

# PROCESS VESSEL UPGRADE USING BELZONA ADHESIVE

ID: 459

**Industry:** Oil & Gas  
**Application:** TCC-Tanks and Chemical Containment Areas  
**Substrate:** Coated steel.  
**Products:** \* Belzona® 1111 (Super Metal) Belzona® 1391 (Ceramic HT Metal),  
**Customer Location:** Offshore Oil Company - UK  
**Application Date:** October 2003

## Problem

To avoid the need for welding to the vessel shell, and additional post weld heat treatment, the internal equipment was installed using a mixture of mechanical and adhesive methods. In addition, the vessel shell had been coated from new with Belzona® 1391 and this was required to be removed in key areas prior to installation of the new equipment.



## Photograph Descriptions

\* Removal of existing coating to allow adhesive to bond directly to steel substrate. Bonding in of mounting clips and overcoating with Belzona® 1391. Sealing of gas demister using Belzona® 1111 and Belzona® 1391. View of application after 8 years in service ,

## Application Situation

This FPSO now had increased levels of water from the well which required modifications to the internal furniture of the process vessels, and the installation of additional separation equipment.

## Application Method

The original coating was removed in localised areas by blasting. The surrounding coating was cleaned and flash blasted. Once completed, mounting clips were bonded into position using Belzona® 1111. The clips were then coated using Belzona® 1391 which was overlapped onto the surrounding prepared coating in accordance with Belzona Know-How System Leaflet TCC-5.

## Belzona Facts

This application was extensively designed to minimise undue stresses on the Belzona adhesive material, and facilitated a rapid turnaround for the vessel refurbishment. The use of adhesive materials in this particular application reduced the need for welding and costly post-weld heat treatment as well as eliminating the need for 'hot work' on this operational facility. The application has been regularly inspected and has now been in service for more than ten years.

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 FS 695214  
 ISO 14001:2015  
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