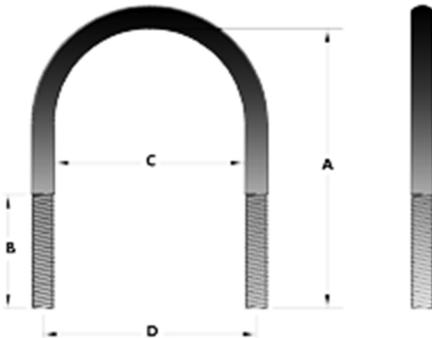


# StepKo AssureaKote™ Coated U-Bolt

StepKo Products AssureaKote™ coating technology is a special proprietary coating that has superior temperature and physical properties when applied to various types of u-bolts. The AssureaKote™ coating provides excellent protection from corrosion by preventing metal to metal contact between the u-bolt and piping. The AssureaKote™ coated u-bolt is very versatile and can be used in many industries including but not limited to pipelines, refineries, chemical plants, offshore platform, rigs, paper mills and marine applications. TD Warehouse keeps a wide variety of sizes of AssureaKote™ u-bolts in stock for immediate delivery in standardized box quantities. All the AssureaKote™ u-bolts in sizes 8" and below are packaged in a strong durable poly bag with the u-bolt, four nuts and rubber pad for easy application in the field, eliminating the removal of the nuts from the u-bolt before applying to the piping and eliminating unneeded labor time.

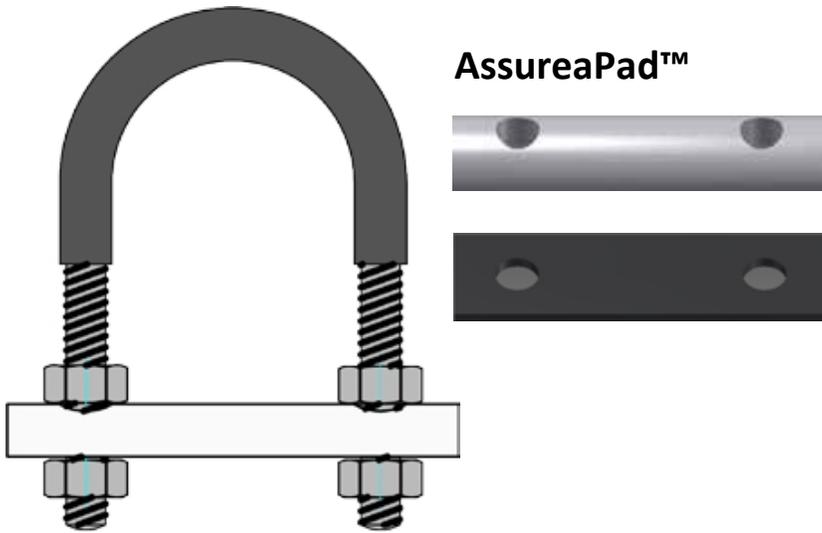
When the AssureaKote™ is coupled with the AssureaPad™, a special blended thermal plastic half-round pad, you can reduce the possibility of crevice corrosion or water formation under the pipe and feel secure that your piping is protected.



Nominal Pipe Size	Bolt Stock OD	U-Bolt Height "A"	Thread Length "B"	Inside Gap "C"	Leg Center "D"	Box Quantity
1"	1/4"	3-7/16"	2-3/8"	1-3/8"	1-5/8"	100 p/Box
1"	3/8"	3-7/16"	2-3/8"	1-3/8"	1-3/4"	100 p/Box
1-1/2"	3/8"	4"	2-1/2"	2"	2-3/8"	100 p/Box
2"	3/8"	4-1/2"	2-1/2"	2-7/16"	2-13/16"	100 p/Box
3"	1/2"	5-13/16"	3"	3-9/16"	4-1/16"	50 p/Box
4"	1/2"	6-13/16"	3"	4-9/16"	5-1/16"	50 p/Box
6"	5/8"	9-1/2"	3-3/4"	6-3/4"	7-3/8"	25 p/Box
8"	5/8"	11-1/2"	3-3/4"	8-3/4"	9-3/8"	15 p/Box
10"	3/4"	13-13/16"	4"	10-7/8"	11-5/8"	5 p/Box
12"	7/8"	16-13/16"	4-1/4"	12-7/8"	13-3/4"	5 p/Box
14"	7/8"	17-5/16"	4-1/4"	14-1/8"	15"	On Request
16"	7/8"	19-5/16"	4-1/4"	14-1/8"	17"	On Request
18"	1"	21-11/16"	4-3/4"	18-1/8"	19-1/8"	On Request
20"	1"	23-11/16"	4-3/4"	20-1/8"	21-1/8"	On Request
24"	1"	27-11/16"	4-3/4"	24-1/8"	25-1/8"	On Request
30"	1"	33-11/16"	4-3/4"	30-1/8"	31-1/8"	On Request
36"	1"	39-11/16"	4-3/4"	36-1/8"	37-1/8"	On Request



