

Emergency Leak Sealing Systems for Transformers



Transformer maintenance is crucial for efficient operation in many power industries. Equipment deterioration can result in potential oil leaks, affecting the surrounding environment. Therefore, any issues need to be solved quickly, to avoid further complications.

Surface-tolerant solutions:

Manually-prepared, oily and wet surfaces can prove difficult to adhere to when carrying out an application. However, Belzona's surface-tolerant solutions can stem and seal transformer leaks quickly and for the long term. They are resistant to a wide range of chemicals and provide excellent corrosion protection.

Belzona 1161

When confronted with wet and oil-contaminated surfaces, Belzona 1161 can be used as multi-purpose, durable repair option. It is easy to mix and apply with no need for specialist tools.

Belzona 1212

This surface-tolerant system is specifically designed for rapid repair applications. With a working life of 9 minutes at 20°C (68°F), Belzona 1212 is ideal for a fast return to service.

Belzona 5831

For further protection against the effects of corrosion use Belzona 5831. This barrier coating can be applied on to manually-prepared surfaces, even when moisture is present.

Belzona Know-How *in Action:* Wind Farm in UK, 2016



Problem

The transformers were leaking oil, which was a safety concern due to overheating. However, they could not be transported from site as the leaking oil could contaminate the surrounding farmland. A quick solution was required to avoid operational delays.

Solution

Belzona 1212, a surface tolerant material, offered a rapid-curing solution to allow the transformers to be replaced as planned with minimum down time and maximum protection for the environment.

Belzona was tasked with supplying material quickly as, for every day the wind farm was out of service, the customer was losing in excess of £34,000. Therefore, there were significant cost savings because this solution could be applied in situ.



Fast Curing

For rapid repairs, Belzona 1212 offers a fast-curing option, even at temperatures as low as 5°C (41°F).



Surface Tolerant

These systems demonstrates excellent adhesion when applied directly onto manually-prepared, wet or oily surfaces.



Corrosion Resistant

Outstanding protection against corrosion for metal substrates, ensuring longevity in service and avoiding unnecessary maintenance.



Experience

These systems have demonstrated a proven track record within many sectors, including Oil and Gas, as well as other power industries.

TECHNICAL DATA	Mixing ratio (<i>Base : Solidifier</i>)	1 : 1 by volume	5 : 6 by weight
	Working life	9 minutes at 20°C (68°F)	
	Shelf life	5 years	
	Dry heat resistance	200°C (392°F)	
	Adhesion (<i>tensile shear</i>)	Grit blasted mild steel - clean and dry: 18.0 MPa (2,615 psi)	Grit blasted mild steel - transformer oil: 20.1 MPa (2,920 psi)
		Ground mild steel - clean and dry: 17.8 MPa (2,575 psi)	Ground mild steel - transformer oil: 18.0 MPa (2,615 psi)
	Compressive strength	69.0 MPa (10,010 psi) at 20°C (68°F) cure	
	Volume capacity	212 cm ³ (12.9 in ³) / 450 g	
	Heat distortion temperature	44°C (111°F) at 20°C (68°F) cure	
	Abrasion resistance	H10 - 1,061 mm ³ wet	CS17 - 54 mm ³ dry