RESIMETAL 102 Metal Repair Fluid –
solvent free epoxy with metallic fillers

Resimetal 102 Metal Repair Fluid is a two component solvent free epoxy metal repair fluid designed to resurface and protect metallic surfaces.

- Apply to mechanically & abrasive blast cleaned surfaces
- High mechanical adhesion to metal substrates
- Apply at thicknesses up to 3mm (120mil)

Typical Applications

damaged flanges leaking tank seams damaged hulls on vessels

Surface Preparation

Metallic Substrates – Mechanical abrasion

1. All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be mechanically abraded using handheld grinders to ***ISO 8501/4 ST3 (SSPC SP3 ST3)***.
3. Once abraded, the surface must be degreased and cleaned using MEK or similar type material.
4. All surfaces must be coated before gingering or oxidation occurs.

Metallic Substrates – Abrasive blast cleaning

1. All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be abrasive blasted to ***ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2)*** minimum blast profile of 75 microns (3mil) using an angular abrasive.
3. Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type material.
4. All surfaces must be coated before gingering or oxidation occurs.

PLEASE NOTE: *For salt contaminated surfaces the substrate must be pressure washed with clean water and checked for salt contamination, please refer to the surface preparation and pre-application guide for further information.*

Mixing

Prior to mixing please ensure the following:

1. The base component is at a temperature between 15-25°C (60-77F°).
2. The ambient & surface temperature is above 5°C (41F°).

Once these 2 checks have been met, please proceed with mixing the product.

1. Transfer the contents of the Activator unit into the Base container.
2. Using the spatula provided, mix the 2 components until a uniform material free of any streaks is achieved.
3. From the commencement of mixing the whole of the material should be used within 30 minutes at 20°C (68°F).

Application

Fairing compound –

1. for filling badly pitted or scarred surfaces apply the material using a rubber float across the repair surface ensuring the product is pressed into any holes or cracks.
2. The maximum wet film thickness this material can be applied onto a vertical surfaces without sagging is 3mm (120mil/ 1/8”).

Anti-slip system –

1. for conveyor rollers, steps or ramps, apply the product to the surface at a wet film thickness of 500 microns (20mil) and then broadcast a suitable aggregate onto the surface (Aluminium Oxide or equivalent).
2. Once cured brush off any excess aggregate.

Resurfacing –

1. If applying as a resurfacing material to repair worn or damaged surfaces the application should be carried out in two coats.
2. The material must be applied at a target wet film thickness of 500 microns (20mil) per coat.
3. From the commencement of mixing the whole of the material should be used within 30 minutes at 20°C (68F°).

Coverage Rates

1kg (2.2lb) of fully mixed product will give the following coverage rates –

0.440m² at 1mm	4.73ft² at 40mil
0.220m² at 2mm	2.37ft² at 80mil
0.146m² at 3mm	1.57ft² at 1/8”

Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.

Cure Times

At 20°C (68F°) the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures:

Usable Life	30mins
Maximum overcoating time	6 hours
Full cure	3 days

For Optimum Performance

After an initial curing period of at least 4 hours at 20°C (68F°), raising the cure temperature progressively to 60 - 100°C (140-212F°) for up to 8 hours will result in improved mechanical, thermal and chemical resistance properties

Pack Sizes

This product is available in the following pack sizes –
1kg (2.2lb)

Colour

Mixed material - dark Grey
Base component – dark grey
Activator component – amber

Over-coating times

Minimum - the applied material can be over-coated as soon as it is touch dry.
Maximum - the over-coating time should not exceed 6 hours.
Where the maximum over-coating time is exceeded, the material should be allowed to harden before being abraded or flash blasted to remove surface contamination.

Storage Life

5 years if unopened and store in normal dry conditions (15-30°C/ 60-86°F)

Other Technical Documents

Safety Data Sheets	-	Base & Activator components
Product Specification Sheet	-	Technical Performance Information

Health and Safety

Please ensure good practice is observed at all times. Protective gloves, goggles & a disposable coverall must be worn during the mixing and application of this product. Before mixing and applying the material ensure you have read the fully detailed Safety Data Sheet.

Legal Notice: