SCAR-GUARD™

26” CRUDE PIPELINE CONSTRUCTION

SAUDI ARABIA, AUGUST 2013

Problem

During the pull back of a pipe using the horizontal directional drilling (or thrust boring) process, the mainline fusion bonded epoxy (FBE) corrosion coating is subjected to abrasion stresses and scarring. These can result in coating failure, which in turn, could lead to integrity issues, thereby, shortening the life span of the carbon steel pipeline.

Conditions

Installation crews faced numerous challenges, including sandstorms and 113°F (45°C) installation temperatures while boring through approximately 160 linear feet (49m) of rocky terrain through which the new 26” OD line must be pulled.

Solution

The Scar-Guard™ System was installed prior to the pull back of the 26” OD pipeline to protect the factory-applied FBE coating and the girth-welded field joints from the abrasion stresses and scarring associated with the horizontal directional drilling process. The Scar-Guard system provides mechanical protection to the approved, manufacturer-applied, FBE corrosion coating, resulting in a very low profile, extremely conformable, and highly impact-resistant composite-reinforced coating which encapsulates and protects the entire length of new pipe during the harsh pull back process.

Result

The contractor on the project successfully installed the Scar-Guard system over 160 linear feet (49m) of 26” diameter pipe ahead-of-schedule, protecting the integrity of the underlying FBE coating, while also providing accost-effective and time-saving solution. The project was a great success and neither the pipe nor the original coating was damaged during the HDD pull back process.

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