

# Sealing of leaks to SF6 Gas Circuit Breaker in large substation

ID: 9380

Industry: Power  
Application: GSS-Gaskets, Seals and Shims  
Substrate: Other  
Products: Belzona 7311

Customer Location: Newark, Nottinghamshire  
Application Date: April 2024

## Problem

SF6 leaking from joints and bolts



Prepare area with emery paper/ wire brush making surface area as rough as possible.



Initial wetting out with a short bristled brush to coat all target areas



Cover nuts/bolts with belzona filled caps  
Wrap with bandage around whole area, overlapping and patching where necessary.



Build up Belzona product, ensuring no air pockets remain. Product given a week to cure before 5 bar restored to the Gas Circuit Breaker

## Application Situation

An effective repair was made to the de-gassed breaker.

The team received detailed training from the Senior Area Sales Engineer and felt confident enough to effect the repair without using outside help

Following the training, they were able to carry out the repair at a time convenient to them and within the allowed outage of the equipment

## Application Method

Isolate and de-gas

Abrade the target area as much as possible

Wet out all target areas with mixed Belzona 7311

Wet out the Belzona 9341 reinforcing sheet

Fill bolt caps and cover all bolts, then apply reinforcing sheet

Build up with Belzona 7311 to encapsulate all possible leaking sites

Allow to cure then introduce gas back to 5 bar working pressure

## Belzona Facts

SF6 has 23,500 time more damage potential to the world's environment than CO2. This was carried out as a best effort

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FS 695214  
ISO 14001:2015  
EMS 695213

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