

HBE-DX

High Build Epoxy coating with Abrasion and Corrosion Resistance

The Canusa HBE-DX is a robust two-component epoxy coating system which has been specifically formulated for directional drilling applications. The formulation design presents high gouge resistance, high tensile elongation, high impact resistance and high flexibility properties. Applied as a standalone coating system or in combination with Canusa's DDX Heat Shrink Sleeve System, HBE-DX has proven to withstand operating temperatures up to 95°C (203°F) with superior performance. HBE-DX is used for protection of pipeline field joint girth welds for directional drilling applications and FBE over coating. This environmentally friendly, 100% solids, novolac epoxy system can either be spray applied or brush applied to the intended substrate.

Directional Drill Compatibility

- High gouge resistance, tensile elongation, impact resistance and flexibility are the major performance characteristics worked into the HBE-DX formulation.

Corrosion Protection up to 95°C

- HBE-DX coating system was designed to protect operating pipelines up to 95°C.

Superior Performance

- HBE-DX has proven to outperform competitive equivalents in a variety of test methods for corrosion and mechanical resistance.

Fast Cure

- HBE-DX's cure component comes standard with Canusa's proprietary Fast Cure option.

High Build in Single Coat

- A single pass application direct-to-metal will achieve a high build coating thickness of 20-40mils (500-1000 microns).



Applications



Oil & Gas



Water Pipelines



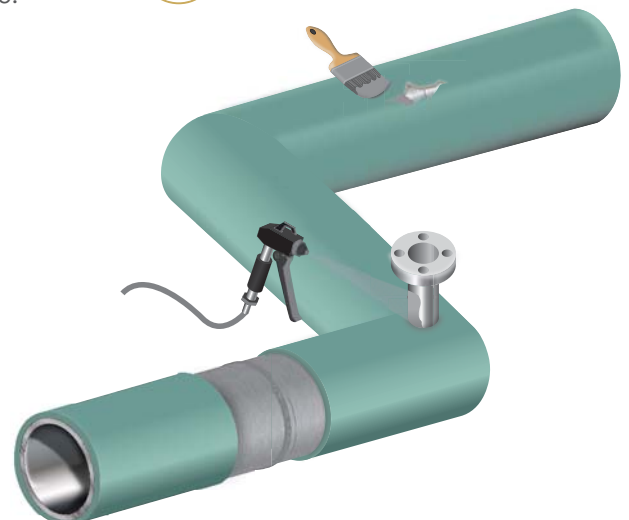
Abrasion Coating



Repair & Rehab



Girth-Weld Joints



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Performance	All performance testing followed CSA-Z245.20-10 unless specified.
Service Temperature	Up to 95°C (203°F)
Mixing Ratio	3:1 (by volume)
Percent Solids	100%
Specific Gravity	Base: 1.49 Cure: 1.05
Hardness (ASTM D2240)	> 85 Shore D
Adhesion to Steel	> 3000 psi
Adhesion to FBE	> 2000 psi
Cathodic Disbondment	
28 days, 23°C	< 4 mm
28 days, 95°C	< 10 mm
Impact Resistance at 30 mils (760 microns)	
@ 20°C	> 4.0 Joules
@ 85°C	> 4.0 Joules
Hot Water Immersion	
28 days, 95°C	Rating 1
Gouge Resistance	
52.6 kg, 20°C to 85°C	< 15% coating thickness
Abrasion Resistance (ASTM D4060)	> 1200 cycles/mil (> 50 cycles/micron)
Tensile Elongation at Break (ASTM D638)	> 1.50%
Flexibility at 20°C	> 1.0°/pd
Water Absorption (ASTM D570)	< 0.1 %
Dielectric Strength (ASTM D149)	> 16 V/um (400 V/mil)
Chemical Resistance (ASTM D543)	Excellent in various pH solutions
Shelf Life	3 years when stored in original packaging between 5°C (40°F) and 40°C (105°F).
Typical Kit Size Required by Pipe Diameter ¹	
4.5" – 16"	0.5 Liter Kit
18" – 32"	1.0 Liter Kit
34" to 50"	1.5 Liter Kit

¹Based on 400 mm coating width, 25 mils (635 micron) average thickness and 50% wastage factor

Safety

Handle with care. Before and during use, observe all safety labels on packaging containers, consult with Canusa-CPS Material Safety Data Sheets and abide by all local or national safety regulations.

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

PDS_HBE-DX_rev014