

# Multi-Purpose, High Temperature Repair and Rebuilding System



Belzona 1511 (Super HT-Metal) is a high temperature, paste-grade system for rebuilding equipment damaged by erosion-corrosion. This material can also be used as a high-strength structural adhesive or for the creation of irregular load bearing shims.

This material has been specifically designed for use in combination with our high temperature coatings. The product's extended overcoat window of 24 hours reduces the need for grit blasting, significantly lowering application costs and downtime. Under immersion it is suitable for applications up to 150°C (302°F).

This multi-purpose repair composite is corrosion resistant and performs well against a wide range of chemicals, making it an ideal choice for use in repair situations or original equipment manufacture (OEM).

TECHNICAL DATA	Mixing ratio (base:solidifier)	5 : 1 by weight		
	Working life	60 minutes at 20°C (68°F)		
	Shelf life	5 years		
	Dry heat resistance	210°C (410°F)		
	Adhesion (tensile shear) mild steel	21.1 MPa (3,060 psi) at 20°C (68°F) cure	19.2 MPa (2,780 psi) at 100°C (212°F) cure	
	Compressive strength (yield)	53.0 MPa (7,690 psi) at 20°C (68°F) cure		
	Volume capacity	383 cm <sup>3</sup> (23.4 in <sup>3</sup> ) / 1 kg		
	Heat distortion temperature	53°C (127°F) at 20°C (68°F) cure	131°C (268°F) at 100°C (212°F) cure	
	Abrasion resistance	H10 - 591 mm <sup>3</sup> wet	CS17 - 12.8 mm <sup>3</sup> dry	

CURE TIMES	Temperature	10°C (50°F)	20°C (68°F)	30°C (85°F)	40°C (105°F)
	Light loading	72 hours	18 hours	5 hours	4 hours
	Full mechanical or thermal loading	Post cure required	30 hours	24 hours	6 hours
	Immersion in chemicals	Post cure required	Post cure required	60 hours	8 hours

\*Please visit the [product page](#) and consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.



**HIGH TEMPERATURE RESISTANCE**



**EROSION + CORROSION RESISTANT**



**CHEMICAL RESISTANT**



**EXCELLENT ADHESION**



**LONG LASTING**

## Key Benefits:

- **Erosion-corrosion resistance**

Belzona 1511 allows damaged equipment to be repaired and protected for the long term.

- **High temperature resistance**

This material is suitable for applications up to 160°C (320°F) in immersion service.

- **Simple to mix and apply**

Belzona 1511 can be easily mixed and applied up to 12mm (0.47"), enabling deep pitting to be repaired.

- **Fully machinable**

Once cured, this material can be machined using conventional tools.

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## Application Areas:

- Clarifiers
- Distillation columns
- Engine and pump casings
- Heat exchangers
- Pipes
- Process vessels
- Scrubber units
- Tanks

## Before and After



Heat exchanger tube face damaged by severe galvanic and pitting corrosion. Rebuilt with Belzona 1511 prior to the application of a Belzona high temperature coating.



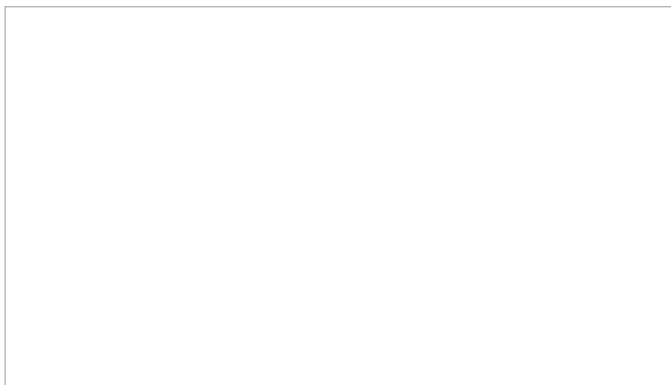
Process kettle developed holes in the weld seam as a result of corrosion. Belzona 1511 used to repair holes for the long term.



High temperature vessel suffering from severe corrosion. Pitted surface rebuilt using with Belzona 1511.

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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.