

Emergency Repair of a 140 °C Liquid Sulfur Tank with Belzona

ID: 10218

Industry: Chemical & Petrochemical
Application: TCC-Tanks and Chemical Containment Areas
Substrate: Carbon steel
Products: Belzona 1593, Belzona 1983 (SuperWrap II)

Customer Location: Tuscany, Italy
Application Date: April 2025

Problem

A liquid sulfur storage tank operating at approximately 140 °C experienced progressive internal corrosion, which eventually led to the formation of a through-wall defect on the shell. This defect caused a loss of containment, with liquid sulfur leaking from the tank. The deterioration was localized in an area where corrosion mechanisms had weakened the internal surface over time, ultimately compromising the structural integrity of the shell



Original view of the liquid sulphur leakage



Initial sealing with Belzona 1593 and reinforcement tape Belzona 9341



Completed application of Belzona 1593 initial interface layer.



Completion of the structural reinforcement using Belzona 1983 for Superwrap II system

Application Situation

The client needed a rapid restoration of the tank without undertaking heavy operations such as full emptying and decontamination. Thanks to the use of Belzona high-temperature products, the through-wall defect was quickly restored and the hazardous leakage was stopped within 48 hours including curing times.

Application Method

After a thorough and carefully controlled abrasive blasting of the external shell, Belzona 1593 together with the Belzona 9341 reinforcement tape were applied as the first interface directly over the through-wall defect. Subsequently, a structural reinforcement using the Belzona SuperWrap II system (Resin grade 1983) was installed

Belzona Facts

The Belzona approach proved to be the only truly effective solution, making it possible to avoid far more complex and risky traditional welding activities and to rapidly restore the tank's operational efficiency.

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

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