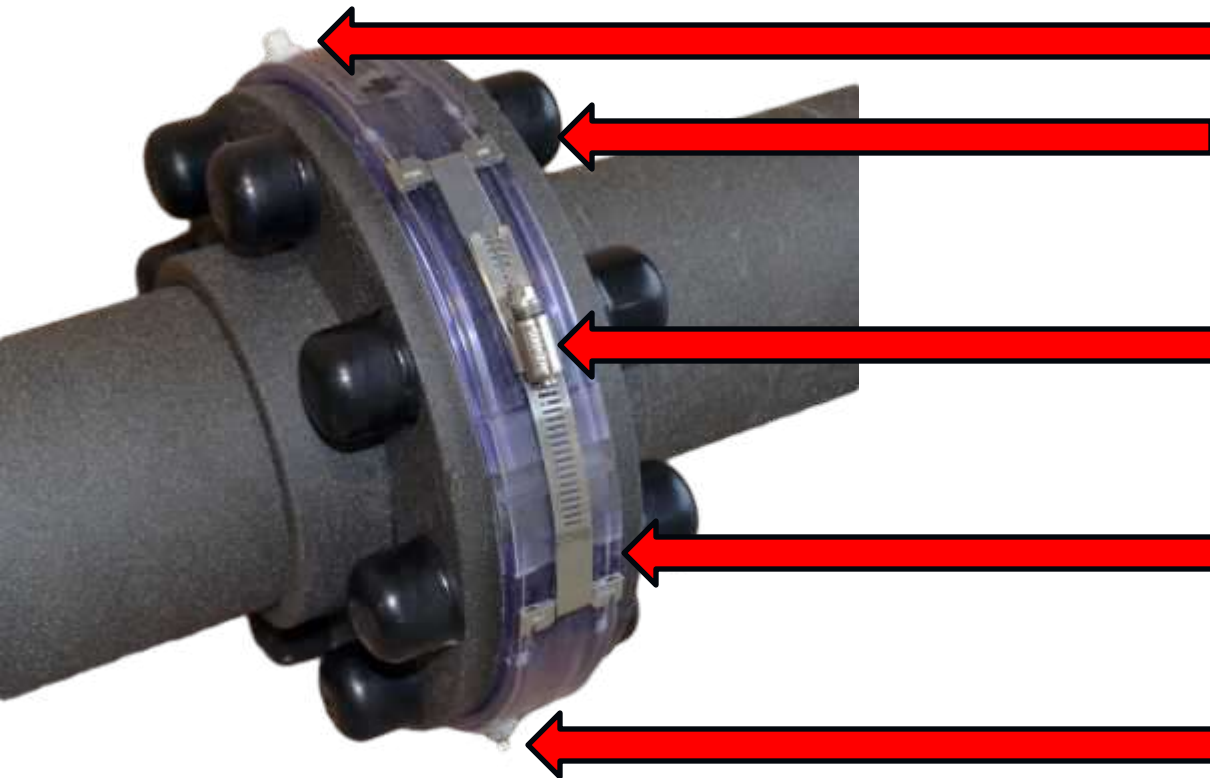


Benefits:

- UV-stabilized clear extruded polymer band
- Stainless steel grease injection fitting
- Allows for visual inspection of flange cavity without removing the protector
- Easy, clean installation
- Operating temperature min. -13 °F to max 167 °F
- 3/4" to 144" Diameter

Kleerband® Flange Protectors

Function:



Grease Injection Fitting

Radolid® Protection Caps

Stainless steel wormgear screw connection for ease of installation

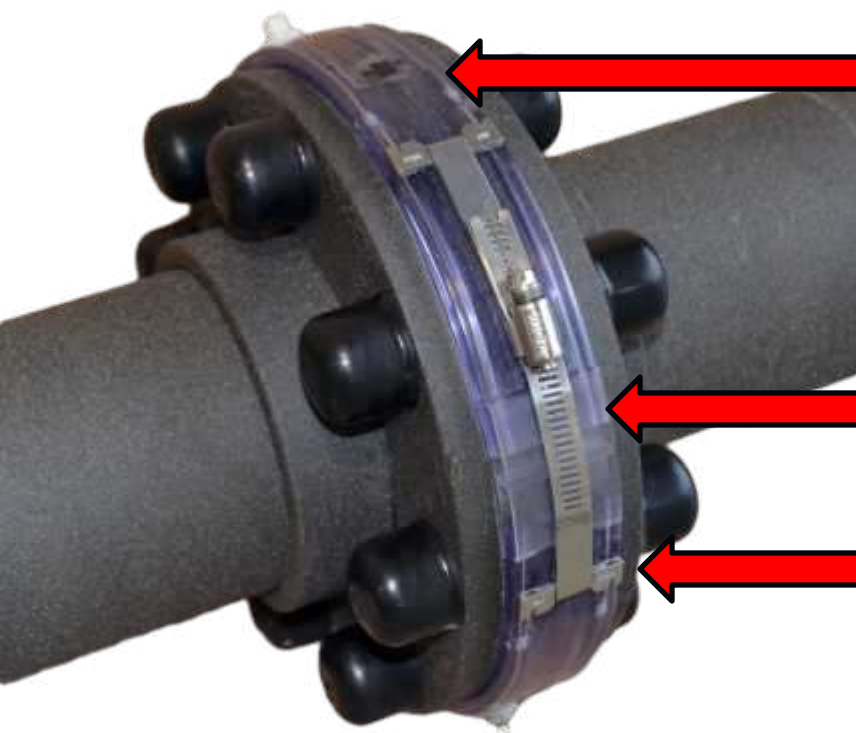
Transparent polyband allows 360° continuous inspection

Positive loading relief vent plug



Kleerband® Flange Protectors

New Design Features:



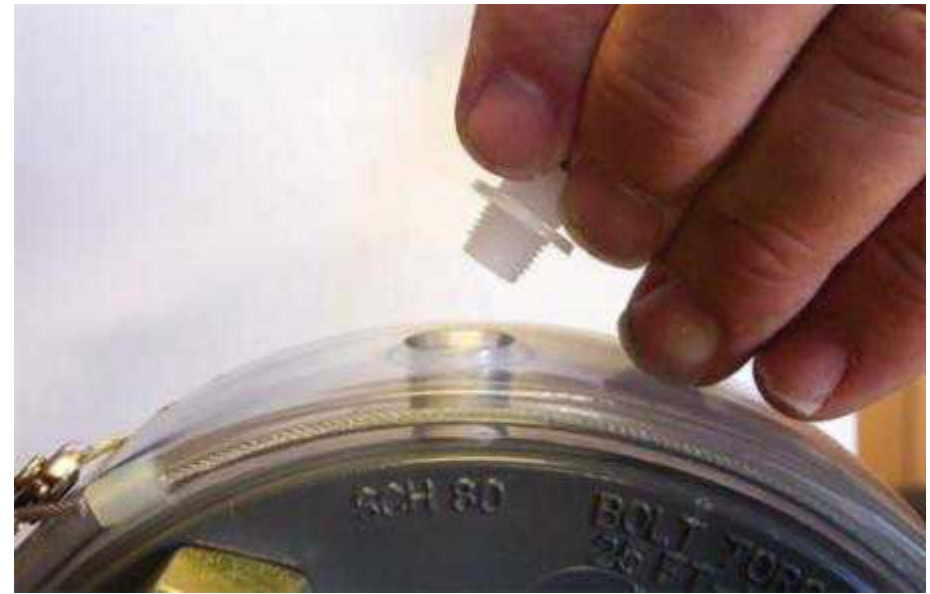
New wire tensile strength of 600 lbs.

New bridge

New T-connection

Kleerband® Flange Protectors

Function Cont: Relief Vent & Plug



Kleerband® Flange Protectors

Outdated Methods

Shrink Sleeves



Wax and
Epoxy Fillers



Tapes



- Complex, time-consuming installation
- Special tools and/or safety equipment
- Increased labor and expenses
- Difficult to wrap completely
- Possible voids in the flange cavity
- Questionable effectiveness of method
- Material that may shrink and separate from the flange
- Difficult removal, not reusable (burn and/or cut off)
- Messy installation, hidden corrosion & trapped moisture

Kleerband® Flange Protectors

Corrosion Test:

#1
UNPROTECTED
FLANGE

#2
PROTECTED
FLANGE



**Kleerband® Flange
Protector with
Radolid® Nut Caps**

**1000 Hour B117
(Salt Fog) Test**

0-HOURS
500-HOURS
1000-HOURS
DISASSEMBLED

Scientific Testing Laboratories, Inc.
2703 Weller Avenue
Baton Rouge, Louisiana 70805
Federal I.D. 72-0880423



Kleerband® Flange Protectors

Trinidad



Kleerband® Flange Protectors

Pemex - Mexico



Kleerband® Flange Protectors

Natural Gas Facility



Radolid® Nut Caps

Heavy-Duty Synthetic Grease



**11 oz.
Spray
Can**



**14 oz.
Cartridge**



**35 lb.
5 Gallon
Pail**



**120 lb.
20 Gallon
Drum**

Kleergel®

Comparison

Kleergel®	Petroleum-Based Lubricant
Special ingredients provide excellent viscosity and film strength to reduce wear	Hardens at low temperature
Continuous operation at temperatures at 350°F and 500°F for intermittent use	Forms gummy deposits and carbon at high temperatures
Contains no impurities and remains flexible at -50°F	Contains impurities that may cause harmful viscosity changes and decrease wear protection

Kleergel®

Calculator

Kleergel Tube											
Tube ID	2.05										
Tube Length of Gel	7.75										
Total Volume	25.6 in ³										
	419 ml										
Flange Application	10"	600#	Flange Application	3"	600#	Flange Application	6"	600#			
Raised Face OD	12.75		Raised Face OD	5		Raised Face OD	8.5				
Flange OD	20		Flange OD	8.25		Flange OD	14				
Gap Width	0.625		Gap Width	0.625		Gap Width	0.625				
Total Volume	117 in ³		Total Volume	21 in ³		Total Volume	61 in ³				
	1910 ml			346 ml			995 ml				
Qty:	2		Qty:	1		Qty:	1				
Tubes of Kleergel Needed	9.11		Tubes of Kleergel Needed	0.83		Tubes of Kleergel Needed	2.37				
Total Tubes of Kleergel Needed	13.00										
	11.38 lbs.										

