

MIS-65 / MIS-100

Wraparound Sleeve for Offshore Heated Infill Systems

For more than 35 years, Canusa-CPS has been a leading developer and manufacturer of specialty pipeline coatings for the sealing and corrosion protection of pipeline joints and other substrates. Canusa-CPS high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate many specific project applications.

Product Description

Corrosion Protection of Girth-Welds under heated infill systems on offshore service environments

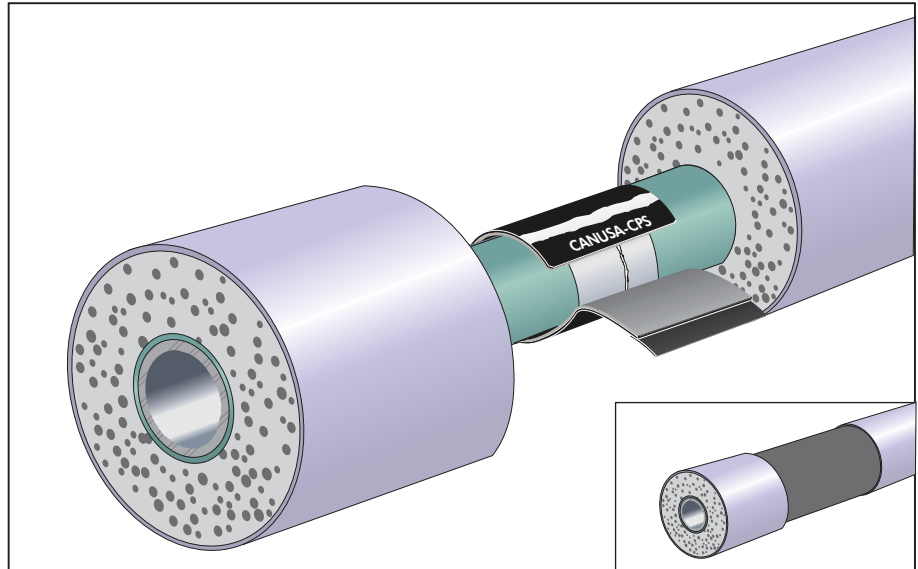
MIS-65 and MIS-100 heat-shrinkable sleeves provide superior corrosion protection and effective long-term adhesion to pipelines operating offshore at temperatures up to 100°C (212°F). MIS-65 and MIS-100 sleeves are specifically engineered for use in combination with hot marine mastic pour, polyurethane foam or other infill systems. MIS-65 and MIS-100 sleeves are resistant to the severe conditions of hot mastic pour operations and maintain their full set of anti-corrosion properties. MIS-65 and MIS-100 are fully compatible with a wide range of pipeline coatings, including PP, FBE, PE, Coal Tar and Tape.

Features & Benefits

Flexible & Time Efficient Installation

MIS-65 and MIS-100 sleeves have a patented one-piece construction that incorporates a pre-attached closure seal. This contributes to a rapid and consistent field installation procedure. Without any requirements for the wrapping of multiple layers, the field installation is fast, efficient and in-line with timing requirements of offshore laybarge operations. The crosslinked high-density polyethylene (HDPE) backing is designed to provide a rapid and consistent shrink response when installed with propane torch equipment. MIS-65 and MIS-100 sleeves can be conveniently wrapped and installed in low ambient temperatures due to its excellent low temperature flexibility attributes.

CANUSA-CPS is registered to **ISO 9001:2008**.



Unique Adhesive Technology

Canusa's unique (open time) adhesive technology allows for lower installation preheat temperatures, superior adhesion to a wide range of mainline pipe coatings and consistent performance in rugged offshore environments. The adhesive has been formulated to provide long-term adhesion and excellent cathodic disbondment resistance properties.






Hot Mastic & Foam Infill Compatibility

MIS-65 and MIS-100 sleeves can be used with hot mastic pour, polyurethane foam or other infill systems to provide effective long-term corrosion protection. MIS-65 and MIS-100 sleeves are resistant to hot mastic pour systems and meet the requirements of the Drum Skin Test for high temperature effects.




Maximize Cost Savings

Precious time is saved in several areas when using MIS-65 and MIS-100 sleeves on laybarge operations in combination with infill systems; lower preheat temperature equates to lower installation times, single wrap configuration eliminates the requirements for multiple wrapping, and the pre-attached closure seal means less time is used handling, positioning and installing the joint protection materials. The overall system minimizes installation time and labour costs while promoting high production rates.

