

203 SUPER FLOW

Resimac 203 Super Flow is an erosion-corrosion resistant coating used principally in fluid flow situations for improving flow efficiency. The material can be applied directly to abrasive blasted steel or to surfaces previously rebuilt with Resimac 101 Metal Repair Paste or 201 Ceramic Repair Paste.

Typical applications

worn impellers, damaged valves, separator housings, damaged pump casings, eroded pipe work, propeller, bow thrusters, rudders, corroded water boxes end plates and tube sheets.

Characteristics

Appearance

Base: Light Grey, Red, or Blue paste
Activator: Straw coloured liquid
Mixed: Light Grey, Red, or Blue

Mixing Ratio

By weight: 5:1
By volume: 3:1

Density

Base: 1.67
Activator: 1.05
Mixed: 1.52

Volume Capacity

657cc/Kg

Solids content

100%

Sag Resistance

Nil at 400microns

Coverage

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

3.235m² at 200 microns
34.77ft² at 8mil
2.188m² at 300 microns
23.52ft² at 12mil

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

The applied material should be allowed to harden for the times indicated below before being subjected to the conditions indicated:

Usable life

10°C 40 minutes
20°C 20 minutes
30°C 10 minutes
40°C 5 minutes

Minimum overcoating time

10°C 4 hours
20°C 2 hours
30°C 1 hour
40°C 30 mins

Maximum overcoating time

10°C 12 hours
20°C 6 hours
30°C 3 hours
40°C 90 mins

Full Cure

10°C 4 days
20°C 2 days
30°C 1 day
40°C 12 hours

Storage life

5 years if unopened and stored in normal dry conditions (15-30°C)

Mechanical Properties

Abrasion Resistance

Taber CS17 Wheels/1 Kg load
24mm³ loss/1000 cycles

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile
187kg/ cm² (2650psi)

Pull off Adhesion to ASTM D4541 on abrasive blasted mild steel with 75 micron profile
202kg/ cm² (2880 psi)

Compressive strength

Tested to ASTM D695
735kg/cm² (10450psi)

Corrosion Resistance

Tested to ASTM B117
Minimum 5000 hours

Flexural Strength

Tested to ASTM D790
570kg/cm² (8100psi)

Hardness

Rockwell R to ASTM D785
85

Heat Distortion

Tested to ASTM D648 at 264psi fibre stress.
20°C Cure 46°C
100°C Cure 82°C

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 70°C.
Resistant to dry heat up to 200°C dependent on load.

Food Contact

USDA compliant for incidental food contact.

Approvals

Approved by BUREAU VERITAS for Surface Protection and Cold Repair Products applied to Marine Vessels.

Certificate No: 55258/AO BV

Expiry: 24th March 2024

Chemical Resistance

The product resists attack by a wide variety of inorganic acids, alkalies, salts and organic media.

For more detailed information refer to the Resimac Technical Centre for advice.

Quality

All Resimac Products are supplied under the scope of the company's fully documented quality system.

Warranty

Resimac warrants that the performance of the product supplied will conform to the typical descriptions quoted within this specification provided material is stored correctly and used according to the procedures detailed in the Technical Data Sheet for the material.

Health and safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read and fully understood the detailed Material Safety Data Sheet

Legal Notice: The data contained within this Product Specification is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Resimac accepts no liability arising out of the use of this information or the product described herein.