Radolid® Nut Caps

Benefits:



- Prevent corrosion
- UV resistant
- Economical
- Reusable
- Easy to install or remove
- Difficult to knock off
- Reduce maintenance costs
- Color code lines
- Grease shipped separately allowing for cleaner storage
- Water resistant

Radolid® Nut Caps

with VCI (Volatile Corrosion Inhibitor)

- A chemical developed by the Allies during WWII to protect weapons from corrosion
- The Radolid® cap has VCI compounded in the PE resin
- VCI vapors are emitted from the cap and form an invisible protective film on metal surfaces



Radolid® Nut Caps

Anwendung



Radolid® Nut Caps

Lafayette Pump Station – Lafayette, LA



Radolid® Nut Caps

The world's largest ball valve and the nut caps that were mounted in a power plant by Sulzer Escher-Wyss located deep within a mountain in 1988.

23 years later, we visited the power station again to get a picture of the condition of the bolts.



Radolid® Nut Caps

San Francisco Public Utilities Commission



Radolid® Nut Caps

San Juan-Chama



Radolid® Nut Caps

European Bridge



Radolid® Nut Caps

Baltic Sea Test



Radolid® Nut Caps

Waterworks



Radolid® Nut Caps

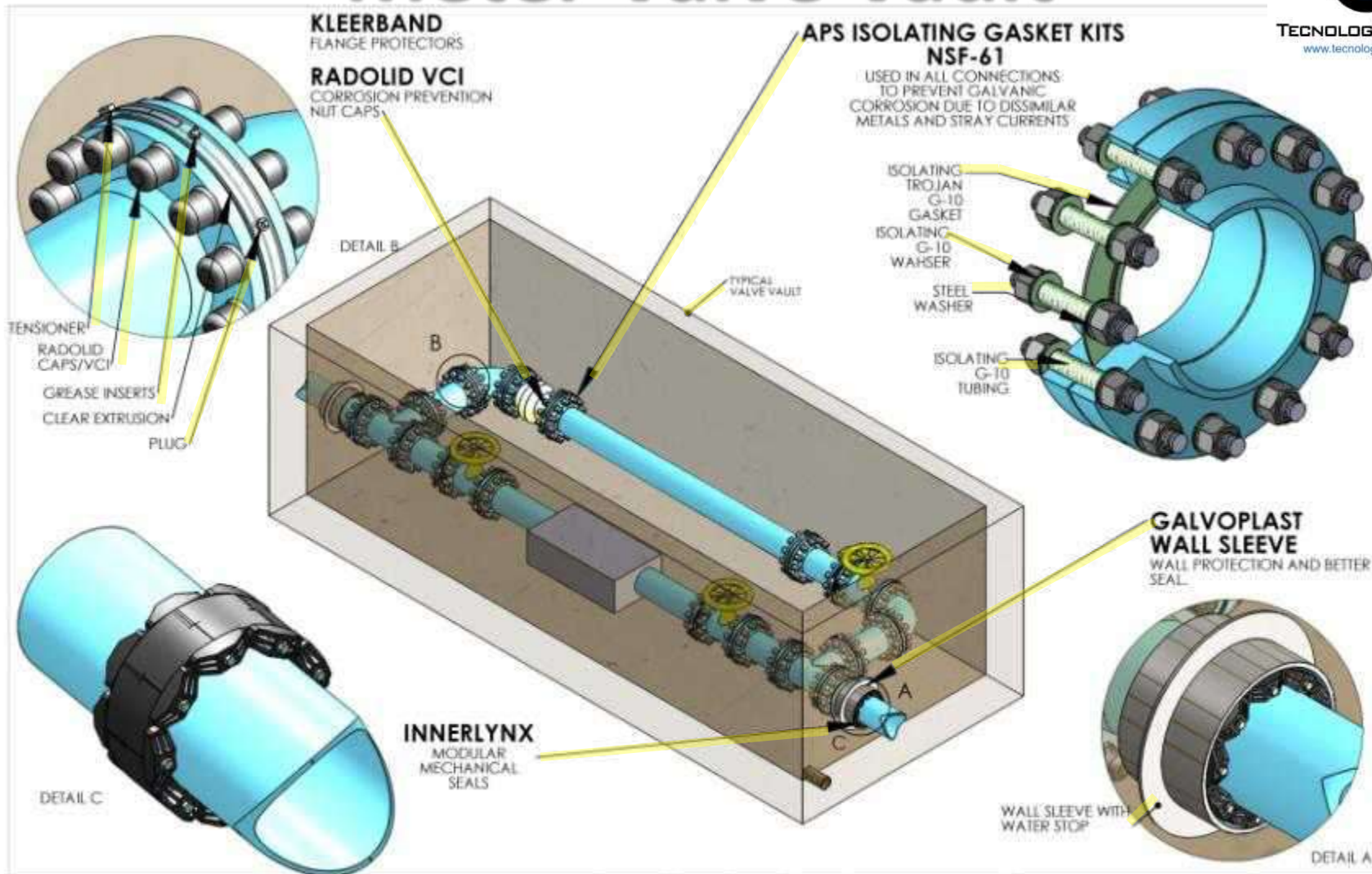
Wind Turbine



Meter Valve Vault



TECNOLOGÍA TOTAL
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COMMENTS:

PROPRIETARY AND CONFIDENTIAL
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SIZE
A

DWG. NO.

REV

SCALE: 1:29 WEIGHT:

SHEET 1 OF 1

	NAME	DATE	MATERIAL FINISH
DRAWN	MAR	9/16/13	TOLERANCES PER: UNLESS OTHERWISE SPECIFIED: DO NOT SCALE DRAWING
CHECKED			DIMENSIONS ARE IN INCHES
ENG APPR.	MAR	9/16/13	TOLERANCES:
MFG APPR.			FRACTIONAL ±
			ANGULAR: MACH ± .000 ±
			TWO PLACE DECIMAL ±
			THREE PLACE DECIMAL ±

ADVANCE
PRODUCTS & SYSTEMS

TITLE:

