

# BELZONA SEALS TRANSFORMER MAIN FLANGE

ID: 4810

**Industry:** Steel & Metal Processing  
**Application:** VPF-Valves, Pipes and Fittings  
**Substrate:** Mild Steel  
**Products:** \* Belzona 1221 (Super E-Metal) Belzona 1291 (ES-Metal) Belzona 1161 (Super UW-Metal) Belzona 5831 (ST-Barrier),

**Customer Location:** Steel producer, UK  
**Application Date:** October 2013

## Problem

The main flange was discharging high volumes of oil through the failed gasket system, together with loss through the top and bottom bolt heads. Continual tightening of the bolts was no longer proving effective on this aged transformer. The Client sought a comprehensive solution to seal the main flange and bolt heads.



## Photograph Descriptions

\* Transformer prior to application Close up substrate preparation Main flange sealed and bolt head encapsulation Repair areas completed following Belzona 5831 coating ,

## Application Situation

Supply Transformer ST6 located at electricity substation within steel manufacturing plant.

## Application Method

Application was carried out in accordance with Belzona System Leaflet VPF-11. Due to a strict outage period and to enhance full success, the Client dropped the oil level beneath the flange level and created the correct working habitat and heat source to reduce product cure time. Substrate was prepared by MBX Bristle Blaster. Residual leaks were sealed with Belzona 1291 & 1221. Flange joint was sealed by applying Belzona 1161 & Belzona 9341 (Reinforcement Tape). The bolt and nut heads were fully encapsulated using a disposable former containing Belzona 1161. Once cured the formers were removed and the prescribed repair areas coated with Belzona 5831.

## Belzona Facts

The leak sealing application was successful following recharge of oil and when the transformer was placed back in service. The flange and bolt heads have shown no further signs of leaking. This has resulted in significant cost saving and eliminated risk to the local environment. Belzona provided a full turnkey solution to the Client.

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Q 09335  
ISO 14001:2015  
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