

PRODUCT DATA SHEET

HBPE80 Heat Shrinkable Wrap-around

3-layer Girth Weld Field Joint Coatings

Description

HBPE80 Heat shrinkable wrap-around sleeve is designed for corrosion protection of girth weld joint buried steel pipeline, especially for 3LPE/DFBE/FBE/CTE/HDPE factory coating pipeline.

- Construction:** Three-Layer system
- First layer:** Liquid epoxy primer RP09, solvent-free two-component
- Second layer:** High shear strength hot-melt co-polymer adhesive
- Third layer:** Radiation cross-linked, high density polyethylene backing, backing with SIP (Shrink Indicator Pattern)



Features & Benefits

- ▶ Excellent multi-functional adhesive allow for lower installation pre-heat temperature and super bonding to PE/DFBE/FBE/CTE/HDPE offer fully resistant to shear forces induced by soil and thermal movements
- ▶ Superior cathodic disbondment and hot water immersion resistance offers the optimum barrier long term protection against corrosion
- ▶ Saves time and cost by lower pre-heat temperature, wet epoxy primer application
- ▶ Embossed backing provides a Shrink Indicator Pattern for application of heat, ensures correct application heating
- ▶ Fully resistance to shear force
- ▶ Completely reform the 3LPE coated pipes

Selection Criteria

	HBPE80
Standard Reference	EN 12068 Class C 80HT UV, NACE, ISO 21809-3
Compatible line coatings	PE/FBE/DFBE/CTE/HDPE
Soil stress restriction	None
Max. operating temperature	85°C
Pre-heat temperature	60-80°C
Recommended pipe preparation	SA 2½

Ordering Information

HBPE type products are available:

- ▶ As cut piece (pre-cut sleeve with separate closure patch)
- ▶ As a roll (closure patches to be ordered separately)

Select sleeve width that will overlap onto the mill-applied coating by 2 inches (50 mm) minimum on each side of the weld joint

Sleeve width (mm): 16", 18", 20", 24"
Other width (10"-36") are available as per Customer special requirement.

Product thickness (mm)		
Backing (as supplied)	Adhesive (as supplied)	Total thickness (recovered on pipe)
0.9	1	2.2
1	1.1	2.4
1	1.3	2.6
1.2	1.4	3.0
1.2	1.6	3.2
1.5	1.5	3.5

Other sleeve thickness from 1.4 to 3.5mm are available as per requirement.

Standard Ordering Options

Cut piece (Pre-Cut sleeve with separate closure patch)		*Roll form (closure patches to be ordered separately)	
Example:	HBPE80-12 X18/2.4	Example:	HBPE80-18 X100/2.4-RL
80	Operating Temperature 80°C	80	Operating Temperature 80°C
12	Outside pipe diameter in inch	18	Roll width in inch
18	Sleeve width in inch	100	Roll length in feet
2.4	Sleeve thickness in mm	2.4	Roll thickness in mm
		-RL	Supplied in rolls

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size and product construction, refer installation instruction.
HBPE type products are installed with RP09 Epoxy primer, epoxy primers are ordered separately. For more ordering information please refer product data sheet.

Closure Patch

Example: CP-4X18

4	Closure patch width in inches	4" (100 mm), 6" (150 mm), 8" (200 mm) 10" (250 mm)
18	Closure patch length in inches	16", 18", 20" 24"

Product Properties

PE Backing

Properties	Test Method	Typical Values
Tensile strength	ASTM D-638	23MPa
Elongation	ASTM D-638	620%
Hardness, Shore D	ASTM D-2240	55
Shrink force @ 150°C	ASTM-638	40 psi
Di-electric voltage breakdown	ASTM D-149	35kV/mm
Moisture absorption	ASTM D-570	0.04%

Adhesive

Softening point	ASTM E-28	120°C
Lap shear	EN 12068/ISO21809-3	
@23°C		5N/mm ²
@ 80°C		0.5N/mm ²

Sleeve

Peel to Steel @23°C	EN12068/ISO21809-3	120N/cm
Cathodic disbondment @23°C	EN12068/ISO21809-3, 28 days	< 3mm
@80°C	EN12068/ISO21809-3, 28 days	< 10mm
Hot Water Immersion 120 days @80°C	ASTM D-870	No de-lamination, no blisters or water ingress
Low Temperature Flexibility	ASTM D-2671-C	-25°C
Impact Resistance	EN12068, Class C	15J no holiday
Penetration Resistance @80°C	EN12068, Class C	>0.6mm residual thickness

Note: The typical values in this data sheet are based on lab prepared samples. For project specific requirements please consult with SNI INDIA

Storage: Indoor, clean, dry away from direct sunlight in a cool place below +50°C

Installation: For proper installation and performance please refer our installation instruction

Personnel Qualification: Installation of the HBPE80 coating system should be carried out by SNI INDIA certified personnel



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