

Pipe in a wastewater pumping station reinforced with Belzona SWII

ID: 9337

Industry: Water / Wastewater

Customer Location: North bay, Ontario

Application: VPF-Valves, Pipes and Fittings

Application Date: November 2022

Substrate: Carbon steel

Products: Belzona 1121 (Super XL-Metal), Belzona 1982 (SuperWrap II), Belzona SuperWrap, Belzona 5811 (Immersion Grade)

Problem

The pipe section was suffering from general external corrosion. The pipe had become weakened from severe metal loss. This pipe section never got flooded nor exposed to immersion conditions. Yet, there was a lot of moisture in the environment.



Corroded pipe with severe metal loss



Blasted pipe and measuring environmentals



Resurfaced with Belzona 1121



Application completed with SWII reinforcement and coated flanges

Application Situation

An engineer assigned to the refurbishment of this pipe section, approached us at Belzona looking for a solution to strengthen a weakened pipe that had severe metal loss. They could not replace the pipe because the system could not be shutdown more than a 2 to 3 hours at a time. They need an in-situ repair!

Application Method

The substrate was grit blasted to near white metal. Since there was a lot of moisture and high humidity, the contractor had to install a dehumidifier to control the environment. The pitting and irregular surfaces were rebuilt and smoothed with Belzona 1121. Then 2 wraps of Belzona SWII were applied to strengthen the weakened pipe. The resin selected for this application was Belzona 1982. Two coats of Belzona 5811 were applied to protect the flanges.

Belzona Facts

The selling point of the application was the engineering design we provided following ASME PCC2 standard for 20 years of protection. The application was carried out without disrupting the service of the pump station which was ideal for the customer as they could not afford to shutdown. The pipe was inspected after 1 year, the wrap and the coating were still in perfect condition.

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ISO 9001:2015

FS 695214

ISO 14001:2015

EMS 695213

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