METER VALVE VAULT BOX



Radolid® Nut Caps

Freedom Tower - NYC



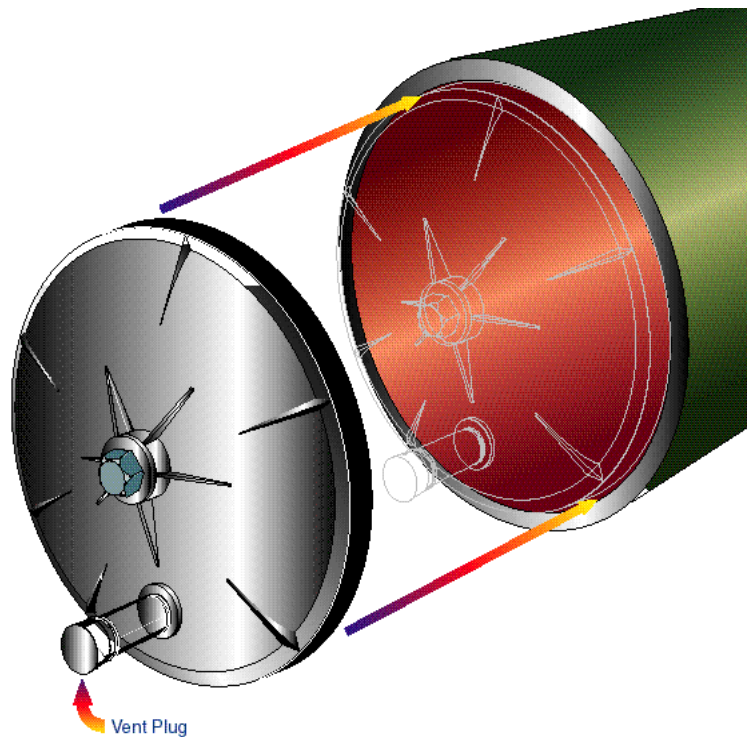
Foreman Nite Caps

**Function:
Keep unwanted items out of your pipes**



Foreman Nite Caps

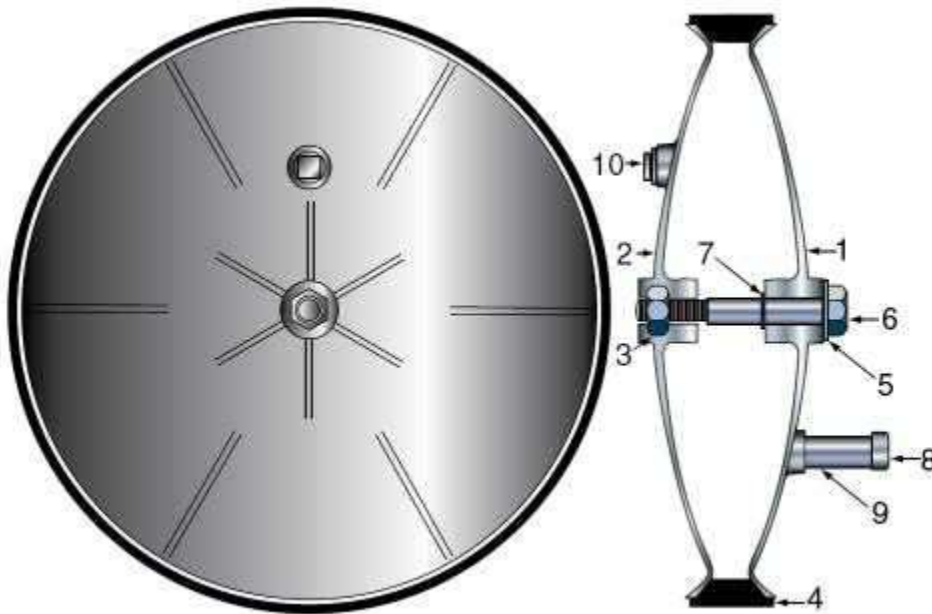
Benefits:



- Temporary pipe seal
- Low-pressure applications
- Lightweight & easy to install
- Economical & reusable
- Durable & long-lasting
- Wider range of Pipe IDs
- Sizes ranging from 1" to 48" in aluminum

Foreman Nite Caps

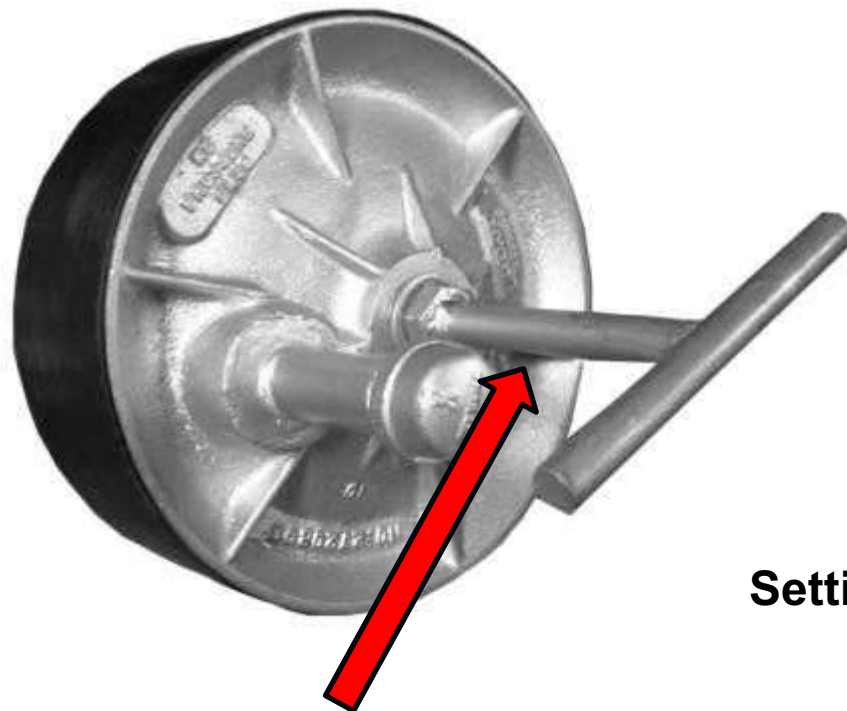
Components:



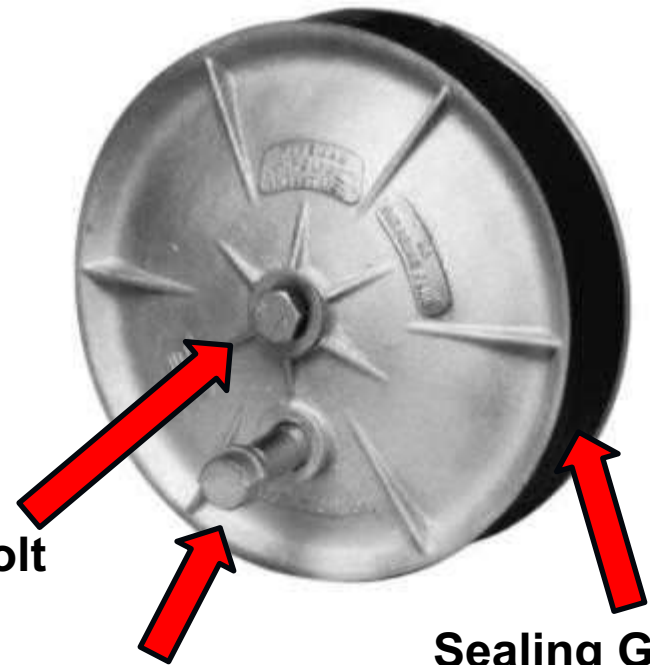
1. Outer Disc
2. Inner Disc with 1" Nut
3. Hex Nut Cast into Item
4. Rubber Gasket
5. Steel & Fiber Washers
6. Hex-Head Bolt
7. Retaining Ring for Bolt
8. Pipe Cap
9. Pipe Nipple
10. Pipe Plug

Foreman Nite Caps

Components:



Optional T-handle



Setting Bolt

Vent Plug

Sealing Gasket

Casing Spacers

Benefits:

- Provide support and retain integrity of casing installation.
- Field-changeable
- Reduce installation costs; easily installed by one person
- Require no special tools or grease.
- Electrically isolate and cathodically protect pipeline from casing pipe through which it passes



Casing Spacers

Types of APS Casing Spacers:

Model SI



Polymer Coated
Band 14 Gauge
Riser 10 Gauge

Model CI



Polyethylene-
Injection Molded

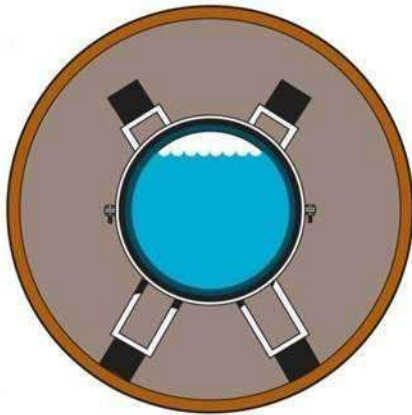
Model SSI



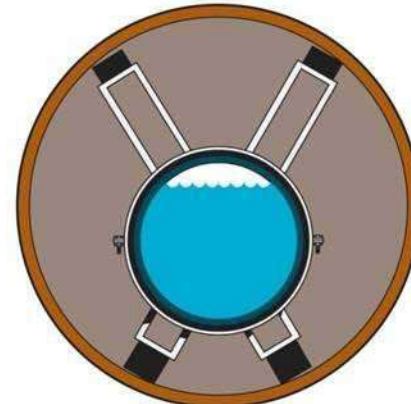
T-304 Stainless Steel
Band 14 Gauge
Riser 10 Gauge

Casing Spacers

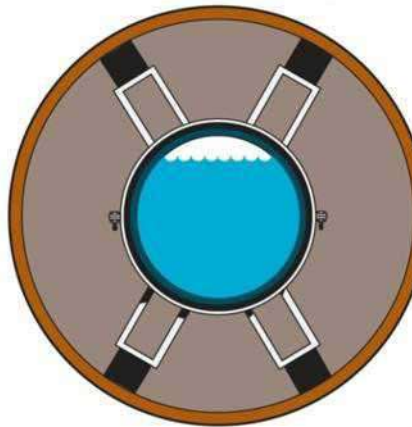
Available Configurations:



