

DDX™

Advanced girth-weld protection for pipes used in directionally drilled applications

The DDX™ - Directional Drilling Kit is a PE mesh-reinforced high performance system designed to protect welded joints on PP, PE and FBE coated pipelines in directional drilling applications. This 3-layer system is the most recent evolution of Canusa's leading edge joint coating technology.

Multi-Layers of Protection

- Force-cured liquid epoxy applied to steel for maximum corrosion protection
- Primary sleeve composed of high shear strength adhesive, an HDPE mesh-reinforced heat shrinkable backing, and a pre-attached closure patch
- Sacrificial sleeve incorporated to protect the leading edge of the underlying primary sleeve during pull-through operation

Superior Gouge and Abrasion Resistance

- Designed to mitigate the effect of forces associated with directional drilling
- Highly resistant to the effect of soil stresses and pipe movements

Excellent Performance with Maximum Productivity

- Uses the most advanced adhesive technology in the industry, allowing for extremely low installation temperatures and a very simple application
- This breakthrough technology bonds directly to the factory-applied coating with almost no preheat required on this critical area
- Maximizes productivity and improves installation quality and process control

Force Cured Epoxy Technology

- Uses our force-cured epoxy technology to guarantee the thickness and performance of this critical corrosion protection layer
- Epoxy is applied to the steel and seals the FBE toe, eliminating any of the known long term adhesion issues associated with application of epoxy onto the mainline coating



Applications



Oil & Gas



Water Pipelines



Directional Drilling



Girth-Weld Joints



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Sleeve Operating Characteristics	Test Method	Typical Values
Pipeline Operating Temp.		Up to 70°C (158°F)
Minimum Installation Temp.		70°C (158°F)*
Main Line Coating Compatibility		PE, PP & FBE
Adhesive Properties		
Softening Point	ASTM E28	100°C
Lap Shear @ 23°C	EN12068	> 250 N/cm ²
Lap Shear @ 60°C	EN12068	> 35 N/cm ²
Backing Properties		
Tensile Strength	ASTM D638	22 MPa
Elongation	ASTM D638	600%
Hardness	ASTM D2240	55 Shore D
Volume Resistivity	ASTM D257	10 ¹⁷ ohm-cm
Abrasion Resistance	ASTM D4060	6 mg
Bursting Strength	DIN 30672	> 2200 N
Sleeve Properties		
Adhesion Strength @ 23°C	EN 12068	> 125 N/cm
Adhesion Strength @ 60°C	EN 12068	> 20 N/cm
Impact Resistance	EN 12068	> 30 J
Indentation Resistance	EN 12068	Pass
Cathodic Disbondment @ 23°C, 28 days	EN 12068	< 3 mm rad
Cathodic Disbondment @ 65°C, 48 hours	EN 12068	< 3 mm rad
Microbiological Resistance	ASTM G21	Pass
Soil Stress Resistance	EN 489:2009	Pass
Gouge Resistance [†]	CSA Z245.21	0.5 mm
Low Temp. Flexibility	ASTM D2671-C	> -32°C
Total System Thickness	Supplied	Typical Applied
Standard Product	2.6 mm	3.0 mm
(Custom project thickness available. Consult with your local Canusa Representative.)		

* Indicated minimum installation temperature is for typical 3-layer systems. Please refer to the appropriate DDX install guide for the minimum installation temperature of a typical 2-layer system.

† Average gouge depth. Test method modified for field-applied 2-layer and 3-layer PE coating systems.

Since 1967, 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.

The product information shown here is intended as a guide for standard products.

Consult your Canusa representative for specific projects or unique applications.



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Canusa-CPS is registered to ISO 9001:2008

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the product data sheet 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 data sheet is to be used as a guide and is subject to change without notice. This data sheet supersedes all previous data sheets on this product. E&OE

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