Weakened pipe reinforced with plate bonding and SW

ID: 9342

Industry: Water / Wastewater Customer Location: Ontario, Canada
Application: VPF-Valves, Pipes and Fittings Application Date: May 2021

Substrate: Carbon steel

Products: Belzona 1161 (Super UW-Metal), Belzona 1982 (SuperWrap II), Belzona SuperWrap

Problem

A pipe in a wastewater plant needed had suffered from external corrosion and metal loss over the years.



Defective pipe



Plate bonding over the most critical area



1st layer of Belzona SWII



Complete repair after consolidating with the release film to be later removed

Application Situation

The pipe was so deteriorated that they were concerned that abrasive blasting the bottom of the pipe will puncture the pipe and create through wall defects. It was decided to do a plate bonding with a surface tolerant product as an initial reinforcement before further reinforcing with SWII.

Application Method

First, the pipe was prepared as best as possible. The we did a plate bonding repair with Belzona 1161 to protect the bottom section of the pipe. After, we grit blasted the rest of the pipe and reinforced the rest of the pipe with Belzona Superwrap II.

Belzona Facts

The pipe was so deteriorated that it was about to have through wall defects and they could not shutdown operations. The Belzona solution presented minimal disruption to their operations and they were able to reinforce and protect the pipe for many years.