

# **DEP 104 Fluid Metal XF**

DEP 104 Fluid Metal XF is a fast curing medium build composition which can be used both as a coating or repair material to rebuild damage up to 3mm. The material has good flexibility which makes it ideal for use as a gap filling adhesive and its ability to bond tenaciously to transformer oil contaminated surfaces make it the material of choice for transformer leak repairs.

# **Surface Preparation**

For optimum results, oil and grease must be removed from the surface of the repair using an appropriate cleaner such as MEK. and the surface abrasive blasted to Swedish Standard SA2.5 and a minimum blast profile of 75 microns using an angular abrasive. Once blast cleaned, the surface must be degreased and cleaned using MEK and all prepared surfaces must be repaired before rusting or oxidation occur.

NOTE: For salt contaminated surfaces the area must be repeatedly water washed, preferably by power washing, until ingrained salts no longer come to the surface on drying. The surface should then be abrasive blast cleaned as above prior to cleaning and degreasing with MEK.

In the case of cracked surfaces, the cracks should be stabilised by drilling the termination points and the cracks veed out and drilled, tapped and bolted every 75-100 mm.

Where abrasive blast cleaning is not possible the surface should be roughened by bristle blaster, needle gun or grinding. Under these conditions adhesion levels will not be optimal although still satisfactory for most applications.

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

### Mixing and Application

Warm the Base to 15-25°C before mixing and do not apply when the ambient or substrate temperature is less than 5°C or less than 3 degrees above the dew point.

Mixing of the product can be on full units or by part-mixing. 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 whole of the material should be used within 5 minutes at 20°C.

For part mixing, using a spatula place a volume measure from the base unit onto a clean plastic mixing surface. Clean the spatula thoroughly and then take one equal volume measure from the Activator unit and place alongside the base measures. Mix as above.

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

DE Polymers Limited Harrogate, North Yorkshire, HG2 8QG, United Kingdom Tel: +44 1423 888132 Email: info@depolymers.co.uk



# **Technical Data Sheet**

# **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:

Usable Life	5 mins
Movement without load or immersion	45mins
Machining and light loading	2 hours
Full loading	8 hours
Immersion	8 hours

### **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 3 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

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

# **Technical data and Performance**

Volume Capacity	555cc/Kg
Compressive Strength ASTM D695	14-18 N/mm <sup>2</sup>
Shear Strength DIN 53283	185kg/cm² (2630psi)
Lap Shear Strength ISO 4587	Steel 25 N/mm <sup>2</sup> Aluminium 15 N/ mm <sup>2</sup>
Hardness Rockwell R ASTM D785	78-80
Peel Strength ISO 4578	3-5

### Health and Safety

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

The data contained within this Technical Data Sheet 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. DE Polymers Limited accepts no liability arising out of the use of this information or the product described herein.

104150308

DE Polymers Limited Harrogate, North Yorkshire, HG2 8QG, United Kingdom Tel: +44 1423 888132 Email: info@depolymers.co.uk