

# BELZONA REPAIRS THE HYDRO PLANT INLET PIPE

ID: 5561

**Industry:** Power  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Cast iron  
**Products:** \* Belzona 1111 (Super Metal) ,  
\* Belzona 9341 (Reinforcement Tape) ,

**Customer Location:** Hydropower plant, Usk, WA  
**Application Date:** March 2014

## Problem

A nearby landslide had shifted the waterline inlet of the hydro project causing extreme pressure on the cast iron pipe near the inlet. This caused the pipe to begin splitting behind the flange due to misalignment.



## Photograph Descriptions

- \* 1. Overview of "vee" out cracks and drilled holes with inserted screws ,
- \* 2. Sweating out with the rosebud torch ,
- \* 3. First layer of Belzona 1111 scrubbed in ,
- \* 4. Completed application ,

## Application Situation

Water inlet pipe of a hydro plant.

## Application Method

The surface was ground with a coarse grinding wheel to expose the full length of the crack. The crack was "vee'd" out and holes were drilled at each end all the way through, and 75% through every 1". The holes were then tapped and screws inserted and ground off flush to prevent movement in the crack. The area was sweated out with a rosebud torch, and a final surface preparation of grinding was done. Belzona 1111 was scrubbed into the surface and a thin layer applied before laying in a coated piece of Belzona 9341. The application was finished off with a final layer of Belzona 1111.

## Belzona Facts

Replacement of the pipe was not really an option due to the cost and time that would be required to remove the pipe from the existing concrete it was bedded into, plus the cost of a crane and removal of the roof. This was a simple application that saved a large sum of money and used a mere \$50.00 USD of material.

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

---

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)

