

# Repair of Holed Nozzles on a Vessel

ID: 9390

**Industry:** Chemical & Petrochemical  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Carbon steel  
**Products:** Belzona 1212, Belzona 5831 (ST-Barrier), Accessories

**Customer Location:** Melbourne, Australia  
**Application Date:** October 2023

## Problem

Customer had a process vessel containing a dangerous chemical during process which has faced severe corrosion at the nozzle joints.



Severe through wall corrosion at the base of the nozzles exposed dangerous chemicals during the process



Mixing Belzona 1212 in preparation for the repair



Application of Belzona 1212 over repair area with reinforcement plate/mesh to be fitted



Completion of the application coated with Belzona 5831

## Application Situation

Due to the position/placement and time restrictions, the customer was unable to remove and or replace the vessel which would have equated to over \$200,000 AUD in total costing. Instead, BELZONA solution was offered to save the customer a considerable amount of money at a far cheaper cost allowing for continued production.

## Application Method

Repair area, which was originally coated and corroded was ground and clean back to bare metal exposed the hole on the tank/nozzle.

Belzona 1212 was the product selected to bond and repair the area, due to inability to carry out any form of abrasive blasting.

Using reinforcement mesh and a metal mesh to cover the hole, the Belzona 1212 was applied in conjunction.

Once cured, Belzona 5831 was applied to coat the repair area.

## Belzona Facts

By using Belzona products, the immediate need to shut the vessel down was eliminated, allowing it to be placed back in service at a significant cost savings against replacement. Approximately \$190,000 AUD in savings.

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ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

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