



Extreme Wear, Abrasion & Impact

Introduction to Resimac

Resimac manufactures a wide range of beaded ceramic epoxy repair materials which are ideal for repairs to process equipment and components subject to extreme wear, abrasion & impact.

Our beaded ceramic enhanced epoxy repair products are manufactured in the UK and exported to over 50 countries worldwide. We are able to provide local solutions in North America, South America, Africa, Europe, Middle East and Asia using our approved contractor network.

We have an extensive track record across all industries with our products being used by some of the largest corporations worldwide to help protect metallic and concrete surfaces from premature failure.

Oil & Gas

Power

Water

Chemical

Marine

Mining & Mineral Process

Paper & Pulp



Heavy Abrasion

Wet slurry abrasion, extreme sliding wear from fine particles

2 component paste grade

Apply by trowel

Solvent free epoxy

Apply at 3-6mm DFT

Base & activator component

Suitable for metallic surfaces

1.5mm ceramic beads

Wear & abrasion resistant

204 HD

Extreme Abrasion

Extreme impact, sliding-wear abrasion, impact caused by medium to coarse particle flow

2 component paste grade

Apply by trowel

Flexible solvent free epoxy

Apply at 6-10mm DFT

Base & activator component

Suitable for metallic surfaces

2-3mm ceramic beads

Wear & abrasion resistant

204 UHD

High Temperature Heavy Abrasion

Wet slurry abrasion, extreme sliding wear from fine particles

2 component paste grade

Apply by trowel

Solvent free epoxy novolac

Apply at 3-6mm DFT

240°C temperature resistance

Apply to any metallic surface

1.5mm ceramic beads

Wear & abrasion resistant

204 XHT

Innovation and Technology

Through advanced testing in the Resimac laboratories we have developed a range of products with unrivalled wear, impact and abrasion resistance.

204 HD

Based on 1.5mm bead blend
 Epoxy resin based
 Max 60°C immersion resistance
 Max 150°C dry temp resistance

Wet slurry abrasion
 Extreme sliding wear from fine particles



Slurry pumps	Bins & hoppers
Fan blade & housing	Hydro-pulpers
Slurry pipes	Hydro-cyclones
Transport screws	Wear plates
Separators	Pipe elbows
Pipe spools	Chutes & hoppers

204 UHD

Based on 2-3mm bead blend
 Flexible epoxy resin based
 Max 60°C immersion resistance
 Max 120°C dry temp resistance

Extreme impact, sliding-wear abrasion,
 impact caused by medium to coarse
 particle flow.



Pulveriser's	Pipe elbows
Slurry pipelines	Dredge pumps
Fans/blowers/cyclones	Fan housings
Hoppers & silos	Ceramic tiles
Chutes	Conveyor screw
Deflector hoods	

204 XHT

Based on 1.5mm bead blend
 Epoxy resin based
 Max 130°C immersion resistance
 Max 240°C dry temp resistance

Wet slurry abrasion
 Extreme sliding wear from fine particles



Slurry pumps	Bins & hoppers
Fan blade & housing	Hydro-pulpers
Slurry pipes	Hydro-cyclones
Transport screws	Wear plates
Separators	Pipe elbows
Pipe spools	Chutes & hoppers

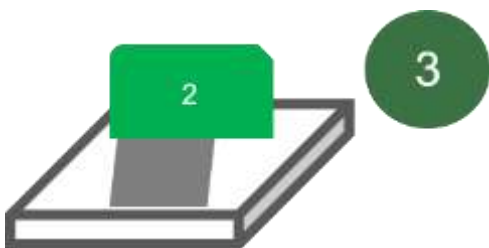
How do you apply these products?



