# Belzona keeps the water on the outside of the tugboat!

ID: 7507

Industry:MarineCustomer Location:Seattle, WAApplication:SOS-Ships and Offshore StructuresApplication Date:July 2017

Substrate: Steel

Products: \* Belzona 1212,

#### Problem

Corroded steel hull developed leaks. The initial response was to insert a wooden dowel into the 1/2" hole. The hole is over 10' below water level on this tugboat. The wooden dowel stopped most of the water but still had some wetness seeping through.









### **Photograph Descriptions**

- \* 1. Three of the companies tugboats at dock.,
- \* 2. The dowel plugging the hole in the hull.,
- \* 3. Grinding the rust and corrosion off.,
- \* 4. The complete application of Belzona 1212.,

### **Application Situation**

Steel tugboat hull below the waterline.

## **Application Method**

The application was done following Belzona System Leaflet SOS-20a. A grinder was used to remove all of the rust and corrosion from an 8" square. This left a very rough and pitted but clean surface. The grinder was also used to cut the wooden dowel off flush

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FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

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with the hull. There was still some saltwater seeping through, so Belzona 1212 was used due to it's surface tolerant properties. A 6" square plate was also cleaned and roughened with a grinder. One unit of Belzona 1212 was mixed and scrubbed in with a short bristle brush to both the hull and the plate. The remaining Belzona 1212 was applied to the center of the steel plate and firmly applied to the prepped area of the hull until the excess material was compressed out of all four sides. The edges were then smoothed off.

#### **Belzona Facts**

This hole had been attempted to be repaired with welding before and ultimately resulted on a worse leak. The alternative was to spend thousands of dollars to put the tugboat in dry dock and weld a plate to the outside of the hull. This repair cost the company only a couple hundred dollars in material and they now have extra units available for the next repair. Now that the crew has received training in the proper procedures of applying Belzona 1212, the next time a need occurs, they will be able to carry out the repair on their own without the need to call in a repair specialist or welder.