

Belzona protects operatives from heat exposure with thermal insulation solution for Fortune 500 Oil and Gas company

ID: 9180

Industry: Oil & Gas
Application: TCC-Tanks and Chemical Containment Areas
Substrate: Carbon steel
Products: Belzona 1121 (Super XL-Metal), Belzona 5871

Customer Location: Louisiana
Application Date: June 2023

Problem

A tank which reaches a temperature of 110 °C (230 °F) and serves as a walkway for operators required thermal insulation in order to aid health and safety standards. According to the guidance set forth by the Occupational Safety and Health Administration (OSHA), the maximum temperature for exposed surfaces that an employee could come into contact with is 60 °C (140 °F), in line with ASTM C1055. Workers must be protected from exposed heated surfaces, so it was crucial to lower the surface temperature of this tank to eliminate this hazard. Additionally, some pitting corrosion had occurred.



Unprotected tank's upper surface, operating at high temperatures.



Surface preparation before application



Tank top after one coat of Belzona 5871.



Finished application of Belzona 5871

Application Situation

Thermal insulation for a tank at a lubricant plant.

Application Method

Prior to coating the vessel was vapour blasted to meet SSPC-SP10 (Near-White Metal) standards and was then degreased. Additionally, some corrosion on the top of the tank required pit filling with Belzona 1121 (Super XL-Metal) ahead of the coating being applied. With the surface prepared, the first coat of Belzona 5871 was then applied using a short-bristled brush. This product expands, reducing the number of layers which are needed, the first coat was applied at the target thickness of 1000 µm (39 mil) wet film thickness, which results in 3000 µm (118 mil) dry film thickness. The second coat was then applied using the same method six hours later. The tank was back to full service just 12 hours after the final coat was applied.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015
FS 695214
ISO 14001:2015
EMS 695213

Belzona products are
manufactured under an ISO
9000 Registered Quality
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Belzona Facts

The application is performing well. The customer has been satisfied with the outcome, but it has only been in service for less than 2 months.

The Belzona solution was chosen as they have seen it in previous applications in the same industry and were keen to try it. They asked if a competitive solution could be used this would be a longer process due to thinner coats thus increasing the application cost compared to using 5871. Overall it took 2, 12-hour days to complete the application process.

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