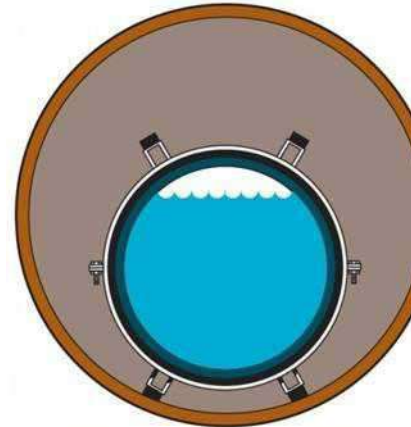
Centered



Non-Centered,
Restrained



Centered &
Restrained



Clear Bell



Casing Spacers

Polyethylene Casing Insulators

Carrier Size	Min. Casing Size	Diameter Over Shoes*	Shoe Height	No. of Runners**	Number Of Segments			Insulator Width
					Full 4 Ft	Full 2 Ft	Total Segs	
1"	3"	2 1/4"	1/2"	2	—	—	2	2 1/2"
1 1/2"	3"	2 3/4"	1/2"	4	—	—	2	2 1/4"
2"	4"	3 1/2"	5/8"	4	—	—	2	3 5/8"
2"	4"	5"	5/8"	4	—	—	2	3 5/8"
4"	8"	5 1/2"	5/8"	4	—	—	2	3 1/4"
4"	8"	8 1/4"	1"	4	—	—	2	3 1/2"
4"	10"	7 3/8"	1 1/2"	4	—	—	2	3 1/2"
4"	12"	8 3/8"	2"	4	—	—	2	3 1/2"
6"	10"	8 3/4"	1"	4	—	—	2	3 3/4"
6"	12"	9 5/8"	1 1/2"	4	—	—	2	4 7/8"
6"	14"	10 5/8"	2"	4	—	—	2	4 1/2"
6"	12"	10 3/4"	1"	4	—	—	2	4 7/8"
6"	14"	11 3/4"	1 1/2"	4	—	—	2	4 7/8"
6"	18"	12 5/8"	2"	4	—	—	2	4 3/4"
10"	14"	12 3/4"	1"	4	—	—	2	4 3/4"
10"	18"	13 3/4"	1 1/2"	4	—	—	2	4 3/4"
10"	18"	14 3/4"	2"	4	—	—	2	4 3/4"
12"	18"	14 3/4"	1"	4	—	—	2	4 3/4"
12"	18"	16 7/8"	1 1/2"	4	—	—	2	4 3/4"
12"	20"	18 3/4"	2"	4	—	—	2	4 3/4"
14"	18"	16 7/8"	1"	7	3	1	4	6"
16"	20"	17 7/8"	1"	8	4	—	4	6"
18"	22"	19 7/8"	1"	9	4	1	6	6"
20"	24"	21 7/8"	1"	10	5	—	6	6"
22"	28"	23 7/8"	1"	11	5	1	8	6"
24"	28"	25 7/8"	1"	12	6	—	8	6"
26"	30"	27 7/8"	1"	13	6	1	7	6"
28"	32"	29 7/8"	1"	14	7	—	7	6"
30"	34"	31 7/8"	1"	15	7	1	8	6"
32"	36"	33 7/8"	1"	16	8	—	8	6"
34"	38"	35 7/8"	1"	17	8	1	9	6"
36"	40"	37 7/8"	1"	18	9	—	9	6"
38"	42"	39 7/8"	1"	19	9	1	10	6"
40"	44"	41 7/8"	1"	20	10	—	10	6"
42"	48"	43 7/8"	1"	21	10	1	11	6"
44"	48"	45 7/8"	1"	22	11	—	11	6"
46"	50"	47 7/8"	1"	23	11	1	12	6"
48"	52"	49 7/8"	1"	24	12	—	12	6"
50"	54"	51 7/8"	1"	25	12	1	13	6"
52"	56"	53 7/8"	1"	26	13	—	13	6"
54"	58"	55 7/8"	1"	27	13	1	14	6"
56"	60"	57 7/8"	1"	28	14	—	14	6"
60"	64"	61 7/8"	1"	30	15	—	15	6"

POLYETHYLENE CASING INSULATORS	
Dielectric Strength (ASTM D-149)	450-500 Volts/Mil
Flexural Strength (ASTM D-790)	1000 psi
Compressive Strength (ASTM D-693)	3200 psi
Tensile Strength (ASTM D-638, D-651)	3100-3500 psi
Water Absorption (ASTM D-570)	< 0.01%
Impact Strength (ASTM D-256)	2.0 ft. lb./in.of notch
Maximum Continuous Operating Temperature	140 °F (60 °C)

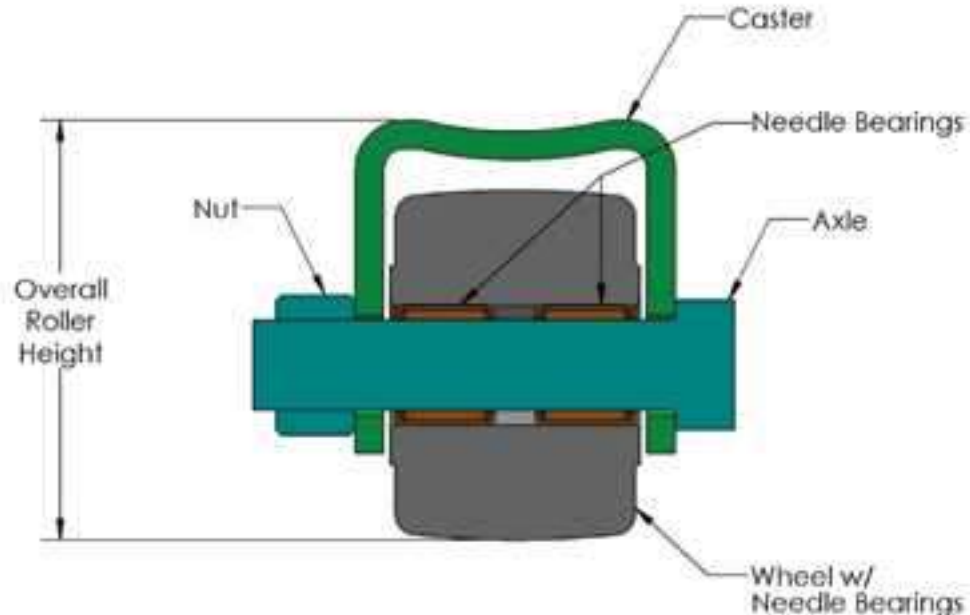
Economical choice with excellent dielectric resistance and low moisture absorption for minimal electric current loss cathodic protection impairment.

Runners 1-1/2" and 2" high are available on all Polyethylene casing Insulators.

**NOTE: Centered or centered and restrained polyethylene insulators are also available on PVC pipe through 24". Non-metallic bolts & nuts are also available.

LPHS Roller Spacers

Low-profile, High-strength Rollers



BENEFITS:

- Reduced Coefficient of Friction
- Reduced Size of Equipment
- Reduced Installation Time
- Reduced Cost of Project

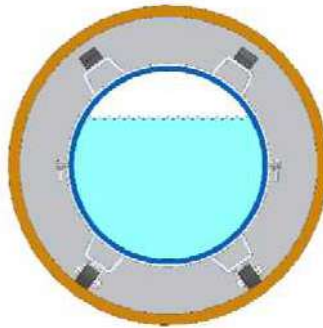
LPHS ISOLATION ROLLERS				VS	TRADITIONAL ROLLERS		
SIZE	HEIGHT	STATIC LOAD	DYNAMIC LOAD	HEIGHT	STATIC LOAD	DYNAMIC LOAD	
SMALL	1.625"	2,000 lbs	1,000 lbs	2.5"	375 lbs	125 lbs	
MEDIUM	2.625"	6,000 lbs	2,750 lbs	4.25"	1,800 lbs	600 lbs	
LARGE	3.125"	9,000 lbs	3,750 lbs	5.625"	2,400 lbs	800 lbs	
XLARGE	3.500"	12,500 lbs	6,000 lbs	6.5"	3,000 lbs	1000 lbs	