# StepKo AssureaPad™ Half-Round Pad



Properties	Value	Standard
<b>Physical</b>		
Tensile Strength	2900 psi min. (19.9N/mm <sup>2</sup> )	ASTM D638
Ultimate Elongation	350% min.	ASTM D638
Density	1.24 +/- .2 gm/cm <sup>3</sup>	ASTM D792
Durometer	92 +/-2 Shore A / 36+/-2 Shore D	ASTM D2240
Tear Strength	470 pli min	ASTM D638
Water Absorption	0.236% Average / 0.264% Max	ASTM D570-98
<b>Thermal</b>		
Heat Age	500Hrs @ 120°C No Cracking	ASTM D2671
Aged Tensile	3639 psi (25 N/mm <sup>2</sup> )	ASTM D638
Aged Elongation	300%	ASTM D638
Low Temperature Flexibility	4Hrs @ -40°C No Cracking	ASTM 2671-13
<b>Electrical</b>		
Dielectric Strength	490 V/mil min. (19 KV/mm Min.)	ASTM D149
Volume Resistivity	5.55x10 <sup>10</sup> Ohm*cm	ASTM D257-14
Dielectric Constant	0.72728 Average @ 20 Hz	ASTM D150-11
	0.08100 Average @ 500 Hz	ASTM D150-11

## StepKo Coated U-Bolt Advantages

StepKo Products stocks hot-dipped galvanized figure 137 long tangent u-bolts with AssureaKote™ and without AssureaKote™.

AssureaKote™ u-bolt is packaged with four nuts and a neoprene u-bolt pad.

StepKo Products also has Stainless Steel, Electro-Plated Galvanized, Teflon-coated or Xylan-coated u-bolts available upon request.



# StepKo Flange Isolation Gasket Kits

The StepKo Products Flange Isolation Gasket Kits are designed to maintain the integrity and reliability of the pipeline and piping system through safety and corrosion protection. Flange Isolation Gasket Kits provide both an effective seal and reliable electrical isolation of flanges. By eliminating metal-to-metal contact, static current is halted to prevent corrosion and aid in the Cathodic Protection of the piping system.

Constructed of high-quality materials that have a high dielectric constant and low water absorption, our Flange Isolation Gasket Kits are available in various configurations to meet every possible need.

We offer Flange Isolation Gasket Kits in all sizes, ranging from ½” to 144”, in all ANSI and API classes. Custom sizes are also available upon request.

## Type E

This style kit contains a full-face gasket that has the same outside diameter as the flanges. This style gasket will prevent foreign material from collecting and creating a bridge, thus shorting the cathodic isolation. Type E gaskets are available in phenolic, neoprene-faced phenolic and high-temperature materials.



## Type F

This gasket will fit only the raised face surface of the flanges. The outside diameter of the gasket is slightly less than the inside diameter of the bolt circle. This gasket can be used on both raised face and full face flanges.



It is recommended that the flanges be wrapped with Flange Band Protectors to prevent foreign material from collecting and creating a bridge, thus shorting out the isolation. Type F gaskets are available in the same material as Type E.

## Type D

Type D gaskets are designed to fit into the ring groove of RTJ (ring type joint) flanges. We also offer BX gaskets. Both are available in grade CE phenolic.



## Warrior

This gasket has a sealing element on each side and is available in both Type E and Type F styles. The sealing element materials are nitrile, viton or Teflon. Gasket materials available are phenolic and G-10.



# StepKo Flange Isolation Gasket Kits

## Gaskets

Material	Dielectric Strength	Water Absorption	Compressive Strength	Maximum Temperature	
				°F	°C
Plain Faced Phenolic	500 vpm	1.5%	25,000 psi	225°F	107°C
Neoprene Faced Phenolic	500 vpm	1.5%	25,000 psi	175°F	79°C
G-10	550 vpm	.10%	50,000 psi	285°F	141°C
Special & High Temperature: Available upon request					



