

HBPE80 HEAT SHRINKABLE WRAP-AROUND SLEEVE

PRODUCT DATA SHEET

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 RPO9, solventfree two component
Second layer	High shear strength hot-melt co-polymer adhesive
Third layer	Radiation cross-linked, high density polyethylene backing with SIP (Shrink Indicator Pattern)



FEATURES AND 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 conforms and replicate the structure of 3 Layer coated pipe

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 2 ^{1/2}

ORDERING INFORMATION

HBPE80 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 / 1.5	1.2 ~1.5	3.0
1.2 / 1.5	1.4 ~1.6	3.2
1.6	1.7	3.5

Other sleeve thickness from 1.4 to 3.5mm are available as per requirement
The above thickness combinations are minimum & general. For customize thickness, please consult with SNI

STANDARD ORDERING OPTIONS

Cut piece (Pre-Cut sleeve with separate closure patch)		Roll form (closure patches to be ordered separately)	
Example:	HBPE80-12X18/2.4	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

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"

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size & product construction, please consult with SNI Representative and refer installation instruction.

HBPE80 type product is installed with RP09 Epoxy primer. Epoxy primer is ordered separately. For more ordering information please refer product data sheet.

PRODUCT PROPERTIES

PE BACKING

PROPERTY	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
Water Absorption @ 24 Hrs	ASTM D-570	0.04%
Moisture vapour transmission @38 °C and 90% RH	ASTM E-398	0.08 g/24 hrs/100 in ²

ADHESIVE

Softening point	ASTM D - 36 / ASTM E-28	120°C
Lap shear	EN 12068 / ISO 21809-3	
@23°C		5N/mm ²
@80°C		0.5N/mm ²

SLEEVE

Peel to Steel @23°C	EN 12068 / ISO 21809-3	120N/cm
Cathodic disbondment @23°C	EN 12068 / ISO 21809-3, 28 days	< 3mm
@80°C	EN 12068 / ISO 21809-3, 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	EN 12068, Class C	15J no holiday
Indentation Resistance @80°C	EN 12068, 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

PERSONAL QUALIFICATION

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



Please read all information in the general guidelines, product data sheets, guide specifications, and material safety data sheets (MSDS) before applying the material. Published technical data and instructions are subject to change without notice. Contact your local SNI India LLP representative or visit our website for current technical data and instructions.

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