

# CORRODED FLANGE GROOVES REFORMED WITH BELZONA

ID: 4182

**Industry:** Power  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Steel  
**Products:** \* Belzona 1111 (Super Metal) ,  
\* Belzona 1321 (Ceramic S-Metal) ,

**Customer Location:** Hydropower plant, Switzerland  
**Application Date:** February 2012

## Problem

Corrosion leading to incorrect sealing of mating surfaces



## Photograph Descriptions

- \* General view of the equipment before application ,
- \* A pre-cut template allows for simple, effective defining ,
- \* Belzona 1321 applied for a smoother surface ,
- \* Pressure pipe after re-assembly ,

## Application Situation

Flange grooves in four pipe flanges. Each flange had a diameter of 1820mm; the grooves were 16mm wide and 3-4mm deep.

## Application Method

Application was carried out in accordance with Belzona System Leaflet VPF-1. After grit blasting the groove, Belzona 1111 was packed overthick into the groove and, using a simple pre-cut template, the original profile of the groove was recreated. Finally, a thin layer of Belzona 1321 was applied to create a smoother surface.

## Belzona Facts

Welding would have taken three to four weeks for two people to complete, a considerable delay in the refurbishment of this hydropower plant. The simple and cold-applied Belzona solution was carried out in just six working days by three people and now ensures long-term corrosion protection of the liner grooves.

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

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