Applications

-  **Offshore Pipelines**
-  **Oil & Gas**
-  **Infill Systems**
-  **Reel, J & S Lay**
-  **Girth-Weld Joints**

Configurations

-  **Wrapid Sleeve™**
-  **2-Layer**
-  **Standard Shrink**

Pipe Sizes

-  **55 - 1220 (2" - 48")**



Temperature Range

-  **up to 100°C (212°F)**

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Product Selection Guide

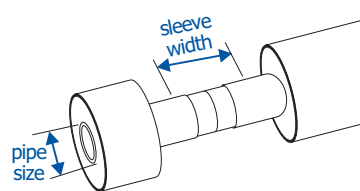
Sleeve Operating Characteristics	Celsius	Fahrenheit	MIS-65	MIS-100
	Choose your sleeve based on Operating Temperature and Characteristics listed below.	105°	221°	
 Pipeline Operating Temperature  Pre-heat Temperature	90°	194°		
	75°	167°		
	60°	140°		
	45°	113°		
	30°	86°		
	Minimum Installation Temperature		65°C (150°F)	90°C (194°F)
	Maximum Operating Temperature		65°C (149°F)	100°C (212°F)
	Resistance to Hot Infill Pour		excellent	excellent
	Compatibility to Hot Marine Mastic		excellent	excellent
	Compatibility to Polyurethane Foam		excellent	excellent
	Main Line Coating Compatibility		Bit, Tape, CTE, FBE, PE	PE, PP, FBE, CTE, AE, BE, Tape
	Recommended Surface Preparation		St 3 (min) SA 2½(rec)	St 3 (min) SA 2½(rec)

Typical Product Properties

	Test Standard	Unit	MIS-65	MIS-100
Adhesive	Softening point	ASTM E28	102 (216)	124 (255)
	Lap shear @ 23°C	DIN 30 672	40 (58)	52 (75)
Backing	Tensile strength	ASTM D638	24 (3480)	24 (3480)
	Elongation	ASTM D638	600	600
	Heat Aging - Elongation @ Break	ASTM D638	450	450
	Heat Shock - 4hrs @ 250°C	ASTM D2671	pass	pass
	Hardness	ASTM D2240	Shore D 57	57
	Abrasion resistance	ASTM D1044	6	6
	Volume Resistivity	ASTM D257	10 ¹⁸	10 ¹⁸
Sleeve	Dielectric Strength	ASTM D149	35	35
	Impact	DIN 30 672	> 8 J	> 8 J
	Indentation Resistance	DIN 30 672	no holiday @ 10kV	no holiday @ 10kV
	Peel Strength to Steel, PE, PP	ASTM D1000	80 (46)	115 (66)
	Peel Strength @ 23°C	DIN 30672	65 (37)	90 (51)
	Cathodic Disbondment @ 23°C	ASTM G8	mm rad < 7	< 7
	Cathodic Disbondment @ 65°C	ASTM G42, 48hrs	mm rad < 7	< 7
	Hot Water Immersion	ASTM D870	Visual pass	pass
	Water Absorption	ASTM D570	0.05	0.05
	Low Temp. Flexibility	ASTM D2671-C	°C (°F) -14 (7)	-15 (5)
Resistance to Infill	Drum Skin Test	D024 A P50-F SD004	Visual no melt or sag	no melt or sag
	Fully Recovered Thickness		1.8 (73)	1.8 (73)
	Visual Inspection	pipe 24", mold 26", mastic @ 200°C	Visual pass, no holidays @ 10kV	pass, no holidays @ 10kV
	Change in Peel Strength	ASTM D1000	% < 10%	< 10%
Change in Tensile Strength	ASTM D638	% < 15%	< 15%	
Change in Elongation	ASTM D638	% < 15%	< 15%	

How To Order:

Dimensions & Ordering Info	MIS-65 315-450 BK	Standard MIS-65 and MIS-100 Options	
	Colour ▶	BK- Black	
	Sleeve Width ▶	300, 450, 600, 700mm (12, 18, 24, 28")	
	Pipe Size ▶	55 - 1220mm (2 - 48")	
	Maximum Operating Temperature ▶	MIS-65 - 65°C (149°F)	MIS-100 - 100°C (212°F)
	Adhesive (thickness as supplied) ▶	0.88mm (35 mils)	
	Backing (thickness as supplied) ▶	0.63mm (25mils)	
	Backing (thickness fully recovered) ▶	0.80mm (32mils)	
Application ▶	Heated Infill Systems		



Min. Sleeve Width =
Bare Steel Dimension + 50 mm (2")
on each side of the pipe joint.

The above represent standard ordering options. Consult your Canusa representative for any unique project requirements or CanusaWrap™ configuration.



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