

# A Small Hole Can Cause Big Problems, But Belzona Provided The Solution

ID: 8505

**Industry:** Chemical & Petrochemical  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Carbon Steel  
**Products:** \* Belzona 1511 (Super HT-Metal) ,  
\* Belzona 1392 (Ceramic HT2) ,

**Customer Location:** Petrochemical Plant - Southeast Texas  
**Application Date:** 05/23/2021

## Problem

The hole was below the fill line in the carbon steel vessel that was operating at 7-10 PSI with a designed temperature range between 120-140C. The customer needed an immediate solution on a Saturday and within 7 hours of the call a Belzona crew was onsite to repair the nozzle. Plant maintenance had placed a hose clamp with rubber patch over the hole and this was included as a defect in the final repair design.



## Photograph Descriptions

- \* 1 - Vessel location ,
- \* 2 - Through wall on Weld ,
- \* 3 - Finished Job #1 ,
- \* 4 - Finished Job #2 ,

## Application Situation

A hole in a weld developed due to Corrosion Under Insulation on nozzle of an Acrylic Acetate vessel. The plant needed a solution to get them 3-4 months of service until a turnaround without losing any production time.

## Application Method

Application was carried out in accordance with Belzona Know-How System Leaflet VPF-11. The repair area was prepared using spark free vapor blast and tools to clean and roughen the substrate to a near white SSPC SP10 finish. The repair was done in-situ while the vessel was still in operation. Belzona 1511 was used to build up around the hose clamp to achieve a smooth surface for final repair.

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.

[www.belzona.com](http://www.belzona.com)

  
**BELZONA**<sup>®</sup>  
Repair • Protect • Improve

Belzona 1392 with a reinforcing cloth was then used to wrap the entire nozzle and onto the vessel body with a final coat of 1392 over the entire repair.

## Belzona Facts

With a quick response and a fast quality repair Belzona saved the plant from an unplanned outage and hours if not days of down time compared to a conventional nozzle replacement.

---

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.

[www.belzona.com](http://www.belzona.com)

