# Handrail bonding on offshore deck

ID: 9253

Industry: Oil & Gas Customer Location: Offshore
Application: GSS-Gaskets, Seals and Shims Application Date: July 2023

Substrate: Carbon steel

Products: Belzona 1161 (Super UW-Metal), Belzona 5811 (Immersion Grade), Belzona 7311

#### 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.







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