

# BELZONA REPAIRS VOITH SCHNEIDER PROPULSION UNIT

ID: 5305

Industry: Marine  
Application: SOS-Ships and Offshore Structures

Customer Location: Ferry, Gourock, UK  
Application Date: September 2014

Substrate: Steel  
Products: \* Belzona 1311 (Ceramic R Metal) ,  
\* Belzona 1321 (Ceramic S Metal) ,

## Problem

*The combination of sea water and erosion from silt and sand was creating an erosion-corrosion cycle. Extensive metal loss had been noticed on the face of the equipment and on the inner rims.*



## Photograph Descriptions

\* 1. Voith unit before work started 2. The damage on the inner rim 3. Belzona 1311 applied & former in place 4. Former removed, rim rebuilt and face coated with Belzona 1321 ,

## Application Situation

A Voith Schneider unit from a passenger ferry.

## Application Method

The application was carried out in accordance with Belzona System Leaflets SOS-1 & 2. The unit was grit blasted and salt tested. The inner rim was then built up using a pre-fabricated metal former. The face was also built back up using Belzona 1311. Belzona 1321 was then applied to coat & protect the unit from future erosion/corrosion.

## Belzona Facts

Replacement of the unit would have been more than £100K. Welding and then machining would have been very difficult due to the size and geometry of the piece. The Supply and fit repair was carried out on the customer's site for £3,000.

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

Belzona products are  
manufactured under an ISO  
9000 Registered Quality  
Management System.

[www.belzona.com](http://www.belzona.com)

  
**BELZONA®**  
Repair • Protect • Improve