## Sleeves



Material	Dielectric Strength	Water Absorption	Maximum Temperature	
			°F	°C
Mylar	4000 vpm	.80%	300°F	149°C
Integral Minlon	1200 vpm	.22%	200°F	93°C
Polyethylene	400 vpm	.01%	105°F	41°C
Phenolic	400 vpm	2%	225°F	107°C
G-10	550 vpm	.10%	285°F	141°C
Nomex	400 vpm	n/a	450°F	232°C

## Washers

Material	Dielectric Strength	Water Absorption	Compressive Strength	Maximum Temperature	
				°F	°C
Phenolic	400 vpm	1.1%	25,000 psi	225°F	107°C
G-10	550 vpm	.10%	50,000 psi	285°F	141°C
Special & High Temperature: Available upon request					



# StepKo Heat Shrink Wrap-Around Sleeve

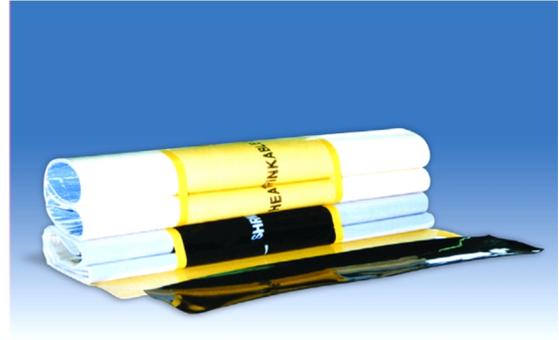
## SHAIC HS-340

**SHAIC HS-340** is a heat-shrinkable wraparound sleeve designed for corrosion protection of field-welded joints of plastic coated steel pipelines. It has a thick crosslinked polyethylene backing coated with butyl rubber based mastic sealant or hot melt adhesive. Hot Melt or Mastic shall depend on project requirements. When heated the backing layer shrinks and the sealant flows and forms a reliable corrosion protection seal onto metal and adjacent coating surfaces.

Cut Sleeve is normally supplied with separate Patch Closure, which is coated with a high shear-strength adhesive; however, there are different types and sizes to comply with individual requirements. It is supplied in bulk rolls as well, and has super-heavy duty, heavy duty and regular thickness.

### Long-term Corrosion Protection

After heating, formed corrosion protection seal and strong backing provides an outstanding waterproofing effect and high chemical resistance. SHAIC HS-340 resists impact, abrasion and ultraviolet light. The sleeves remain free from penetrating pinholes due to a multi-layered structure, and have excellent resistance against cathodic disbondment and dielectric breakdown.



### Simple Application

No special skills or equipment are needed. Sleeve is installed in minutes with a propane torch. Wrap the sleeve around foreign matters-free, preheated surface. Fix the center of preheated patch closure on the overlapped end and start heating the sleeve in the center. Move the torch around pipe circumferentially to heat the left and the right half of sleeve. Finish by heating vertically over the entire sleeve to ensure a uniform adhesion and by using a roller or gloved hands to remove wrinkles and air.

### Bulk Rolls

SHAIC HS-340 is supplied in bulk rolls and is cut in the field for any size pipe. No need to drive to warehouse. Reduces inventories and saves the cost and time.



# StepKo Heat Shrink Tube

## SHAIC HT-350

**SHAIC HT-350** is a heat shrinkable tube designed for corrosion protection of field-welded joints of plastic coated steel pipelines. It has a thick crosslinked polyethylene backing coated with butyl rubber based mastic sealant or hot melt adhesive. When heated the backing layer shrinks and the sealant flows and forms a reliable corrosion protection seal onto metal and adjacent coating surfaces.

### Tubular Configuration

SHAIC HT-350 needs no patch closure and should be slid over the pipe prior to welding the joint. Its unique design reduces time for handling, positioning and installation of Patch Closure. This minimizes application time and labor costs.

### Long-term Corrosion Protection

After heating, formed corrosion protection seal and strong backing provides an outstanding waterproofing effect and high chemical resistance. SHAIC HS-340 resists impact, abrasion and ultraviolet light. The sleeves remain free from penetrating pinholes due to a multi-layered structure, and have excellent resistance against cathodic disbondment and dielectric breakdown.



### Simple Application

No special skills, equipment, patch closure nor primer are needed. Slide the tube over the pipe before welding the joint. Position the tube over welded, foreign-matters free and preheated joint. Remove the release liner and temporarily insert spacing pads between the pipe and the tube at both upper edges of the tube to keep it away from the pipe and to facilitate the application. Remove spacing pad when the tube is shrunk at the center and move torch circumferentially to heat the left and the right half of the tube. Finish off by heating over the entire tube vertically to ensure a uniform adhesion and by using a roller or gloved hands to remove wrinkles and air.

