

## Northwest Houston Project

## **CASE STUDY**

**HDD Weld Protection** 





Denso Bore-Wrap® being applied over Denso Protal 7200™



Denso Bore-Wrap® protecting the underlying coating after bearing failure.



The first weld joint after exiting the bore hole.

## **Project Data**

Location	Cypress, TX
Completion	April 2021
Project Type	HDD Weld Protection
Products Used	Denso Bore-Wrap®

## **Project Details**

As is common practice these days, a road crossing for a new 18" pipeline was being installed by means of Horizontal Directional Drill (HDD). The HDD was approximately 1000' long and was installed beneath a major road in the Houston Metropolitan area. Using an abundance of caution during installation for HDDs, the pipeline operator specified that the weld joints be protected by a fiber reinforced ARO coating system. The contractor was using Denso Protal 7200 as the anti-corrosion coating on the field joint and as such chose to use the complimentary product also made by Denso and selected Bore-Wrap from the available options.

Bore-Wrap was applied to each field joint area to protect the coating over the elevated profile as the pipe was dragged in. The contractor performed the pipe stringing and coating over a span of 3 days and pulled the pipe in on the 4th day. The project was going along as planned right up until the point when the pipe was to be lifted into position for the pull back to start. Unfortunately, during the lifting process one of the pipe rollers couldn't handle the load shifting and it forced the pipe over the edge of the roller. While this does happen from time to time, it is still a frustration because it typically causes damage to the anti-corrosion coating and sometimes even gouges the steel pipe which requires a cut out or repair.

In this instance it happened to occur as the Bore-Wrap was just above the roller. When the pipe dropped, the Bore-Wrap took the initial impact from hitting the bearing, and as the load continued to roll, the bearing housing broke while struggling to pass through the Bore-Wrap. Once the pipe had stopped shifting and it was safe to inspect the damage, the contractor found that the Bore-Wrap had absorbed all of the damage and none of the joint coating was damaged. Both the point of impact and the gouge from the point of the bearing breakage had failed to penetrate Bore-Wrap. The contractor was able to again lift the pipe and proceed with the installation as planned without any further repair or mitigation needed.

Upon completion of the installation, the first joint of pipe was pulled out and inspected. Bore-Wrap had protected the coating on the joint and exited the bore hole with very little sign of wear. The circumstances of this HDD pull showed the products performance in terms of impact, gouge, abrasion, and flexibility, and the results speak for themselves.