

Pipeline Repair Products

Mainline coating repair products for corrosion protection

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

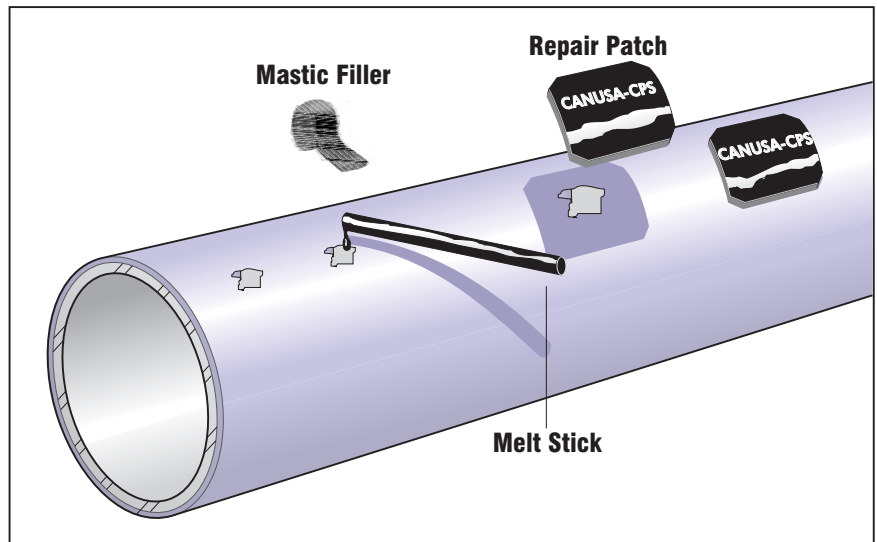
Canusa's Pipeline Repair Products are used to add corrosion protection and/or fill voids in damaged coatings. A full line of products provides the flexibility to make a variety of repairs to mainline coatings, ranging from minor coating damage to holidays and exposed steel.

Features & Benefits

All of Canusa's Pipeline Repair Products offer flexibility of installation, exhibit excellent adhesion to steel and are compatible with common pipeline coatings. These products also remain permanently flexible and provide superior resistance to moisture infiltration, resulting in a sound corrosion protection layer.

The Coating Repair Patch (CRP)

CRP consists of an irradiated, cross-linked polyolefin sheet coated with a heat-activated adhesive. It is designed specifically for sealing and protection of damaged pipeline coatings up to 150mm x 150mm in size. The patch can be installed quickly with no special tools required. The installed patch provides a barrier to moisture and corrosion and is resistant to abrasion and shear forces during pipeline installation and while in-service.



Melt Sticks (MS)

Melt Sticks are heat-activated adhesives supplied as a rod for ease of application. They are ideal for small coating repairs ranging from superficial damage to holidays and cracks up to 10mm x 10mm. Melt sticks may also be used as a filler material below Coating Repair Patches.

Mastic Filler (MF)

Mastic Filler is used to fill larger voids and deep crevices in damaged coatings prior to the application of Canusa Repair Patches.

Note: For damage greater than 150mm x 150mm, a new sleeve is recommended.

Applications



Oil & Gas



Water Pipelines



Repair & Rehab

Configurations



Patch



Melt Stick



Mastic Filler



Epoxy

Pipe Sizes



All Sizes

Temperature Range



up to 100°C (212°F)

The product selection chart shown here is intended as a guide for standard products. Consult your Canusa representative for specific projects or unique applications.

Pipeline Repair Products

Product Selection Guide

Pipeline Operating Characteristics	Celsius	Fahrenheit	CRPO	CRPN	CRP65	CRP-PE
	125°	257°				
110°	230°					
90°	194°					
70°	158°					
50°	122°					
30°	86°					
Pipeline Operating Temp.		°C (°F)	50 (122)	60 (140)	65 (150)	100 (212)
Minimum Installation Temp.		°C (°F)	75 (167)	80 (176)	90 (195)	>125 (257)
Resistance to Circumferential Forces			good	good	excellent	excellent
Resistance to Soil Stress			good	good	excellent	excellent
Resistance to Axial Pipe Movement			good	good	excellent	excellent
Mainline Coating Compatibility			PE, PP, PU, FBE, CT, Bit	PE, PP, PU, FBE, CT, Bit	PE, FBE, PP, HPCC	3LPE, FBE

Product Properties

Adhesive	Test Standard	Unit	CRPO	CRPN	CRP65	CRP-PE
Softening point	ASTM E28	°C (°F)	102 (216)	124 (255)	94 (201)	>135 (275)
Lap shear (@23°C)	DIN 30 672	N/cm ² (psi)	40 (58)	52 (75)	245 (350)	245 (350)
Backing						
Specific gravity	ASTM D792		0.93	0.93	0.93	0.94
Tensile strength	ASTM D638	MPa (psi)	24 (3480)	24 (3480)	24 (3480)	28 (4060)
Elongation	ASTM D638	%	700	700	700	500
Hardness	ASTM D2240	Shore D	48	48	48	52
Abrasion resistance	ASTM D1044	mg	35	35	35	35
Volume Resistivity	ASTM D257	ohm-cm	10 ¹⁷	10 ¹⁷	10 ¹⁷	2.5x10 ¹⁸
Dielectric Voltage Brkdwn	ASTM D149	kV/mm	27	27	27	39
Patch						
Impact	DIN 30 672	class C	pass	pass	pass	pass
Indentation	DIN 30 672	class C	pass	pass	pass	pass
Peel to PE or Steel (@23°C)	ASTM D1000	N/cm (pli)	80 (46)	115 (66)	120 (70)	>150 (260)
Peel to PE or Steel (@23°C)	DIN 30 672 class C50	N/cm (pli)	65 (37)	90 (51)	86 (50)	>130 (75)
Cathodic Disbondment	ASTM G8	mm rad	8	17	13	< 8
Water Absorption	ASTM D570	%	0.05	0.05	0.05	0.05
Low Temp. Flexibility	ASTM D2671-C	°C (°F)	-14 (7)	-15 (5)	-26 (-18)	-14 (7)

How To Order:

CRPN - B 150-30 BK Colour ▶ Length of Roll ▶ Width of Roll ▶ Configuration ▶ Adhesive (thickness as supplied) ▶ Backing (thickness as supplied) ▶ Product Designation ▶	Canusa Repair Patch	MS-1F 25-300 Length ▶ Diameter ▶ Adhesive ▶ Product Designation ▶	Melt Stick 300 mm (12") 25 mm (1") 1F- (hot melt) MS - Melt Stick
	BK-Black		
	15m, 30m (50 ft, 100 ft)		
	150 (6") - 450 (18")		
F124-B 50-3-7.5 Length ▶ Thickness ▶ Width ▶ Configuration ▶ Product Designation ▶	B-Bulk Roll N - 0.63 mm (25 mils) 65 - 0.63 mm (25 mils) O - 1.1 mm (45 mils) 0.80 mm (32 mils) CRP-Coating Repair Patch	Mastic Filler 3.0 m (10') 7.5 m (25') 15 m (50') 3 mm (1/8") 50 mm (2") B - Bulk Roll Mastic Filler	

*NOTE : Both Melt Stick & Mastic Filler are only to be used on pipelines with an operating temperature ≤ 80°C



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Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the installation guide when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this installation guide is to be used as a guide and is subject to change without notice. This installation guide supersedes all previous installation guides on this product. E&OE