Thin Wall Pipe Repair completed with SuperWrap

ID: 10313

Industry:	*Chemical & Petrochemical*	Customer Location:	*Geismar*
Application:	*VPF-Valves, Pipes and Fittings*	Application Date:	*July 2026*
Substrate:	*Carbon steel*		
Products:	*Belzona 1511 (Super HT-Metal),Belzona 1984,Belzona 5111 (Ceramic Cladding)*		

Problem

Solstice found heavy external corrosion where the support brackets were welded to a high-pressure pipe. UT readings showed the wall thickness was down to just 0.052 in., so they needed to act fast. Cutting the pipe out and replacing it would've meant a shutdown, so they were looking for a safe, engineered repair that could get the line back in service without all the extra downtime.



Pre-Application Inspection Showing Localized External Corrosion and Wall Thinning on Existing Steel Piping, Requiring Engineered Composite Reinforcement to Restore Structural Integrity.



Application of Belzona 1511 (Super HT-Metal) to Rebuild the Deteriorated Pipe Surface, Fill Corrosion-Related Irregularities, and Establish a Uniform Profile for the Subsequent Composite Wrap Application.



Installation of the Belzona SuperWrap II Composite Repair System Around the Affected Pipe Section to Provide Engineered Structural Reinforcement Over the Identified Wall-Loss Area.



Completed Belzona SuperWrap II Composite Reinforcement System, Providing Structural Support to the Corrosion-Affected Pipe Section in Accordance with the Engineered Repair Design. Belzona 5111 topcoat

Application Situation

The Belzona repair helped the customer avoid an emergency shutdown that would have cost well over $100,000 in downtime, lost

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FS 695214
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production, and replacement costs. Instead, they were able to restore the integrity of the pipe in just two days without welding or cutting out the line, saving both time and money while keeping the plant running.

Application Method

The repair started with surface prep using an MDX sparkless grinder to remove all corrosion and create the required anchor profile. We rebuilt the damaged areas with Belzona 1511, then installed the engineered Belzona SuperWrap II system using Belzona 1983 resin and Belzona 9381 reinforcement fabric following the approved ASME PCC-2 design. Once the wrap was complete, we finished everything with Belzona 5111 for long-term UV and weather protection. Throughout the job, our team completed QA/QC checks to make sure the repair met the engineered design and was ready to go back into service.

Belzona Facts

The customer specifically required an ASME PCC-2 compliant repair that met their engineering standards while also being completed as quickly as possible. Belzona SuperWrap II provided an engineered solution that met both requirements. Instead of shutting the unit down and replacing the pipe, the customer was able to avoid well over $100,000 in potential downtime and repair costs. The repair eliminated the need for hot work, was completed in just two days, and safely returned the line to service while extending the life of the asset until a future planned outage.

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