LPHS Roller Spacers

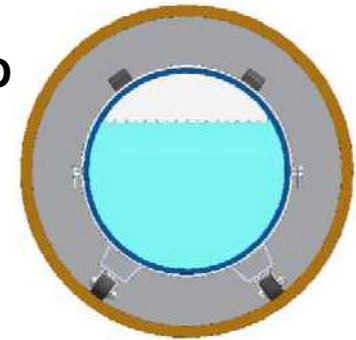
Low-profile, High-strength Rollers

OPTIONS

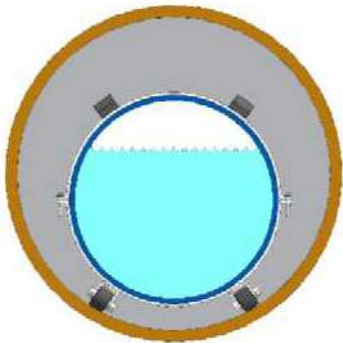
**CENTERED
RESTRAINED**



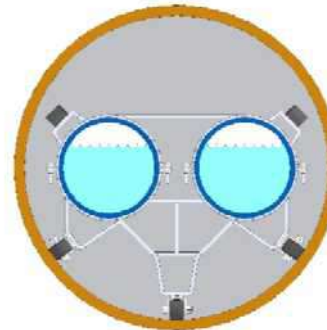
CENTERED



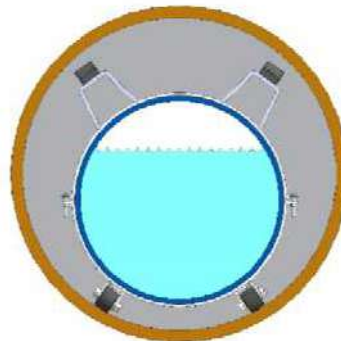
CLEAR-BELL



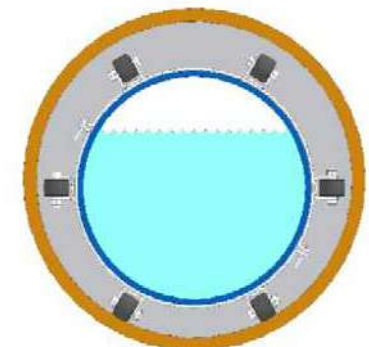
CLUSTER



**NON-CENTERED
RESTRAINED**

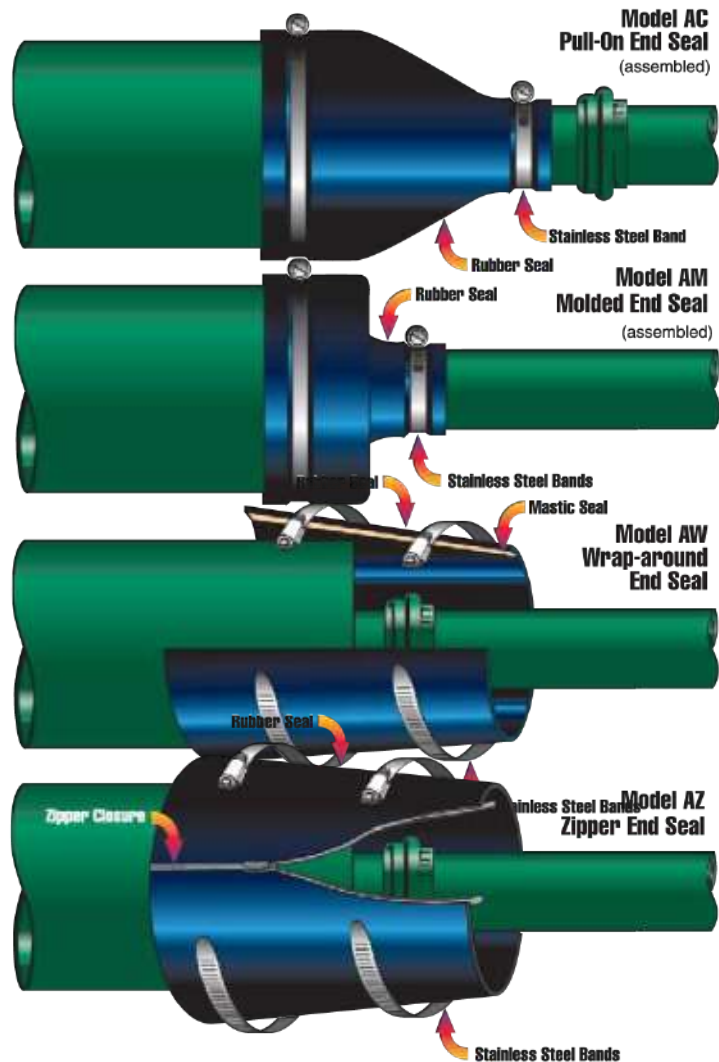


**360° WHEEL
PLACEMENT**

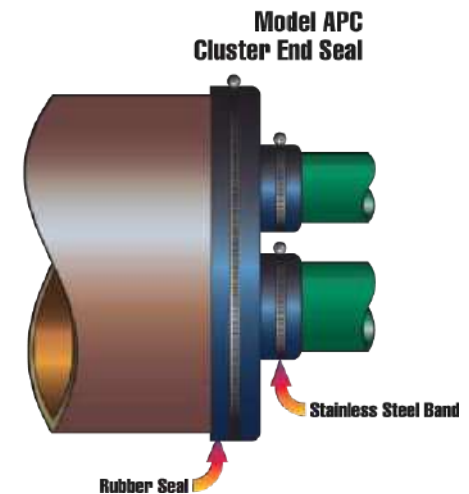
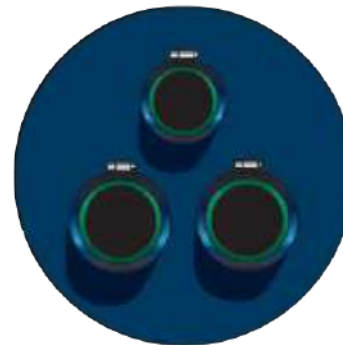


Casing Spacers

5 Types of End Seals



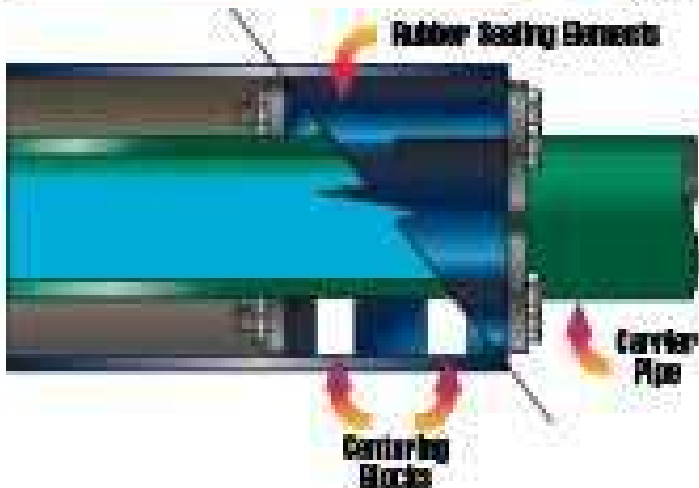
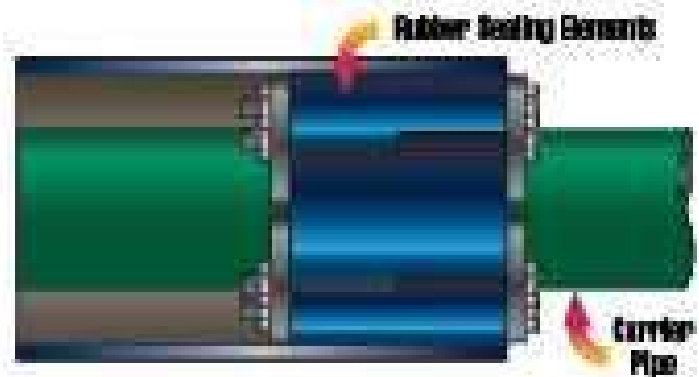
- Made of 1/8" thick synthetic rubber
- Chemically resistant
- 304 stainless steel banding straps
- Non-magnetic wormgear



Casing Spacers

End Seals

Innerlynx Model End Seal



Centering Blocks are plastic reinforcements that assure a penetrating pipe will stay “centered” within its casing and adds extra support against heavy loads from back fill.

- Form a mechanical seal between pipelines and casing.
- Form a hydrostatic seal and electrically isolate the carrier pipe from the casing
- Can be easily installed by one person and requires no extra tools

Types of Innerlynx End Seals

IL-C - Standard pipe INNERLYNX with insulating type plate.

IL-S316 - Pipe INNERLYNX with stainless steel hardware

IL-CB - Pipe INNERLYNX with centering block feature.*

IL-O Nitrile - INNERLYNX can be used for fuel applications in airports



Casing Spacers

Ala Moana
Honolulu, HI



Casing Spacers

Bradshaw Construction CIAC, Tampa, FL



1,500 foot river crossing



Proprietary install method

Casing Spacers

Clearway Construction Kennedy Blvd., Ontario



- 3,300 feet of 48" steel carrier into 60" steel casing.
- Use of roller spacers produced a time savings of 2 ½ weeks which equates to a significant savings in labor costs.

Casing Spacers

King Street Feedermain Bolton, Ontario



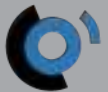
Casing Spacers

King Street Feedermain Bolton, Ontario



Casing Spacers

Judlau Construction
New York – MED-609

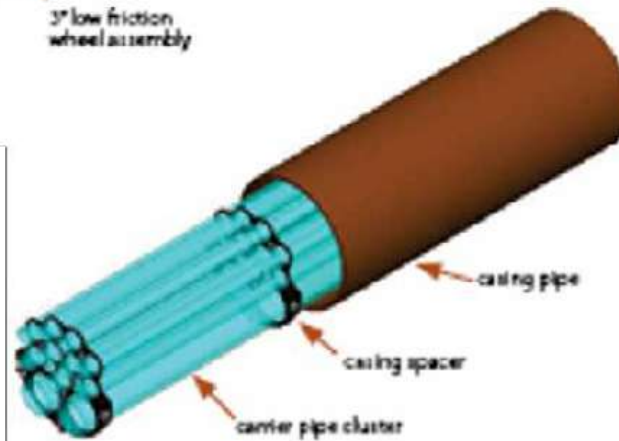
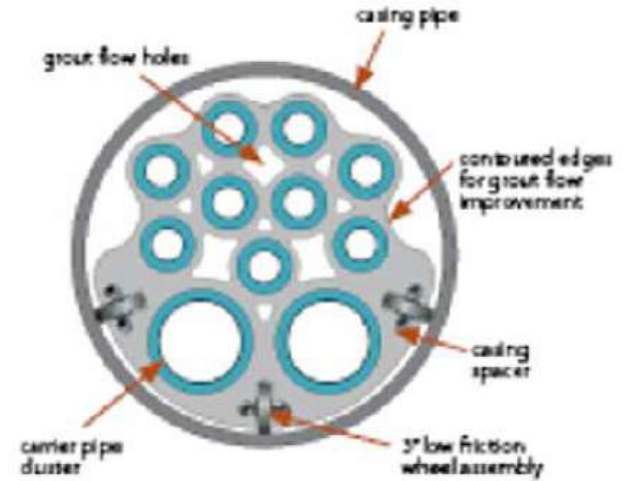


Bore Spacers

- Designed to support and cradle conduit, allowing for optimal free flow of grout eliminating voids.
- Maintain accurate duct position and alignment that will result in a reduction of installation time, boosting efficiency.