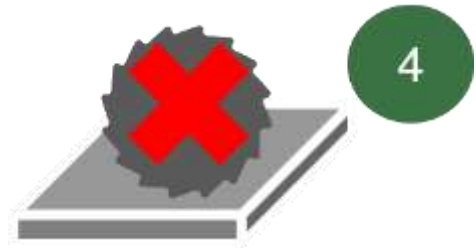
Ensure the product is streak free and a consistent mix throughout
Ensure the mixed product is placed on a clean surface



Use the applicator tools provided
1. Ideal for coving and intricate details
2. Ideal for filling flat surfaces

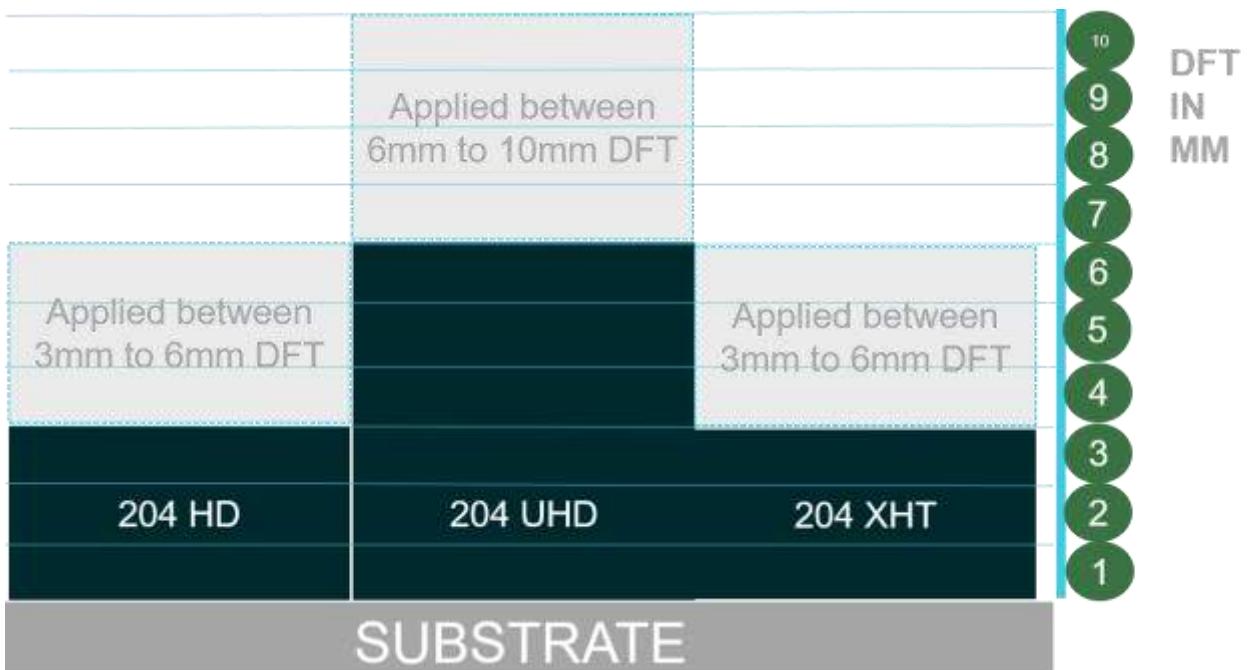


Apply the material to the repair surface, force the product into any cracks or holes.
Smooth off any ridges with a gloved hand



Once cured these products cannot be machined

What film thickness are these products applied?



What are the benefits of using Resimac products?

