

# Fast Curing, Surface Tolerant, Abrasion Resistant System for Patch Repairs



# 1818



Belzona 1818 is a fast curing, surface tolerant, abrasion resistant system ideal for patch repairs on surfaces subject to high erosion and abrasive environments.

Its fast curing properties results in minimal downtime for damaged equipment, and the product can experience full mechanical loading in as little as two hours after application.

This material has built in surface tolerant technology, enabling it to bond tenaciously onto steel substrates even when surface preparation is minimal or if the substrate is heavily contaminated with oil or water. The product can even be applied and cured underwater.

Supplied as a two-part system, Belzona 1818 is easy to mix and apply without the need for specialist tools and can be applied direct to the substrate with no need for an additional primer.

TECHNICAL DATA	Mixing ratio (base : solidifier)	3 : 2 by volume		4 : 3 by weight	
	Working life	16 minutes at 20°C (68°F)			
	Coverage rate	0.14 m <sup>2</sup> (1.55 ft <sup>2</sup> ) at 3 mm (0.12 in) per 1 kg unit			
	Shelf life	3 years			
	Taber Dry (CS17) 1kg 1000 cycles	4 mm <sup>3</sup> loss			
	Taber Wet (H10) 1kg 1000 cycles	83 mm <sup>3</sup> loss			
	Compressive Strength	76.2 MPa (11,050 psi) 24 hour cure at 20°C (68°F)		78.5 MPa (11,380 psi) 7 day cure at 20°C (68°F)	
Heat distortion temperature (HDT)	44°C (111°F) after 24 hours cure at 20°C (68°F)		51°C (124°F) after 7 day cure at 20°C (68°F)		
Adhesion (Pull Off) on grit blasted mild steel	Clean and dry: 16.3 MPa (2,370 psi)	Transformer oil contaminated : 14.1 MPa (2,040 psi)	Wet: 15.9 MPa (2,300 psi)	Underwater: 15.3 MPa (2,220 psi)	

CURE TIMES	Temperature	5°C (48°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
	Movement or use involving no loading	4 hours	3 hours	1.5 hours	1 hour	20 minutes
	Light loading	6 hours	4.5 hours	2 hours	1.5 hours	30 minutes
	Full mechanical or thermal loading	24 hours	18 hours	8 hours	6 hours	2 hours

*In emergency situations, Belzona® 1818 can be returned to service following the light loading times.*

*\*Please consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.*



**SURFACE TOLERANT**



**ABRASION RESISTANT**



**RAPID CURE**



**EXCELLENT ADHESION**



**EASY TO APPLY**

## Key Benefits:

- Excellent abrasion resistance

Belzona 1818 exhibits outstanding abrasion resistance and can withstand erosion up to temperatures of 80°C (176°F).

- Surface tolerant

Belzona 1818 can be applied directly onto manually prepared, wet or oil contaminated surfaces and can even be applied underwater.

- Fast curing

Belzona 1818 is fast curing ensuring a quick return to service. Depending on ambient conditions, the product can experience full mechanical loading after only 2 hours.

- Easy to mix and apply

No specialist tools required for mixing or application.

## Application:



As shown in the image above, Belzona 1818 is ideally suited for patch repairs where a rapid return to service is required.

## Application Areas:

- Turbo Separators
- Slurry pumps
- Grinding mills
- Screw conveyors
- Chutes and hoppers
- Hydrocyclones
- Wear plates
- Grit pumps
- Agitator shafts, hubs and blades
- Dust extraction pipe work



For more information, please contact your local Belzona representative:



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### QUALITY PRODUCTS - TECHNICAL SUPPORT

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

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.