# BELZONA ELASTOMERS SEAL SF6 GAS LEAK

ID: 4234

Industry: Power Customer Location: Electricity Substation, UK

Application: VPF-Valves, Pipes and Fittings Application Date: October 2012

Substrate: Steel and Rubber

Products: \* Belzona® 2111 (D&A Hi-Build Elastomer),

\* Belzona® 2311 (SR Elastomer),

### **Problem**

Each joint/flange was suffering from leaks requiring sealing as opposed to fully stripping back each joint and replacing with new gaskets which degrade quickly. A solution was required to minimise the uncontrolled release of SF6 gas into atmosphere. The solution must be flexible, and provide in excess of 3kV insulation properties under 0.5bar pressure.









## **Photograph Descriptions**

- \* Visual view of equipment horizontal bus bar ,
- \* Substrate preparation completed,
- \* Conditioned and first Elastomer coat/joint sealing,
- \* Completed application with full encapsulation,

### **Application Situation**

Six capacitor current transformers leaking SF6 gas to Low Voltage side between bus bar and flange. The operating pressure was 45psi.

### **Application Method**

The application was cvarried out in accordance with modified versions of Belzona Know-How System Leaflets VPF-5 & VPF-11. after preparing the substrate and conditioning with Belzona® 2911, a fillet was created using Belzona® 2311 to the circumference of the bus bar, flange and rubber gasket joint. After allowing to cure, a gas test was undertaken to establish that the initial leak sealing system was successful. A coat of Belzona® 2111 was then applied to all of the areas of substrate incorporating Belzona® 9341 (Reinforcing Tape). A second coat was then applied to an approximate thickness of 5mm encapsulating the bus bar, all flange surfaces and the branch joint behind the flange.

For more examples of Belzona Know - How In Action, please visit https://khia.belzona.com

ISO 9001:2015 Belzona products are
FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

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# Belzona Facts Upon completion of each of the six applications, gas testing proved zero emission and in turn, the competency of the repairs with a six month review scheduled.