

# BELZONA 1111 FIXES THE FIBERGLASS FLANGE

ID: 5654

Industry: Marine  
Application: VPF-Valves, Pipes and Fittings  
Substrate: Fiberglass  
Products: \* Belzona 1111 (Super Metal) ,

Customer Location: Marine Industry, S.W. Washington  
Application Date: May 2015

## Problem

Cracks appearing in the flange and leaking water when the system was pressurized.



## Photograph Descriptions

- \* Preparing the area to expose the crack ,
- \* Drilling and V'ing the crack ,
- \* Steel plate fitted and drilled ,
- \* Completed application, inside and outside ,

## Application Situation

24" fiberglass flange on a pump system with two 600hp pumps that pump water into the silt at the dock to keep the bay open for freight ships. It is located underneath the dock and is run on a daily basis.

## Application Method

The application was carried out in accordance with Belzona Know-How System Leaflet VPF-9. The ends of the cracks were located and drilled through to terminate the crack. The cracks were worse than originally thought, actually cracking into three different areas. The cracks were then drilled every 1" and V'd out. A thin, mild steel plate was fit to the inside of the pipe with holes drilled in it as well matching the pipe. Both the steel plate and fiberglass pipe were prepped by grinding where Belzona 1111 was to be applied. Belzona 1111 was mixed and applied to the fiberglass pipe, carefully pushing it into the crack and holes. The steel plate was mounted inside the pipe and mounted with bolts and then covered with a thin layer of Belzona 1111. The exterior portion of the crack was smoothed over to allow the metal collar to still fit on the flange.

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.

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## Belzona Facts

Less than 1Kg of Belzona 1111 was used for this repair and it was completed in half a day. The alternative was \$30,000.00 USD and several days labor to replace an entire 10' section of this pipe. Belzona once again is the best way to go.

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