

# BELZONA PROTECTION INSIDE AND OUT!

ID: 406

**Industry:** Oil & Gas  
**Application:** TCC-Tanks and Chemical Containment Areas  
**Substrate:** Carbon Steel  
**Products:** \* Belzona® 1111 (Super Metal) ,  
\* Belzona® 4311 (Magma CR-1) ,  
\* Belzona® 4341 (Magma CR-4) ,  
\* Belzona® 5111 (Ceramic Cladding) ,  
\* Belzona® 6111 (Liquid Anode) ,

**Customer Location:** Oil Company - Mexico  
**Application Date:** December 2003

## Problem

Internal corrosion due to contact with HCL (hydrochloric acid) 30-36% had caused severe corrosion on the walls, nozzles, fittings, etc. of the tanks. The exterior of the tanks had been damaged from atmospheric corrosion.



## Photograph Descriptions

- \* Extent of the corrosion due to the effects of the hydrochloric acid coupled with hydrocarbons and heat. ,
- \* Nozzles coated with Belzona® 4311 or Belzona® 4341, depending on operating temperatures. ,
- \* Pinhole detection being carried out over the Belzona coating system. ,
- \* Exterior view of the tank coated on the outside with Belzona® 6111/Belzona® 5111. ,

## Application Situation

Portable Acid Tanks for Oil Well Injection.

## Application Method

Application was carried out in accordance with a modified version of Belzona Know-How System Leaflet TCC-5.

## Belzona Facts

Failure of vinyl ester coating forced customer to bring the tanks out of operation every 4-6 months. The Belzona solution allowed for the rebuilding of the damaged areas with Belzona® 1111. Depending on the operation temperatures of the tanks, either Belzona®

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  
Management System.

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**BELZONA®**  
Repair • Protect • Improve

4311 or Belzona® 4341 was used as the coating material. Belzona® 6111/5111 was used on the exterior of the tanks.

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