

# Lining for Protection Against Abrasive Attack at Elevated Temperatures



**BELZONA**<sup>®</sup>  
**1813**



Belzona 1813 is a two-component repair and protective coating for surfaces subject to abrasive attack at elevated temperatures up to 200°C (392°F).

Belzona 1813 can be applied without the need for specialist tools and will bond to a wide range of metallic substrates, providing a seamless abrasion resistant lining. It is capable of being applied in thick or thin layers, with no shrinkage, expansion or distortion.

As well as abrasion protection, Belzona 1813 also protects surfaces against erosion and corrosion and is resistant to a wide range of chemicals, even at high temperatures.

TECHNICAL DATA	Mixing ratio (base : solidifier)	3 : 1 by volume	3.84 : 1 by weight
	Working life	40 minutes at 20 °C (68 °F)	
	Shelf life	5 years	
	Dry heat resistance	240 °C (464 °F)	
	Adhesion (tensile shear)	Mild steel: 15.1 MPa (2190 psi) at 20 °C (68 °F) cure	
	Compressive strength	74.7 MPa (10 840 psi) at 20 °C (68 °F) cure	
	Volume capacity	450 cm <sup>3</sup> (27.5 in <sup>3</sup> ) / kg	
	Heat distortion temperature	54 °C (129 °F) at 20 °C (68 °F) cure	
	Coverage rate	0.15 m <sup>2</sup> (1.61 ft <sup>2</sup> ) / kg at 3 mm (0.125 in)	
	Abrasion resistance	H10 - 45 mm <sup>3</sup> wet	

CURE TIMES	Temperature	10 °C (50 °F)	15 °C (59 °F)	20 °C (68 °F)	25 °C (77 °F)
	Movement or use involving no loading	16 hours	12 hours	8 hours	6 hours
	Machining or light loading	24 hours	18 hours	12 hours	8 hours
	Full mechanical or thermal loading	10 days	8 days	6 days	4 days
	Contact with chemicals	20 days	14 days	10 days	6 days

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



**HIGH  
TEMPERATURE  
RESISTANCE**



**CHEMICAL  
RESISTANT**



**ABRASION  
RESISTANCE**



**FAST  
CURING**



**SOLVENT  
FREE**

## Key Benefits:

- **Broad range of temperatures**

Belzona 1813 will protect assets against abrasion and impact damage up to temperatures of 200°C (392°F).

- **Easy to mix and apply**

Mixing and applying Belzona 1813 is made simple as there is no need for specialist tools or hot work. Additionally, no dust or loose aggregates are necessary.

- **Seamless finish**

Belzona 1813 can be applied in thin layers or built up to a thicker profile (up to 6mm (0.25inch) on vertical surfaces). Due to its solvent-free formulation, Belzona 1813 will not experience shrinkage, expansion or distortion.

- **Exceptional resistance**

As well as exhibiting abrasion resistance comparable to basalt, Belzona 1813 is also resistant to a wide range of chemicals.



Damaged screw conveyor



The screw conveyor repaired with Belzona 1813 and alumina tiles

## Application Areas:

### Power Industry

- Ash handling systems
- Boiler slag systems
- Electrostatic precipitators
- Induced draft fans
- Scrubbers
- Spiral feeders into
- Boilers

### Pulp & Paper

- Launderers
- Recontour chippers

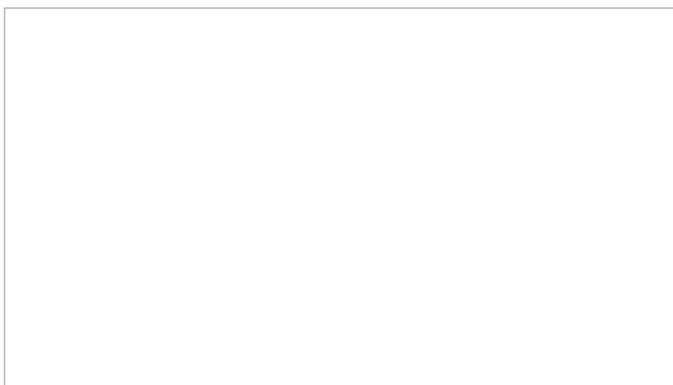
### Cement

- Breakers
- Crushers
- Pulverisers

### General

- Bins
- Blowers
- Bunkers
- Centrifuges
- Chutes
- Cyclones
- Deflector plates
- Exhausters
- Wear plates
- Fan blades
- Fan housings
- Hoppers
- Impellers
- Mixing bowls
- Nozzles
- Pipe elbows
- Screens

For more information, please contact your local Belzona representative:



### 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.