Simple and easy to apply

Eradicates hot works/ welding

No specialist tools required

Bonds to any metallic surface

No shrinkage during cure

High mechanical adhesion

Reinforced with ceramic beads

Proven abrasion resistance

Resists high impact force

Replacement for rubber lining

Restore to OEM specifications

Replace expensive alloys

Resists industrial chemicals

High temperature resistance

Resists high density slurries

Reduced Health & Safety risk

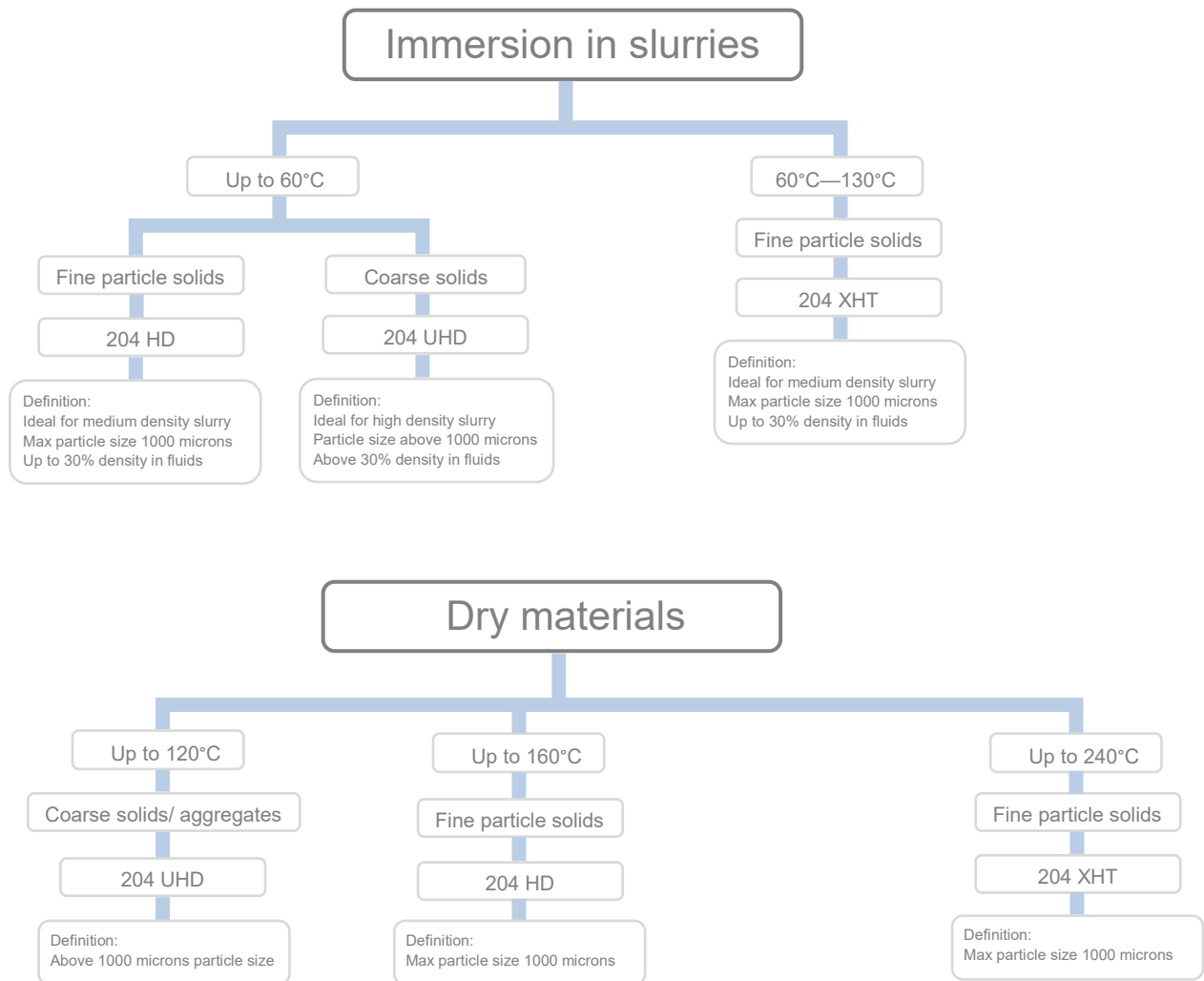
Reduced downtime

Extended life cycle costs

Reduced inspection times

Multiple on site solutions

Which product do I use?



Typical Applications

Resimac abrasion resistant materials can be used across a wide range of industries. The 204 series of products are ideal for protecting metallic surfaces subject to wear from heavy abrasion and impact.

Process equipment and structures that are involved in grinding, crushing, dry sliding abrasion, wet sliding abrasion, high impact environments and chemical attack can be protected from premature failure using the Resimac 204 series products.

