

# HEAVY-DUTY

## GIRTH-WELD PROTECTION FOR DIRECTIONALLY DRILLED PIPELINES

DDX™

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

The DDX™ — Directional Drilling Kit is a high performance system designed to protect welded joints on 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.

For added mechanical protection during a directional drill application, Canusa's Wrapid Shield™ XL, Wrapid Shield™ XLE or HBE-DX™ can be applied on the DDX's leading edge as an overcoat.

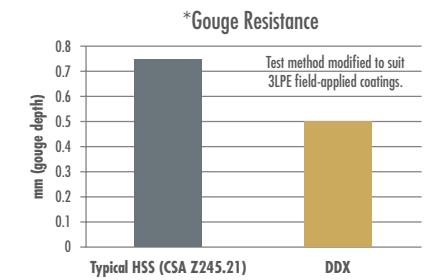
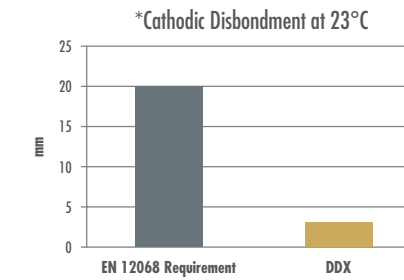
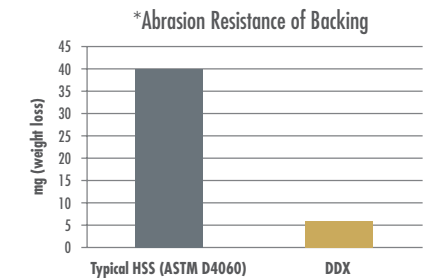
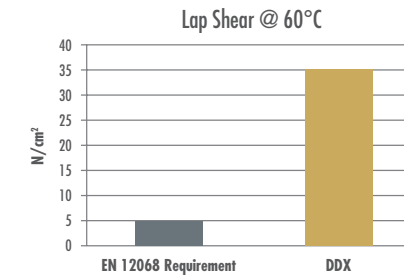
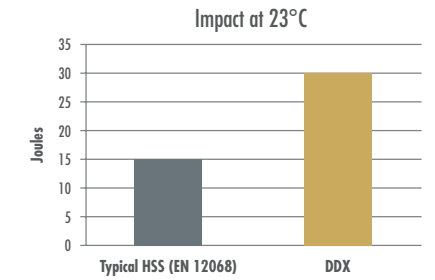
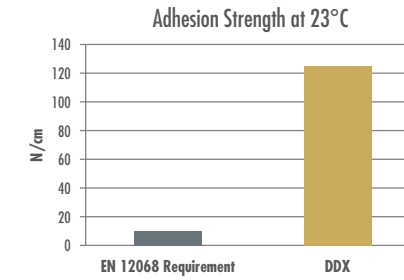


Superior Gouge & Abrasion Resistance

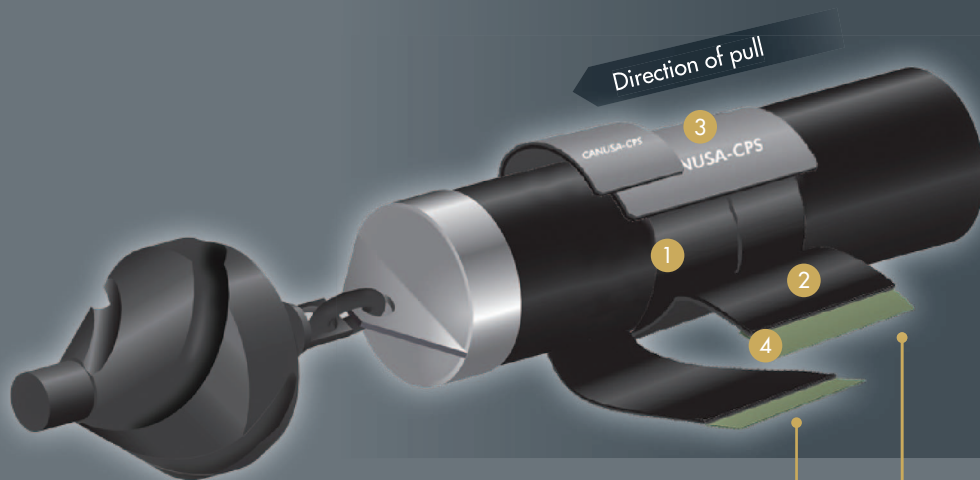


### Nakhon Sawan Project, Thailand

DDX is used to protect nearly 5,000 field joints on directionally drilled 3LPE pipelines. Standard DDX product build, which includes a liquid epoxy layer, a primary DDX sleeve to protect the epoxy coated field joint and a sacrificial sleeve to protect the leading edge of the primary sleeve, was utilized for normal HDD and thrust boring operations. For HDD operations in rocky terrain, standard DDX product build in conjunction with Canusa's Wrapid Shield XLE were applied on field joints.



\* Lower values indicate excellent field-applied coating performance for these properties.



1. Force cured epoxy provides excellent anti-corrosion properties and assured epoxy thickness
2. High shear copolymer adhesive with low preheat for efficient installation
3. High performance HDPE backing provides exceptional resistance to the effect of soil shear and pipe movements
4. Pre-attached closure offers quick and easy installation

Sacrificial sleeve protects the leading edge of the primary sleeve during pull-through

Primary sleeve is composed of high shear adhesive, a protective heat-shrinkable HDPE backing and a pre-attached closure



### Trusted around the world

- CNOOC
- Devon Energy
- Gazprom
- IOCL
- Petrobras
- PetroChina
- PTT
- TOTAL

## LIBERTY SALES & DISTRIBUTION

Hatfield & Washington, PA

Ph: (877) 373-0118 Fx: (888) 850-3787

sales@libertysales.net www.libertysales.net