

# Repair Corroded Cooling Tower Pipe with Belzona

ID: 5414

**Industry:** Chemical & Petrochemical  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Carbon Steel  
**Products:** \* Belzona 1211 (E-Metal) ,  
\* Belzona 1111 (Super Metal) ,  
\* Belzona 4151 (Magma-Quartz Resin) ,  
\* Belzona 5111 (Ceramic Cladding) ,  
\* Belzona 9731 ,

**Customer Location:** Petrochemical Plant Southeast Texas  
**Application Date:** April 2013

## Problem

Non-destructive testing (NDT) showed where heavy corrosion had caused major pitting resulting in thin walled pipe in many areas and through wall in one spot.



## Photograph Descriptions

- \* Close-up of heavy corrosion ,
- \* Original leak and new through wall due to blast ,
- \* Belzona 1111 applied to fill the pits ,
- \* Finished project ,

## Application Situation

3 sections of 30" x 10' Suction Pipe and 3 sections of 30" x 10' Discharge Pipe on Cooling Tower

## Application Method

Application carried out in accordance with Belzona Know How System Leaflet VPF-11. After proper surface preparation Belzona 1211 was used to fix the live leak. Belzona 1111 was then used to fill the pitting. Belzona 4151 with Belzona 9731 reinforcement tape were used to form a pipe wrap for strength. A final coat of Belzona 5111 was used for UV and environmental protection.

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 original plan was to replace 30 linear feet of discharge pipes of 30 inches in diameter at a cost of almost \$90,000 for materials only. The Belzona solution saved the customer over \$75,000 and was completed in just 2 days. It was so successful that in addition 30 linear feet of suction piping was done within 2 weeks saving the plant over \$150,000.

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