Pipe Wrap®

Pipe Repair Systems

Project Overview

A 20" OD horizontal natural gas pipeline in Patterson, LA that had been installed in 1956, was experiencing significant external Class 1 location corrosion. The damages, existing at 9 o'clock and 3 o'clock, were 17" long x 15" wide by x .123" deep for the 1st grid and 15" long x 16" wide x .066" deep for the 2nd grid, respectively. The repair of the pipe with a nominal wall thickness of .281" would require facilitating a maximum operating pressure of 1,050 psi and a pipe temperature of $50^{\circ}F$.

The Solution

The Pipe Wrap[®] team designed a 20-year life solution utilizing the A+ Wrap[™] System. The system consisted of with 17 layers of A+ Wrap[™] for three linear feet, which would restore the structural integrity of the pipeline and bring it back to pristine conditions based on the first grid.

Repair Method

The repair was completed in two hours by a Pipe Wrap technician and contractor personnel. The repair area was grit-blasted and wiped clean with Acetone followed by an application of EP420 as filler material for load transfer at corrosion. The repair included a girth weld and long seam welds. The technician then applied a PPR epoxy coating to entire repair zone. The 12″ Wide A+ Wrap™ System was applied using the layer over layer with offset method. ILI markers were then installed to allow for inspection. The application was finished by applying Constrictor Wrap, which was perforated and allowed to cure. The next day the contractor removed the Constrictor Wrap and applied a tpcoat with customer coating.

Project Details

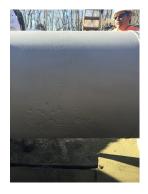
Location: : Patterson, LA

Application: 20" Natural Gas Pipeline **Client:** Transmission Pipeline Company

Repair System: A+ Wrap™



Completed A+ Wrap installation



View of corrosion



Application of PPR epoxy



Installing ILI markers



A+ Wrap installation with Constrictor Wrap

