Know-How*in Action*

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BELZONA TRANSFORMER LEAK REPAIRS ON TERTIARY BOX

CUSTOMER
Electricity Substation, UK

APPLICATION DATE
September 2012

APPLICATION SITUATION
Exterior/Rooftop of Super Grid Transformer Tertiary Box

PROBLEM
The transformer had been suffering from extremely high losses of transformer oil. Following a site survey, oil discharges were evident at many of the flange and bolt joints to equipment located to both the interior and exterior of the noise enclosure. The root cause of the oil leaks was found to be the tertiary box located in the noise enclosure on the rooftop.

PRODUCTS
Belzona 1221 (Super E-Metal)
Belzona 1161 (Super UW-Metal)
Belzona 5831 (ST-Barrier)

SUBSTRATE
Mild Steel

APPLICATION METHOD
The application was carried out in accordance with modified versions of Belzona Know-How System Leaflets VPF-8 & 11. The tertiary box substrate was prepared before Belzona 1221 was used to stem any active oil leaks. The flange joint was sealed using Belzona 1161 incorporating Belzona 9341 (Reinforcing Tape). Bolt and nut heads, together with male studs were protected by either bridging tape or tight fit former, then fully encapsulated using a disposable former containing Belzona 1161. Following the curing process, the formers were removed and all of the repair areas were coated with Belzona 5831.

BELZONA FACTS
The leak sealing project was successful. In recharging the transformer with oil to the correct level, neither the flange or bolt heads showed any visual evidence of further leakage. The clients request that the studs be protected prior to encapsulation of the bolt heads was also met.

PICTURES
1. Tertiary Box during survey
2. Completed application
3. Completed application

1.


2.


3.


ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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