

ProCoat™ H80

PRODUCT DESCRIPTION

ProCoat™ H80 system provides advanced corrosion protection and excellent bonding performance for pipelines operating at temperatures up to 80°C. Engineered with a high-temperature adhesive formulation optimized for force cure epoxy primers, the H80 sleeve achieves superior adhesion to both steel and parent coatings. When applied over a compatible epoxy layer, ProCoat™ H80 system delivers long-term protection comparable to multi-layer factory-applied polyethylene coatings, making it an ideal solution for demanding onshore and offshore pipeline environments.

PRODUCT FEATURES

Advanced High-Temperature Adhesive Technology

- High-shear performance at elevated temperatures.
- Optimized for high-temp epoxy primers.
- Strong bonding to steel and parent coatings.

Efficient, Flexible Installation

- Lower pre-heat for faster application.
- Wet-epoxy installation capability.
- Available in bulk rolls or pre-cut sleeves.

Durable Long-Term Protection

- Seamless barrier for up to 80°C service.
- High resistance to chemicals and abrasion.
- Maintains coating integrity in harsh environments.



High-Temperature Pipeline Joint Protection Sleeve



STANDARD COMPLIANCE

STANDARD	COMPLIANCE
STANDARD NAME	
ISO 21809-3:2016	Compliant*
Field joint coatings - heat-shrinkable materials	
CSA Z245.30:22, 14B-2	Compliant*
Field-applied external coatings for steel pipeline systems	
EN 12068:1998	Compliant*
External organic coatings - tapes and shrinkable materials	
EN 10329:2006	Compliant*
External field joint coatings for steel tubes and fittings	
DIN 30672:2000	Compliant*
Tapes and shrinkable materials for buried/underwater pipelines	
DNV-RP-F102:2021	Compliant*
Pipeline field joint coating and field repair of linepipe coating	
GB/T 23257-2017	Compliant*
Polyethylene coating for buried steel pipeline	
GB/T 51241-2017	Compliant*
Technical code for field joint coatings of pipeline	

* Compliance is limited to the relevant provisions applicable to heat-shrinkable sleeve field joint coating systems and is subject to the approved system configuration, application procedure and project-specific qualification requirements.

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Adhesive

	Unit	Typical Value	Test Method
Softening Point	°C	120	ASTM E28
Lap Shear @ 23°C (steel/steel)	N/mm²	> 3	ISO 21809-3 / EN 12068
Lap Shear @ 23°C (PE/PE)	N/mm²	> 3	ISO 21809-3 / EN 12068
Lap Shear @ 80°C (steel/steel)	N/mm²	> 0.4	ISO 21809-3 / EN 12068
Lap Shear @ 80°C (PE/PE)	N/mm²	> 0.4	ISO 21809-3 / EN 12068

Backing

	Unit	Typical Value	Test Method
Tensile Strength	MPa	23	ASTM D638 / ISO 527
Elongation at Break	%	600	ASTM D638 / ISO 527
Hardness	Shore D	55	ASTM D2240 / ISO 868
Volume Resistivity	Ω·cm	> 10¹⁵	ASTM D257

System Performance

	Unit	Typical Value	Test Method
Peel Strength at 100 mm/min to pipe surface @ 23°C	N/mm	> 5	ISO 21809-3 / EN 12068
Impact Resistance (holiday detection at 5 kV/mm + 5 kV)	J/mm	7	ISO 21809-3 / EN 12068
Indentation Resistance @ 80°C, 10 N/mm²; residual thickness	mm	> 0.6	ISO 21809-3 / EN 12068
Cathodic Disbondment @ 23°C, 28 days	mm	< 5	ISO 21809-3 / EN 12068
Cathodic Disbondment @ 80°C, 28 days	mm	3	CSA Z245.21
Low-Temperature Flexibility @ -25°C	N/A	No separation, tears or cracks	ASTM D2671

Product Thickness

	Unit	Typical Supplied	Test Method
Sleeve Backing Nominal Thickness	mm	> 1.0	
Adhesive Nominal Thickness	mm	> 1.5	



Figure 1. Peel Adhesion

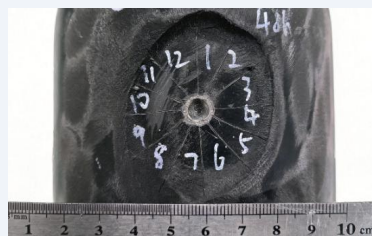


Figure 2. Cathodic Disbondment

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