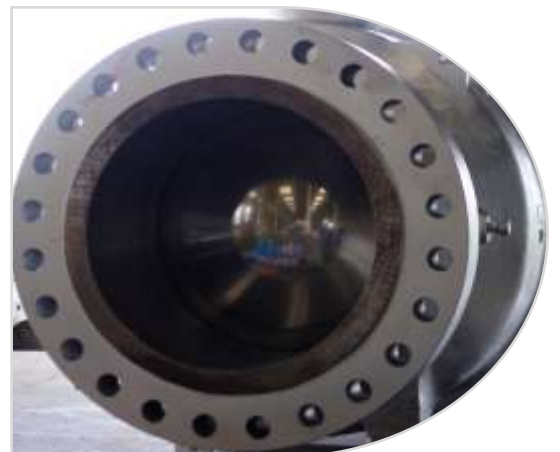
Separation Ponds & Tanks



Screens & Shakers



Pumps



Valves



Crushers & Grinders



Deflector plates



Chutes



Hoppers



Transport Screws



Pipes & Pipe Elbows

Abrasion, Wear & Impact Protection

Product Testing and Product Characteristics

	HD	UHD	XHT
Compressive strength <i>Tested to ASTM D 695</i>	1046kg/ cm ² (14,880psi)	790kg/ cm ² (11,150psi)	1046kg/ cm ² (14,880psi)
Corrosion Resistance <i>Tested to ASTM B117</i>	1000 hours	1000 hours	1000 hours
Flexural Strength <i>Tested to ASTM D790</i>	475kg/cm ² (6710psi)	415kg/cm ² (5860psi)	475kg/cm ² (6710psi)
Hardness <i>Rockwell R to ASTM D785</i>	89	75	89
Slump Resistance	10mm	20mm	10mm
Tensile Shear Adhesion <i>Tested to ASTM D1002</i>	272kg/cm ² (3840psi)	236kg/cm ² (3330psi)	272kg/cm ² (3840psi)
Abrasion Resistance <i>Taber abrasion CS17 1000 cycles/ 1kg</i>	42mm ³	29mm ³	42mm ³
Volume Capacity <i>cc per kg</i>	440	420	448
Base density <i>gm per cm³</i>	2.28	2.41	2.21
Activator density <i>gm per cm³</i>	2.26	2.29	2.26
Mixed product density <i>gm per cm³</i>	2.27	2.38	2.23
Dry heat resistance <i>(°C)</i>	150	120	240
Intermittent wet heat resistance <i>(°C)</i>	120	100	150
Immersion temperature re- sistance <i>(°C)</i>	60	60	130
Mixing ratio by volume	2:1	5:2	2:1
Mixing ratio by weight	2:1	2.64:1	2:1

	10°C			20°C			30°C			40°C		
	Pot life	Touch dry	Immersion	Pot life	Touch dry	Immersion	Pot life	Touch dry	Immersion	Pot life	Touch dry	Immersion
HD	60mins	8hrs	4 days	30mins	4hrs	2 days	15mins	2hrs	1 day	7.5mins	60mins	12hrs
UHD	100mins	12hrs	4 days	50mins	6hrs	2 days	25mins	3hrs	1 day	12.5mins	90mins	12hrs
XHT	60mins	8hrs	4 days	30mins	4hrs	2 days	15mins	2hrs	1 day	7.5mins	60mins	12hrs

Resimac Technical Support and Expertise



Formed in 2009 and based in the North of England, Resimac manufactures a wide range of solvent free epoxy and polyurethane coatings and engineering materials for the Marine, Chemical, Water, Power, Oil and Gas Industries.



We are able to offer expert technical advice onsite or online 24 hours a day, 7 days a week in over 45 countries worldwide.



Contact us direct by email, telephone or by visiting our website.

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With over 50 contractors worldwide we are able to offer fast and effective solutions in many of the worlds major industrial areas.

Fluid Wear & Abrasion

Extreme Wear & Abrasion

Chemical Protection

Corrosion Protection

High Temperature Protection

Impact Protection

Metal Repair

Pipe Repair and Pipe Wrapping

Thermal Protection

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