

TECHNICAL DATA SHEET: REPCO 1106 ST XF Paste

PRODUCT DESCRIPTION

REPCO 1106 ST XF Paste is a two component solvent free surface tolerant epoxy metal repair compound. The product has been designed for use on a wide range of metallic surfaces and once cured is machine able.

TYPICAL APPLICATIONS

Suitable for emergency repairs or part of planned maintenance to equipment such as –

- Underwater structures
- Ship Hulls
- Structural adhesive
- Worn or damaged pump shafts
- Cracked pump or valve casings
- Worn bearing housings
- Reforming flanges faces
- Leaking tank seams
- Cracked engine blocks

SURFACE PREPARATION

GENERAL

The product has been developed with for surfaces with less than ideal surface preparation. Correct surface preparation is essential for the long term success of any application. All oil and grease must be removed from the surface of the repair using an appropriate cleaner such as MEK.

STEEL SUBSTRATE

For optimum performance all steel substrates should be abrasive blasted to ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2) and a minimum blast profile of 75 microns using an angular abrasive.

Hand Tools

Where abrasive blast cleaning is not possible (excluding salt contaminated surfaces) the surface should be roughened by MBX, needle gun or grinding.

PLEASE NOTE: For salt contaminated surfaces the area must be abrasive blast cleaned as mentioned above and left for 24 hours to allow any ingrained salts to come to the surface. After this 24 hour period the surface must be washed with MEK prior to brush blasting to remove the surface salts. This process must be repeated until all ingrained contaminants have been sweated out of the surface.

In areas where the product should not adhere a thin layer of a suitable release agent should be applied taking care not to contaminate other areas.

Where possible ensure all loose material and as much surface contamination is cleaned from the surface, prior to wiping the surface with a suitable solvent cleaner such as MEK.

MIXING AND APPLICATION

PRECAUTIONS

Warm the Base component to 15-25°C (60-77F°) before mixing and do not apply when the ambient or substrate temperature is below 5°C (40F°) or less than 3°C (37°F) above the dew point

MIXING

Mixing of the product can be on full units or by partmixing. If mixing the whole unit please ensure as much of the base and activator is dispensed from the plastic container onto a clean plastic mixing surface and mix using a spatula until a uniform material free of any streakiness is achieved while ensuring no unmixed material is left on the spatula or the mixing surface. From the commencement of mixing the entire material should be used within 5 minutes at 20°C (68F°).

For part mixing, using a spatula place one equal measure from the base unit and activator unit onto a clean plastic mixing surface. Mix as above.

Using a spatula or applicator tool, apply the material to the prepared surface, ensuring the product is pressed into any pitting corrosion, holes or cracks and profile the repair to a smooth finish.

Where a machined finish is required, the repair area should be built up to at least 1.5mm (60mil) above the final surface tolerance. Once cured machine using a surface cutting speed of 200ft/minute and a feed rate of 50 thou/rev initially and 10 thou/rev for finishing.

Coverage Rates

500gm (1.1lb) of fully mixed product will give the following coverage rates $-\,$

 $\begin{array}{lll} 0.222m^2 \ at \ 1mm & 2.4ft^2 \ at \ 40mil \\ 0.111m^2 \ at \ 2mm & 1.2ft^2 \ at \ 80mil \\ 0.074m^2 \ at \ 3mm & 0.80ft^2 \ at \ 1/8'' \end{array}$

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:

Temperature	Movement without load or immersion	Machining and light loading	Full mechanical Loading	Full Immersion
10°C/50F°	2 Hours	4 Hours	8 hours	16 Hours
20°C/68F°	45 Mins	90 Mins	4 Hours	8 Hours
30°C/86F°	30 Mins	1 Hours	2 Hours	6 Hours
40°C/104F°	20 Mins	30 Mins	1 Hour	4 Hours

UNIT SIZES

Product is available in the following pack sizes – 200gm (0.4lb), 500gm (1.1lb)

OVERCOATING TIMES

Minimum – further material can be applied as soon as the first layer is touch dry.

Maximum – regardless of temperature the over-coating time should not exceed 4 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, and to expose a frosted appearance.

COLOUR

Mixed Material - Light Grey
Base Component - Black
Activator Component- White

TECHNICAL SUPPORT

Zoom Corrosion Technology offer complete technical support and assistance, from discussing application requirements to training approved local contractors. For further information please contact a REPCO representative or your nearest REPCO authorised dealer.

STORAGE LIFE

The shelf life of the product is typically 5 years if unopened and stored in cool dry conditions (15-30°C/60-86F°). Once opened replace the lid firmly and store as above.

TECHNICAL DATA

Volume Capacity	555cc/Kg	
Compressive Strength	14-18 N/mm²	
ASTM D695		
Tensile Shear Strength	185kg/cm²	
ASTM D1002	(2630psi)	
Hardness Rockwell R	78-80	
ASTM D785		
Peel Strength	3-5	
ISO 4578		

ADDITIONAL TECHNICAL DATA

Please see the REPCO 1106 ST XF Paste Product Specification Sheet for further technical and performance data.

HEALTH AND SAFETY

Please refer to the product safety data sheet for detailed information on handling, storage, shipping and disposal.

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