

## Surface Tolerant Multi-purpose Repair Material

Belzona 1212 is a paste grade multi-purpose epoxy-based material that utilises the latest technology to achieve rapid cure and excellent adhesion. Belzona 1212 has built-in surface tolerant technology, enabling the product to bond tenaciously onto steel substrates even when surface preparation is minimal or if the substrate is heavily contaminated with oil or water.

When ideal surface preparation of the metallic substrate cannot be achieved due to lack of time or resources, Belzona 1212 provides a cost-effective repair that can reinstate equipment for years of service. With a high level of tolerance to surface contamination and excellent adhesion to manually prepared substrates, this fast curing material is ideally suited for applications where grit blasting cannot be achieved.

When fully cured, this two-part system exhibits outstanding mechanical strength and, by virtue of the metallic character of Belzona 1000 Series polymers, will behave and move sympathetically with the metal substrate.



### APPLICATION AREAS

- Plate bonding, corrosion pit filling and localised repair of wet, sweating or oil contaminated pipes where grit blasting cannot be achieved
- In-situ sealing of oil and fluid leaks on storage tanks, engines, gearboxes, transformers and sumps
- Long-term repair of offshore structures and marine vessels, including ship hulls, rudders, propellers and ballast tanks, without taking the equipment out of service
- Underwater repairs including use in splash zones and coastal structures

### KEY BENEFITS



#### EXCELLENT ADHESION

Belzona 1212 exhibits high adhesive strength to non-grit blasted contaminated substrates.



#### SURFACE TOLERANT

Belzona 1212 can be applied directly onto manually prepared, wet or oil-contaminated surfaces as well as underwater.



#### RAPID CURE

Belzona 1212 cures rapidly after mixing of the two components. It also cures extremely well at temperatures as low as 5°C (41°F).



#### HIGH MECHANICAL STRENGTH

When fully cured, Belzona 1212 demonstrates excellent mechanical properties, resulting in excellent durability and longevity in service.



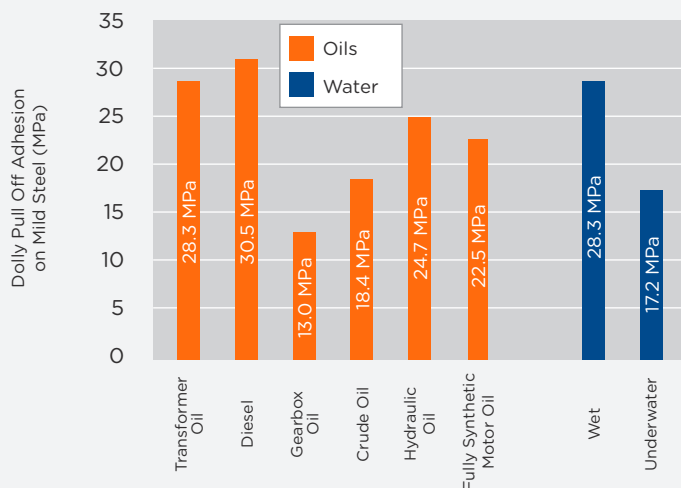
#### SIMPLE TO USE

Belzona 1212 has a simple 1:1 volume mix ratio, making it very simple to use and apply with minimal training and simple tools.

## 1212

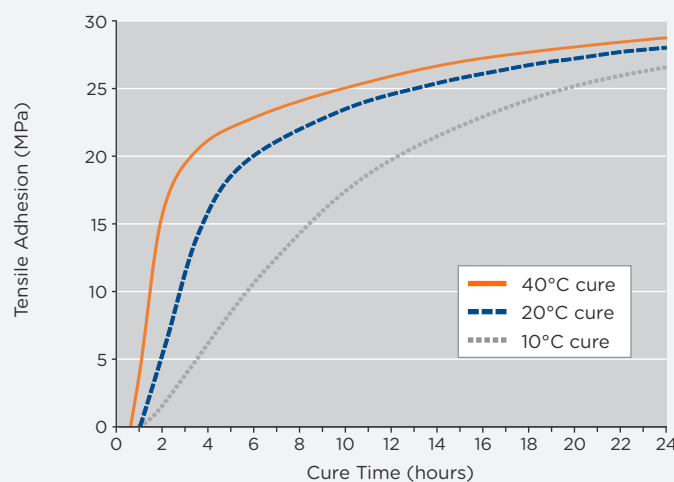


## EXCELLENT ADHESION



- Belzona 1212 demonstrates excellent adhesion to contaminated mild steel surfaces prepared to SSPC-SP11/ISO 8501-1 St3.

## RAPID CURE



- Following a 90 minute cure at 20°C (68°F), a one inch square bracket bonded with Belzona 1212 will be able to support a tensile load of greater than 200kg (440lbs).
- After a 4 hour cure at 20°C (68°F), the same bracket will be able to support a load of greater than 1000kg (2200lbs).

## KEY TECHNICAL DATA

<b>Tensile Strength (ASTM D638)</b> 25.0 MPa (3625 psi) 24 hour cure at 20°C (68°F)	<b>Full Mechanical Loading</b> 8 hours at 20°C (68°F)	<b>Tensile shear adhesion (ASTM D1002)</b> <i>on manually prepared ground mild steel (SSPC-SP11 / ISO 8501-1 St3)</i>
<b>Compressive Strength (ASTM D695)</b> 24 hour cure at 20°C (68°F)	75.4 MPa (10,935 psi)	Clean and dry 17.8 MPa (2,575 psi) Transformer oil 18.0 MPa (2,615 psi) Wet 13.6 MPa (1,970 psi) Underwater 13.2 MPa (1,915 psi)
<b>Usable Life</b> 20°C (68°F)	9 minutes	<b>Mixing Ratio</b> Mixing ratio by volume (Base:Solidifier) 1:1

FOR MORE INFORMATION:

## QUALITY PRODUCTS - TECHNICAL SUPPORT

The Belzona product range is manufactured through stringent quality and environmental control guidelines complying with the internationally recognised requirements of ISO 9001:2008 and ISO 14001:2004.

Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by a trained Technical Consultant who will diagnose the problem, recommend the solution and provide 24 hour on-site application supervision and advice.



Belzona products are manufactured under an ISO 9000 Registered Quality Management System