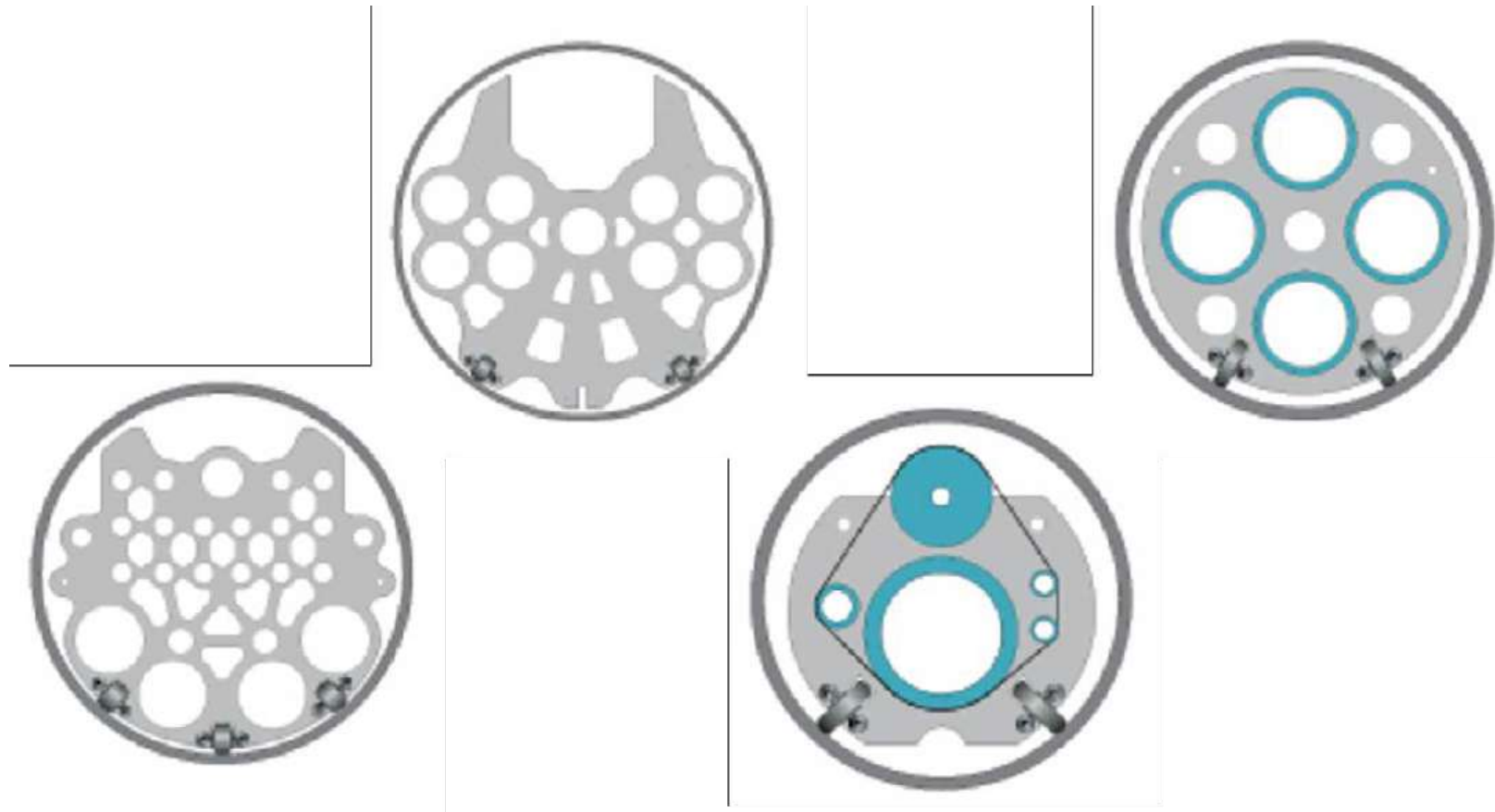


Bore Spacers



Bore Spacers

Unlimited Number of Conduits & Configurations Designed to Fit Your Needs



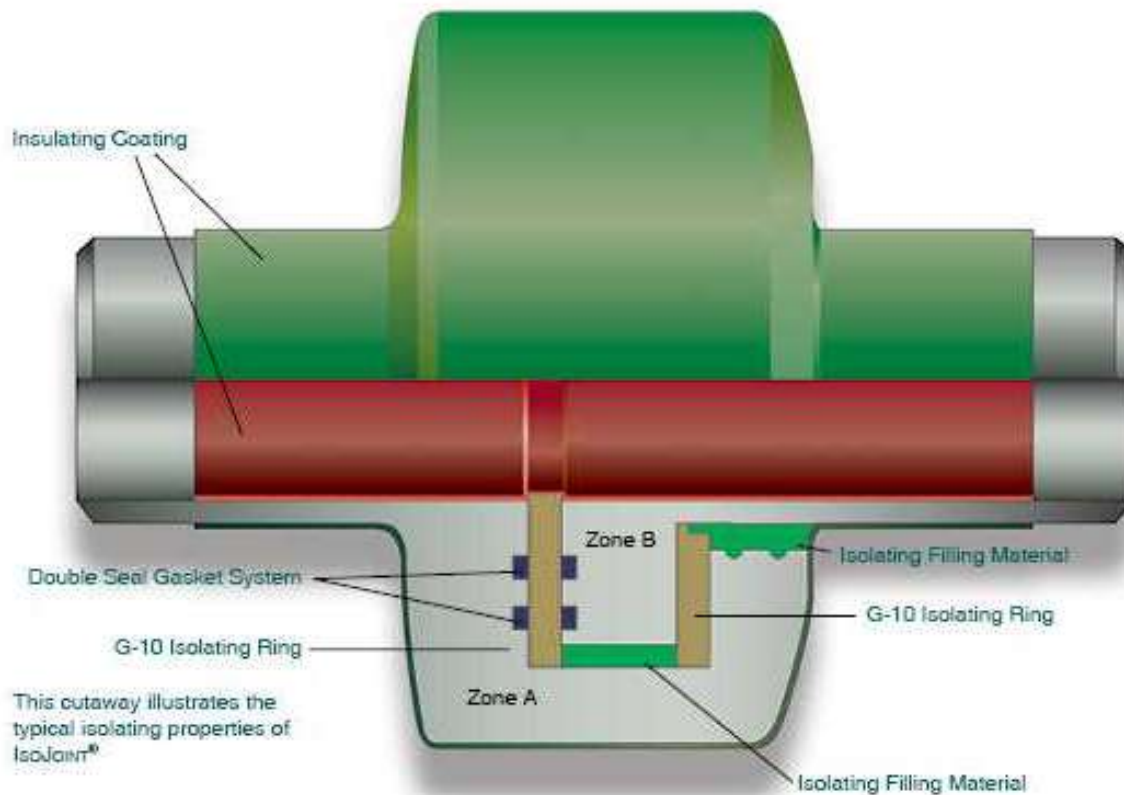
Isojoint®

Benefits:



- Isolates stray currents impressed on the pipe from exterior forces such as electrical transmission systems, earth current and currents flowing from point to point.
- Excellent bending and torsional resistance.
- Earthquake resistant – Acts as a thrust block or joint.

Isojoint®



This cutaway illustrates the typical isolating properties of Isojoint®

Isojoint®



Isojoint®

IPL Segment 15-1 – Chatfield, TX 78” Isojoint®



Isojoint®

Russell Corrosion – 72”



Innerlynx®

Benefits:



- Electrically isolates the carrier pipe from the penetrated structure
- 21 different sizes for pipe diameters from 1/2" to 144"
- 5 different models for a variety of different applications
- Custom Sizing
- Absorb sound, shock and vibration
- Can be removed and reinstalled for pipe repairs
- Easily installed by one person
- Made in the USA

