Milliken Infrastructure

FormaShield

Pipe Repair Systems

CASE STUDY

OIL + GAS INDUSTRIAL

Project Overview

An externally corroding 8" OD horizontal above-ground hydrogen pipeline in Texas City, TX, required reinforcement using the FormaShield® system. The corrosion dimensions were 19" long x 9" wide x 0.151" deep at the 6:00 position. The repair was a Class 4 location with a nominal wall thickness of 0.250" and a Grade X-42 (42,000 SMYS) pipe. The ambient temperature was 63° F and the pipe's temperature was 60° F.

Repair Solution

The team designed the repair in accordance with ASME PCC-2 standards, utilizing the FormaShield wrap system with four layers for 18 linear inches to restore the structural integrity of the pipeline back to pristine conditions.

Results

The reinforcement repair was completed in 55 minutes by two Milliken Infrastructure Solutions supervisors, company and contractor personnel. The repair area was grit-blasted and wiped clean with acetone, and EP-420 filler material was applied for load transfer at corrosion areas. A PPR epoxy coating was used on the entire repair zone, and no ILI smart pig markers were installed for this job. The 4" wide FormaShield system was applied using the spiral method for 18 linear inches using four layers. Next, the team applied constrictor wrap, perforated it and allowed it to cure. The contractor removed the constrictor wrap after curing was complete and applied a topcoat with a customer coating.

Project Details

Location: Texas City, TX

Application: 8" Hydrogen Pipeline

Repair System: FormaShield

Completed FormaShield repair.

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855-655-6750

MILLIKEN INFRASTRUCTURE

pipe wrap

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EP-420 filler material applied.

FormaShield installation in progress with perforating constrictor wrap.

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