

SYNTHO-GLASS[®] XT

PIPELINE REINFORCEMENT AND REPAIR



Problem

This 900 psi, 10.75" OD pipe was showing signs of substantial wall loss over an 8-1/4" area.

Solution

In order to promote adhesion, the pipe was sand blasted to remove rust, paint, and other foreign matter, then cleaned using a solvent wipe. Pits were filled using Syntho-Steel™ load transfer putty then the entire repair area was coated with Syntho-SubSea™LV, a high compression strength two part Kevlar® reinforced epoxy. The two part epoxy stopped the corrosion and provided a load transfer median engineered to cycle and work with the 900 psi (62 bar) line. The line was then wrapped with 8 layers of Syntho-Glass®XT, a 54,000 psi (3723 bar) tensile strength fiberglass composite sleeve, which provides structural integrity to the composite repair system.

Result

The repair was completed inexpensively in less than one hour. A repair that could have otherwise could have taken weeks. Syntho-Glass XT composite system fully restored the pipe's hoop and axial strength to enable operations at full MAOP of 900 psi (62 bar).



©Neptune Research Inc. (NRI) NRI® and Syntho-Glass®XT are registered trademarks of NRI. Syntho-Steel™ and Syntho-SubSea™LV are trademarks of NRI. Kevlar® is a registered trademark of E.I. du Pont de Nemours and Company. Please contact your local NRI distributor or office for the most current product specifications. User shall determine suitability of product for use and assumes all risk. XT CS 0811

NRI
Innovative Composite Solutions