Models



← **Model C – Standard EPDM**

← **Model O - Nitrile**

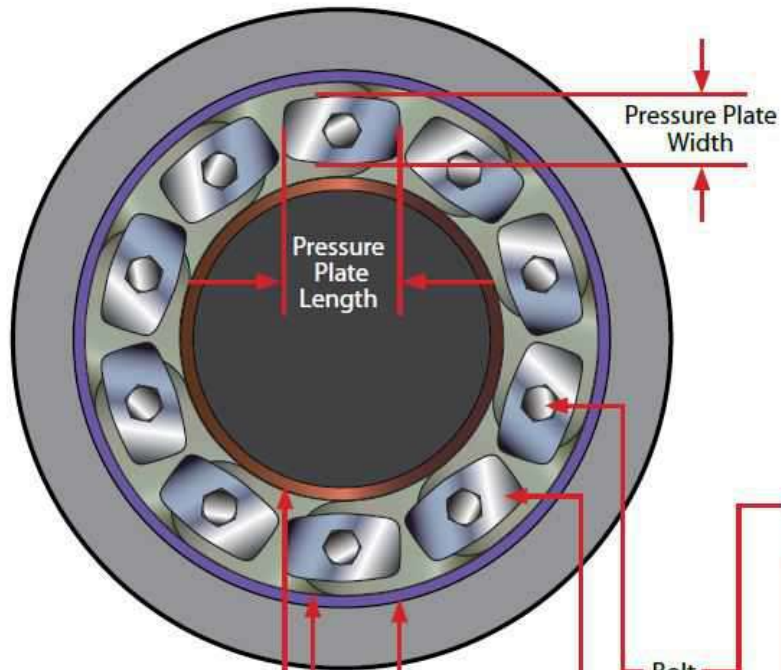
← **Model L – Low-Durometer EPDM**

← **Model UL – UL-Approved Proprietary Rubber**

← **Model T – High/Low Temperature Silicone**

Innerlynx®

Innerlynx® Assembly
Front View

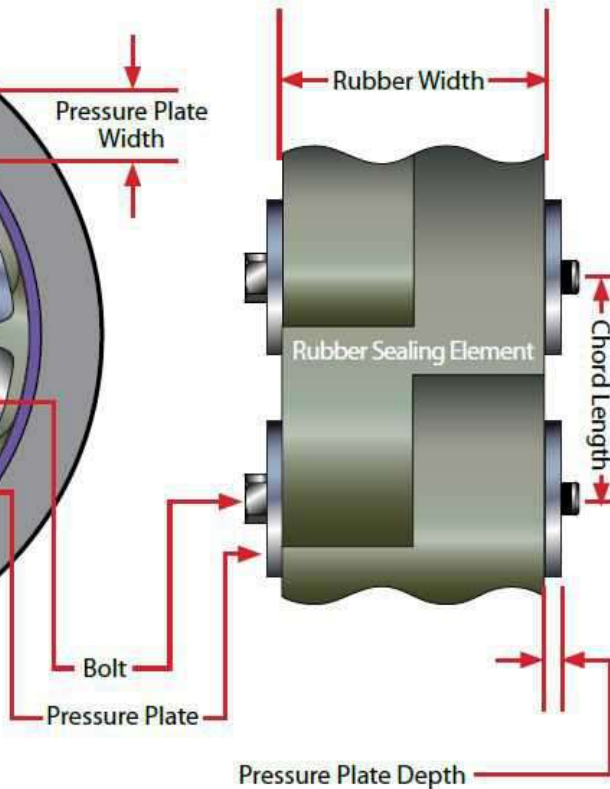


Pipe, Tube, Conduit
or Cable O.D.

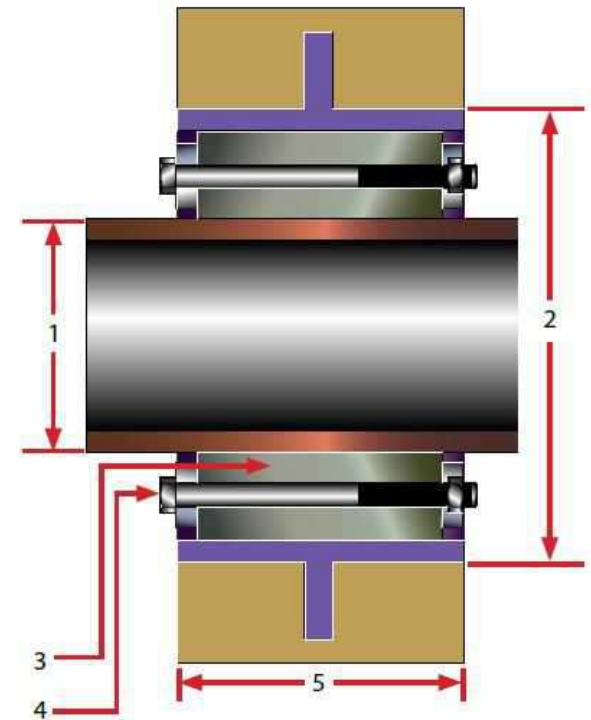
Actual Rubber Sealing
Element Thickness

Sleeve, Casing or Wall Hole I.D.

Innerlynx®
Side View



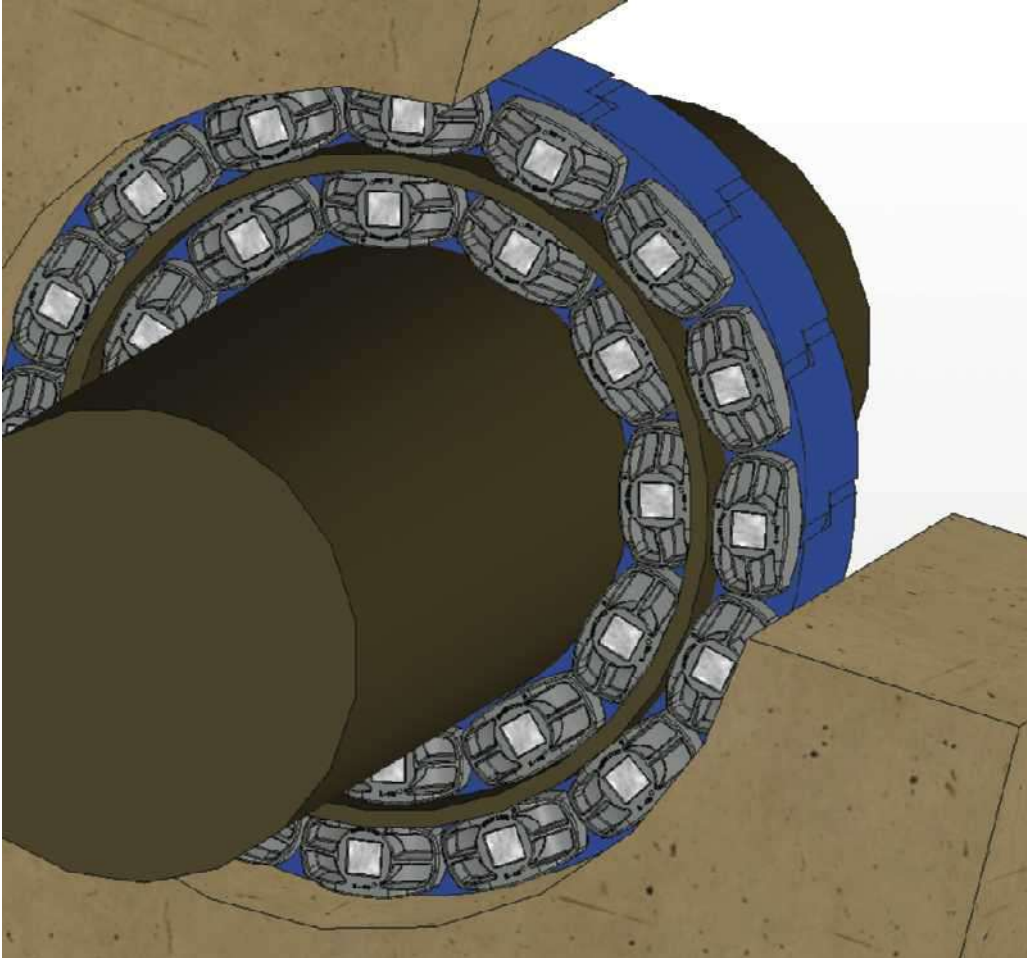
Innerlynx® Assembly
Side View/Cut Away



1. Pipe outside diameter
2. Wall sleeve or core drill inside diameter
3. Model of Innerlynx®
4. Specify steel or stainless steel hardware
5. Wall thickness



Innerlynx®



Install multiple layers of Innerlynx® using intermediate sleeves between wraps when the annular space is wider than the expanded thickness of a single Innerlynx® assembly.

