

BELZONA SUPERWRAP II EXTENDS LIFE OF A HIGH TEMPERATURE PIPELINE BY 5 YEARS

ID: 8575



PROBLEM

The 406 mm diameter pipe had developed a critical (Class 3) through wall defect calculated at 40 x 40 mm. The operating temperature was 90°C and the operating pressure was 17.6 bar. The total defect length was 90 mm in axial.

APPLICATION SITUATION

High Temperature, Fuel Oil Pipeline

APPLICATION METHOD

The application was completed in accordance with Belzona Know-How System Leaflet VPF-11. After the surface preparation by grit blasting to achieve SA 2.5 with a 75 microns profile, Belzona 1511 was applied to the critical defect area to fill and smooth out before wrapping. Belzona SuperWrap II was then applied in accordance with the engineered design as an 11 wrap system with the total length of 540 mm, using Belzona 1983 resin to provide a further 10 years service life.

BELZONA FACTS

Belzona SuperWrap II was chosen because it is an engineered solution that can be designed as a pipe repair system being compliant to ISO 24817 and ASME PCC-2. The Belzona 1983 resin was chosen due to its high heat resistance of up to 150°C. The repair was designed by Belzona Engineer and the application was completed by applicators who are trained and validated to apply Belzona SuperWrap II.

INDUSTRY

Oil & Gas

LOCATION

Victoria, Australia

APPLICATION DATE

December 2020

PRODUCTS

Belzona 1511 (Super HT Metal)
Belzona 1983 (SuperWrap II Resin)
Belzona 9381 (SuperWrap II
Reinforcement Sheet)
Belzona 9382 (Release Film)

SUBSTRATE

Carbon Steel (Grade: ASTM A106B)

PHOTOS

1. Defect in the pipe
2. Defect pit filled with Belzona 1511
3. Application in progress
4. Application completed

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

Belzona products are manufactured
under an ISO 9001 Registered
Quality Management System.

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