

# Belzona repairs porcelain shed

ID: 5964

**Industry:** Power  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Porcelain  
**Products:** \* Belzona 1111 (Supermetal) ,  
\* Belzona 4311 (Magma CR1) ,  
\* Belzona 2211 (MP Hi-build Elastomer) ,

**Customer Location:** Sub Station Herefordshire, UK  
**Application Date:** September 2015

## Problem

To replace the shed would be expensive, involving crane hire, complex removal of various plant and the need to draft in a team of skilled labour.



## Photograph Descriptions

- \* 1. The damaged shed ,
- \* 2. The Elastomer applied to create the mold ,
- \* 3. The repair before coating ,
- \* 4. The finished repair with Belzona 4311 applied ,

## Application Situation

The sub station had a recent outage for routine repairs. During the outage a contractor accidentally damaged one of the porcelain sheds breaking off and cracking parts of the porcelain.

## Application Method

A mould of a sound area of the shed was created by applying Belzona 2211 after treating substrate with Belzona 9411 (Release Agent). Once the Elastomer mould had cured it was removed, Belzona 9411 applied inside before wetting out the damaged portion of the shed with Belzona 1111. More Belzona 1111 was applied to the damaged area of the shed before the mould was positioned to rebuild the shed profile. Once Belzona 1111 had cured the mould was removed and a coat of Belzona 4311 was applied over the repair to colour match and to prevent arcing across the repair.

## Belzona Facts

The repair carried out involved no hot works and no expensive plant or equipment hire. The whole repair was safely carried out from a cherry picker platform which was already on site for the outage. The main reason the National Grid chose this method was the speed of the repair and the huge cost saving (estimated at £10,000) compared to replacing the entire porcelain shed. The

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FS 695214  
ISO 14001:2015  
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porcelain shed is back in service and working normally.

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