Innerlynx®

Henderson Pump



Innerlynx®

Waste Water Treatment Plant Lafayette, LA



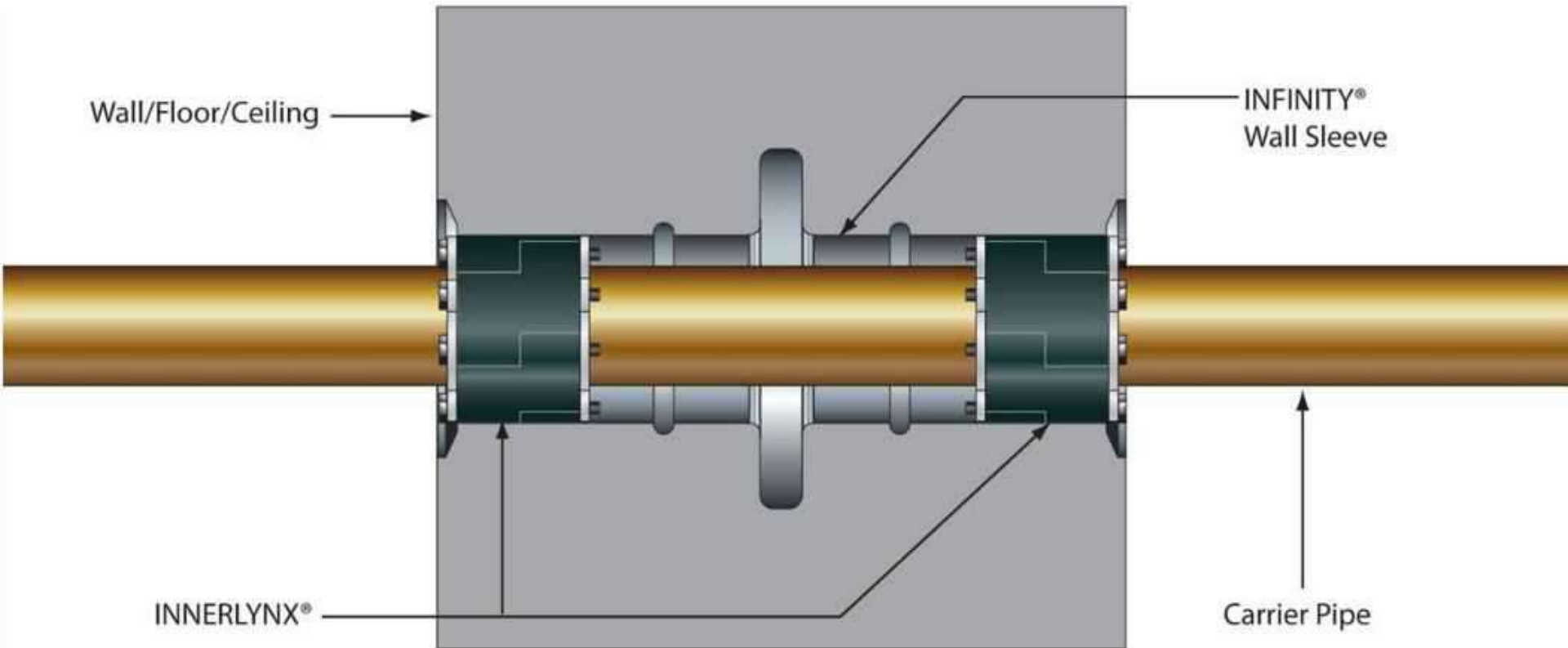
Infinity® Wall Sleeves

Benefits:

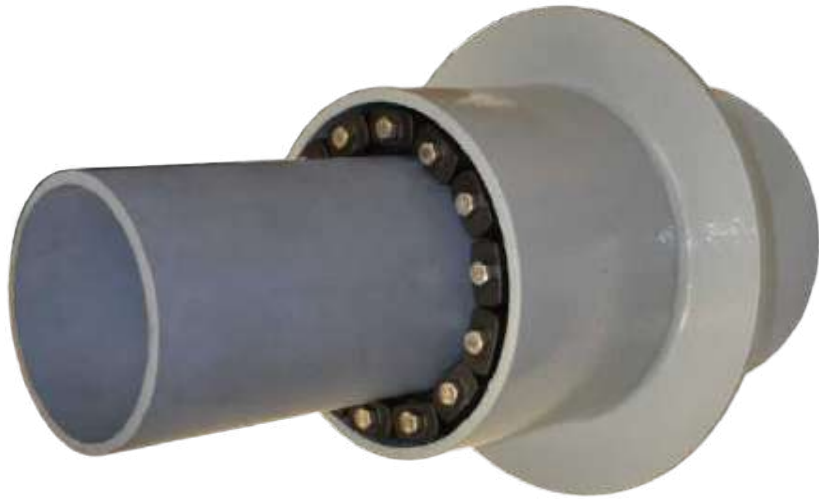


- Constructs a circular penetration through walls, floor & ceilings
- Made of high-density polyethylene (HDPE)
- Available in 16 sizes from 2” to 25”

Infinity® Wall Sleeves



Gal-vo-plast® Wall Sleeves



Steel wall sleeves with proprietary Gal-vo-plast® coating to replace galvanized wall sleeves.



Gal-vo-plast® Wall Sleeves

Benefits:

- Less expensive than galvanized
- More corrosion resistance
- Available in 2" to 120" diameter
- Longer installation life



UBolt-Cote® & Atlas® Pipe Support Function:



Stop crevice corrosion by
eliminating metal-on-metal contact.

UBolt-Cote® & Atlas® Pipe Support

Benefits:



- Unaffected by heat, UV rays, electrolysis or sandblasting
- Shock absorbing
- Ubolt coating available in polyolefin and powder coat
- Atlas® Pads available in half-round 180 and full-round 360



UBolt-Cote® & Atlas® Pipe Support



Raq-Gard

Benefits:



- Eliminates corrosion between pipe and I-beams
- One size fits all
- Lightweight & easy to install
- Chemically resistant
- Fiber reinforced

Inspect-A-Lift®

FUNCTION:



- Crevice is eliminated
- Support is easy to inspect
- Water is kept off the pipe
- Paint is preserved
- Corrosion is eliminated



Inspect-A-Lift®

Benefits:



- No metal-to-metal contact
- Minimum contact points
- Easy to install
- Cost efficient
- Non-corrosive
- Fully adjustable
- Reduces maintenance costs
- Standard sizes fit 2" to 42" diameter pipe

Inspect-A-Lift®



Nustar Line South Texas



Gulf South Pipeline

Safety Spray Shields



Fabricated industrial covers designed to prevent a catastrophe by temporarily containing and detecting hazardous leaks and sprays due to failures at piping connections.

Safety Spray Shields

Safety Spray Shields work by creating a barrier “Shield” between flowing chemicals and the external environment.



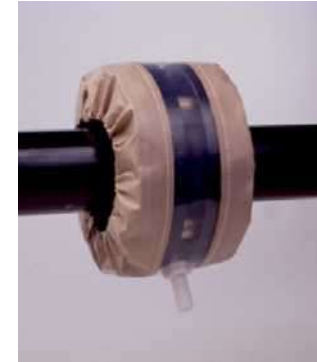
Safety Spray Shields



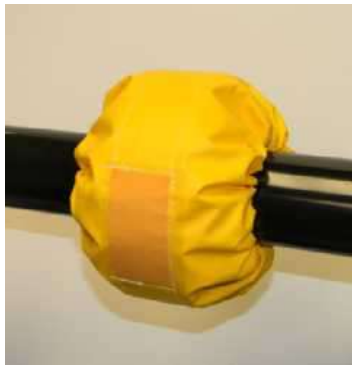
Clear PTFE



PTFE



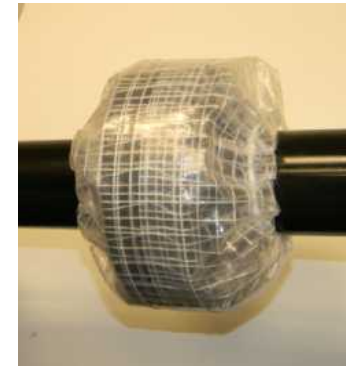
Optional Drain Nipple



PVC



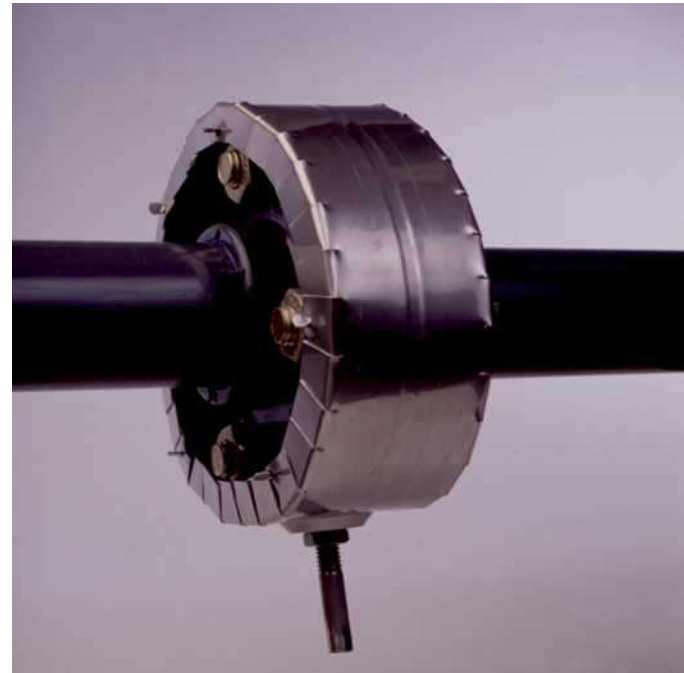
Polypropylene



Polyethylene

Safety Spray Shields

304 & 316 SS Metal – Safety Spray Shields



High Temperature & Pressure Applications

Safety Spray Shields

Arrestor Splash Deflector

- 304 Stainless Steel Construction
- 25 Gauge Sheet Metal
- Multi-layered wire mesh lining
- Quick latch that's adjustable and can be locked.
- 2000 °F Temperature Resistance
- 3500 PSI Pressure Resistance
- UV & Fire Resistance
- Patent Pending



Safety Spray Shields

Spray Shield Varieties



Valve Spray Shields



Expansion Joint
Spray Shields



Fitting Spray Shields

Safety Spray Shields

Evonik Degussa – Mobile, AL



Safety Spray Shields

Flint Hills Refinery – Corpus Christi, TX



Safety Spray Shields

Tate & Lyle – Dayton, OH



Safety Spray Shields

Air Products – Lake Charles, LA



ADVANCE PRODUCTS & SYSTEMS, INC.

Complete pipeline solutions to
protect your equipment, personnel
and investment.



TECNOLOGÍA TOTAL
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