A Fast-Curing Metal Repair Composite for High Speed Emergency Repairs

BELZONA® 1221

Belzona 1221 (Super E-Metal) is a two component emergency repair composite based on a ceramic steel reinforced polymer system. This fully machinable Belzona product can be used for the permanent bonding, repairing or rebuilding of metallic components.

Belzona 1221 can be applied without the need for specialist tools. It will bond strongly to almost any rigid surface.

This multipurpose emergency repair material will not corrode and is resistant to a wide range of chemicals.

ABS TYPE APPROVED PRODUCT

TECHNICAL DATA				
Mixing Ratio (Base:Solidifier)	1 : 1 by volume	2 : 1 by weight		
Working Life	3 minutes at 25°C (77°F)			
Shelf Life	5 years			
Heat resistance	70°C (158°F) dry	60°C (140°F) wet		
Adhesion (Tensile Shear)	Mild steel: 17.2 MPa (2,500 psi)	Copper: 12.4 MPa (1,800 psi)	Aluminum: 10.3 MPa (1,500 psi)	
Compressive Strength	55.8 MPa (8,100 psi)			
Volume Capacity	550 cm³ (33.5 in³) / 1 kg			
Heat distortion temperature	51°C (124°F) at 25°C (77°F) cure			
Flexural strength	59.3 MPa (8,600 psi)			

CURE TIMES				
Temperature	10°C (50°F)	15°C (59°F)	20°C (68°F)	25°C (77°F)
No loading or immersion	16 minutes	15 minutes	14 minutes	13 minutes
Machining and/or light loading	50 minutes	45 minutes	40 minutes	35 minutes
Full mechanical or thermal loading	100 minutes	90 minutes	75 minutes	60 minutes
Immersion in chemicals	36 hours	30 hours	24 hours	20 hours

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

FULLY MACHINABLE

EXCELLENT ADHESION

FAST CURE

CORROSION RESISTANCE

EASILY TO APPLY

1000 Series

BELZONA 1221

Key Benefits:

Corrosion and chemical resistance

This multipurpose emergency repair material will not corrode and is resistant to wide range of chemicals.

Excellent adhesion

The material can be applied in thin or thick sections in one operation and bonds strongly to almost all rigid substrates.

Fast cure

Due to its fast-curing characteristics, this repair material is ideal for emergency repair situations and allows a rapid return to service.

Application Areas:

- Leaking pipes
- Scored hydraulic rams
- Leaking tanks
- Stripped threads
- Fractured and holed casings
- Bearing seats
- Damaged insulators
- Ducts
- Hoppers

Application: Before & After

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.

Copyright © Belzona International Limited 2019