

# Handrail bonding on offshore deck

ID: 9253

Industry: Oil & Gas  
Application: GSS-Gaskets, Seals and Shims  
Substrate: Carbon steel  
Products: Belzona 1161 (Super UW-Metal), Belzona 5811 (Immersion Grade), Belzona 7311

Customer Location: Offshore  
Application Date: July 2023

## Problem

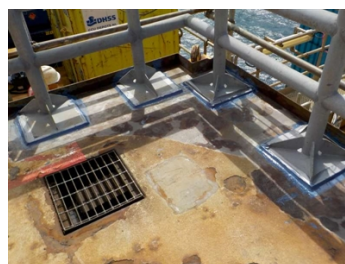
A new handrail was designed on an offshore loading deck just above critical lower deck. Because there were some holes in the deck due to corrosion, welding new plates was not clients first choice. A very strong bonding was required and had to be designed and calculated. Also the flexibility of the Belzona 7311 was preferable because large containers could impact into the handrail.



Deck before application



Fixing the holes with Belzona 1161 and re-inforcement sheets



Bonding the small plates with Belzona 7311.  
The bigger plate was bonded with Belzona 7311 and injected with Belzona 5811.



Application ready to be top coated.

## Application Situation

Welding was not permitted because of the critical environment. Production on the platform in-situ. ATEX grit blasting and bonding with Belzona 7311 was the way to go.

## Application Method

The bigger plate of 5000[mm] x 1000[mm] was bonded with Belzona 7311 and after curing injected with Belzona 5811. Separate parts of the handrail were bonded with the Belzona 7311 completely.

## Belzona Facts

Alternative for welding

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

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