Bonding of 325mm Steel Pipe into 500mm thick Concrete Wall with Belzona 1212

ID: 9728

Industry: Pulp & Paper

Application: CEP-Centrifugal Pumps

Substrate: Carbon steel
Products: Belzona 1212

Customer Location: Felixton - Northern KZN

Application Date: January 2025

Problem

A central return line for three centrifugal pumps was required to reduce the turbulence within the piping system. In order to install this 325mm OD pipe back into the Pulp Chest, we had to diamond drill a 350mm hole x 500mm thick through the chest wall. Once done, we sealed the entire inside as well as both ends with Belzona 1212 and we were pressed for time on a one day shut









350mm Diamond Tip Core
Drilling 500mm thick through
the Pulp chest Wall - 50mm Re
Bar inside . The core drilling
took 8 hours alone.

Belzona 1212 was selected to seal and bond the 325mm OD steel pipe into the chest wall was we only had 12 hours on the shut.

325mm Inside Return line located inside the Pulp chest

325mm Outside Return line located outside the Pulp chest. From here an expansion joint was installed and the pipe was coupled into the common pump pipeline.

Application Situation

As this was a new pipe installation our only criteria was time itself. The plant was off line for 12 hours so we had to maximise our time by using the Belzona 1212 which was fully hard and ready to be in use within 1.5 hours due to the high heat here. The plant standing time alone is R250 000-00 per hour.

Application Method

The pipe and internal of the concrete wall was cleaned with solvent to save time. The Belzona was mixed and applied simultaneously by 4 men using spatulas to quickly and effectively applied the Belzona 1212 before it cured. Once done, the pipe was inserted into the wall and both ends were sealed off using the Belzona 1212

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ISO 9001:2015 Belzona products are
FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

BELZONA®
Repair • Protect • Improve

Belzona Facts The standing time for our clients plant is R250000-00 per hour so a quick repair was very beneficial to the client.
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