RESIMETAL 203 Superflow Ceramic Repair Fluid

Resimac 203 Superflow Ceramic Repair Fluid 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

Suitable for the coating of equipment such as pump cases and impellers, valves, pipes, propellers, rudders, jet tubes, kort nozzles, etc.

Characteristics

Appearance

Base:	Blue or light grey Paste
Activator:	Amber liquid
Mixed:	Thixotropic blue or light grey liquid

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 400 microns

Useable Life

10°C	45-60 minutes
20°C	20-30 minutes
30°C	20-25 minutes

Coverage

Application should be carried out in two coats. To achieve the correct film thickness of 250 microns per coat a practical coverage rate of 2.2 sq m/kg should be aimed for.

Cure Times

At 20°C 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:

Movement without load or immersion	6 hours
Light loading	10hours
Full loading and cold water immersion	3 days
Hot water and Chemical immersion	6 days

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

122mg loss/1000 cycles
0.08cc loss/1000 cycles

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile

187kg/cm² (2650psi)

Compressive strength

Tested to ASTM D 695

735kg/cm² (10,450psi)

Corrosion Resistance

Tested to ASTM B117

Minimum 5000 hours

Flexural Strength

Tested to ASTM D790

570kg/cm² (8100psi)

Hardness

Rockwell R to ASTM 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

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200°C dependant on load.

Chemical Resistance

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

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