Belzona Repairs Valve Guide
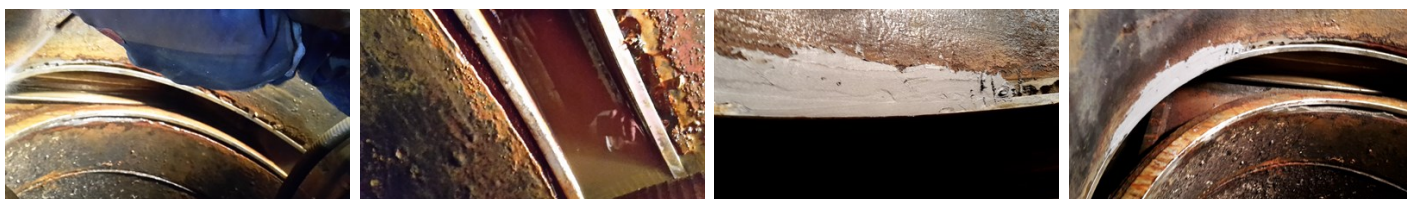
Industry:	*Marine*	Customer Location:	*South West England*
Application:	*VPF-Valves, Pipes and Fittings*	Application Date:	*May 2019*
Substrate:	*Cast Iron*		
Products:	** Belzona 1161 (Super UW-Metal) ,*		

Problem

The valve guides had corroded due to galvanic attack, all of the Cast iron that was in contact with the Carbon steel had corroded away as a result and the guides were loose within their locations. Due to this no full seal could be created, thus losing tons of water every hour.

Photograph Descriptions

* 1. U-Shaped channel with corrosion damage around the external edge where it meets the cast iron. ,
* 2. Further channel damage. ,
* 3. Channel filled with Belzona 1161. ,
* 4. Application complete. ,

Application Situation

There are three pumps at the bottom of the main dock pump house. The pumps are impounding pumps for the very busy commercial docks, these pump in sea water to lift or lower the dock level for incoming or outgoing vessels. The valves act as shut offs for the sea water in and out of the dock and are fitted in line with the impounding pumps.

Application Method

In conjunction with Belzona System Leaflet VPF-04, all areas were grit blasted back to good sound substrate and any salt was reduced to an acceptable levels using a chemical cleaner and high temperature washing. The new guides were installed and located using fixings, prior to application of Belzona 1161.

Belzona Facts

Due to the age and location of the valves, replacements would have been bespoke and very costly, added to this loss of efficiency of the valves meant the impounding pumps needed to be operated again after several hours to maintain the levels within the dock.