

# BELZONA 1111 REBUILDS TOWBOAT DRIVE

ID: 7515

Industry: *Marine*  
Application: *SOS-Ships and Offshore Structures*

Customer Location: *WA, USA*  
Application Date: *July, 2017*

Substrate: *Cast steel*  
Products: *\* Belzona 1111 Super Metal ,*

## Problem

*After 64,000 hours of operation, a fair amount of erosion had occurred starting to compromise the mating face of this drive unit. Up to 1.5 inches of missing steel in the worst places.*



## Photograph Descriptions

\* Pic 1. Original condition showing erosion. Pic 2. Blasted and ready for the application. Pic 3. Partially completed. Pic 4. Application complete. ,

## Application Situation

Erosion damage to the cast steel housing of this Schottel drive on a towboat.

## Application Method

The area of application was grit blasted with alumina oxide for a rough clean finish. MEK was used to wash the area. The first layer of Belzona 1111 Super Metal was applied with a short bristle brush to work it into the rough open pores for optimal adhesion. Slowly, mixing smaller batches the areas were rebuilt. This allowed for the deeper areas to be filled in without worry of slump as the prior layers were setting up as the next layer was applied. After the application was complete, the team waited till the next day to hand finish the application with sandpaper, emery cloth, and flat boards.

## Belzona Facts

It takes 2 years and several tens of thousands of US dollars to get a set of these drive units made and delivered. This application took a mere 2 hours to complete, with no more than another 2 hours to finish off. The entire unit will be over-coated with Belzona 1331 after it is assembled.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

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FS 695214  
ISO 14001:2015  
EMS 695213

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