



## TBK-VE-XL

Visco-Elastic corrosion and mechanical protection system for pipeline field joints during horizontal directional drilling.

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 TBK-VE-XL Directional Drilling Kit is a patented, high performance and easy to apply system designed to provide corrosion and mechanical protection to girth weld joints on polyethylene, polypropylene and FBE coated pipelines used in horizontal directional drill installations or areas where severe backfill conditions are present. The system consists of two components: Wrapid Bond™, a visco-elastic coating which provides corrosion protection at the field joint; and Wrapid Coat™ XL, a moisture curable polyurethane impregnated fibreglass protective outer wrap. The system provides effective protection against abrasion and wear forces that occur during the pull-through operation. The system is fully compatible with cathodic protection systems, resists cathodic disbondment and is designed for a wide range of operating temperatures.

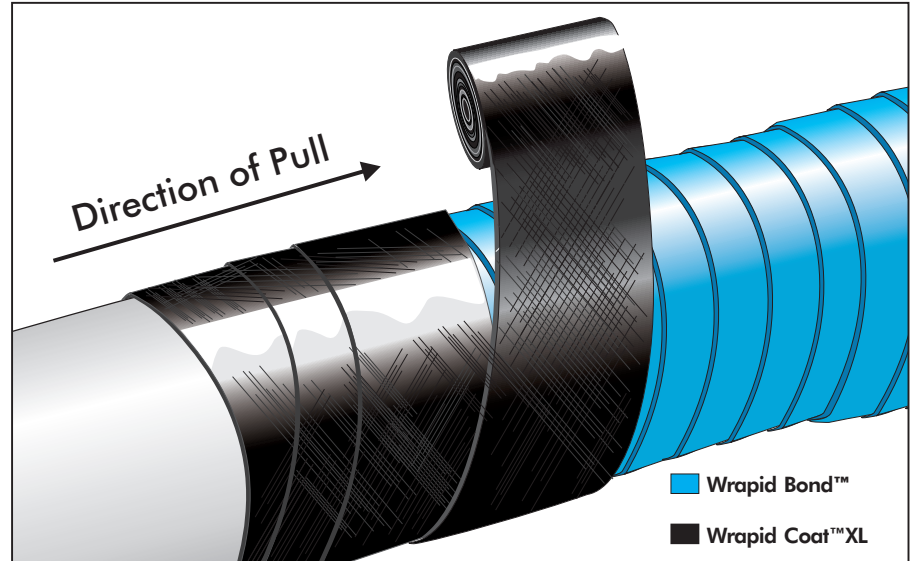
### Features & Benefits

#### Long Term Protection

Canusa's TBK-VE-XL Directional Drilling Kit provides superior corrosion protection because of the inherent properties of the visco-elastic coating coupled with a high performance hard shell outer wrap. The result is effective, long term protection against corrosion and mechanical damage.

#### Superior Mechanical Performance

Canusa's TBK-VE-XL Directional Drilling Kit utilizes a moisture curable fibreglass outer wrap as mechanical protection. This outer wrap provides excellent tensile strength and hardness with resistance to impact, indentation and



abrasion. The resulting system is tough yet has a low profile which is particularly important in directional drilling applications.

#### Convenience

The visco-elastic corrosion coating is simply wrapped around the pipe at the field joint and adheres with light tension or pressure. Minimal surface preparation and no special tools are required. The moisture curable fibreglass is activated by opening the heat sealed foil pouch and exposing the resin pre-impregnated fibreglass roll to water, either by pouring water into the pouch, submerging the roll in water or misting water onto the material as it is being wrapped around the pipe. The system is finished with a compression film to consolidate the wraps and cures quickly into a cast-like material. All materials are provided in a convenient ready-to-use kit which minimizes installation time and labor costs while promoting high production rates.

#### Coat and Bury or Bore in Under 1 hour

Given the minimal surface preparation, no special pre-heating and no cooling time, this system can be installed on 2"-12" diameter pipes in under 10 minutes and cured in less than 30 minutes. Larger pipe diameters may take slightly longer to install. This means that a typical system can be installed, cured and ready to move in under 1 hour, versus other systems which may require 24 hours before moving.

### Applications



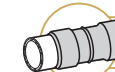
Oil & Gas



Water Pipelines



Directional Drilling



Girth-Weld Joints

### Configurations



Multi-Layer



Multi-Product Kit



Wrapid Bond™



Wrapid Coat™ XL

### Pipe Sizes



55-1520 (2"-60")

### Temperature Range



Up to 75°C (167°F)

## Product Selection Guide

<b>Sleeve Operating Characteristics</b>	<b>Pipeline Operating Temperature</b>	Celsius	Fahrenheit	<b>Wrapid Bond™ with Wrapid Coat™XL</b>
		110°	230°	
		90°	194°	
		70°	158°	
		50°	122°	
		30°	86°	
Maximum Pipeline Operating Temperature <span style="color: red;">■</span> °C (°F)				75 (167)
Resistance to Circumferential Forces				Excellent
Resistance to Soil Stress				Excellent
Resistance to Axial Pipe Movement				Excellent
Main Line Coating Compatibility				PE, PP, FBE, PU, Coal tar, Bitumen

## Typical Product Properties

Wrapid Bond™		
Property	Test Method	Value
Thickness	Measured	> 1.8mm
Density	ASTM D792	1.1-1.3 g/cm <sup>3</sup>
Impact Resistance*	EN 12068	15J (min.)
Indentation Resistance*	EN 12068	0.60 mm remaining (pass) (min.)
Peel Strength*	EN 12068	>0.5 N/mm Cohesive failure
Lap Shear Strength	EN 12068	0.02 N/mm <sup>2</sup>
Glass Transition Temperature	ASTM D3418	< -20°C
Cathodic Disbondment Resistance*	ASTM G8/EN 12068	2 mm @ 23°C
Cathodic Disbondment Resistance*	ASTM G42/EN 12068	1 mm @ 60°C
Electrical Resistance*	EN 12068	> 10 <sup>8</sup> ohm/m <sup>2</sup>
Unwinding Test @ -30°C	EN 12068	No separation, tears or cracks
Low Temperature Flexibility @ -30°C	EN 12068	No separation, tears or cracks
Water Absorption	ASTM D570	< 0.05%
Drip Resistance	EN 12068	Pass at 90°C

Wrapid Coat™XL		
Property	Test Method	Value
Tensile Strength	ASTM D638	36,000 psi
Flexural Strength	ASTM D790	26,000 psi
Compressive Strength	ASTM D695	24,000 psi
Impact Resistance	ASTM G14	167 J
Lap Shear Strength	ASTM D5379	900 psi
Hardness	Shore D	80

\* When used with Wrapid Coat™PVC or Wrapid Coat™XL. Refer to the Wrapid Coat™ data sheet for more information.

## How To Order:

<b>Dimensions &amp; Ordering Info</b>	<b>TBK-VE-XL 230-450-GY</b>	<b>TBK-VE-XL</b>
	Colour ▶	<b>Grey (finished system)</b>
	Width ▶	<b>450mm (18") with 300mm-900mm (12"-36") available</b>
	Pipe Size Range ▶	<b>55 mm (2") to 1524mm (60")</b>
	Mechanical Protection ▶	<b>Wrapid Coat™XL</b>
	Corrosion Coating ▶	<b>Wrapid Bond™</b>
	Configuration ▶	<b>TBK "Directional Drilling Kit"</b>

\* Contact your Canusa-CPS sales representative for more information.



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