### **APPLICATION GUIDE**

**MAXKOTE** 

APG-REV2- 2022

#### M-METAL 700 - METAL EPOXY PUTTY - EXTENDED CURE

#### M-METAL 700 - Metal Epoxy Putty - Extended Cure

Is an Extend Cure Metal Epoxy Putty suitable for large repair areas where extra pot life is required.

The product is supplied in two parts with a base and activator. Once mixed M-METAL 700 provides a smooth grey paste ideally suited for repairs to steel components and other metallic surfaces.

The mixed the material can be applied in a single coat up to a thickness of 20.0mm without slumping.

When mixed the product has a standard has a pot life of 60 mins. Once cured it is readily drilled and machined to fine tolerances or can be sanded to achieve the desired profile of the repair.

#### **Typical Uses**

- Machinery Shimming and Choking
- Large Shaft Repairs
- Pump Casing Defects
- Repair Worn Bearing Housings
- Leaking Flange Repairs
- Leaking Tank Seams
- As a Structural Adhesive

#### **Application Guide**

#### **Surface Preparation - Grit-Blast**

- All oil and grease must be removed from the surface using an appropriate cleaner such MEK or similar type solvent.
- All surfaces must be abrasive blasted to ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE
   2) minimum blast profile of 75 microns using an angular.
- Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type solvent.
- All surfaces must be coated before gingering or oxidation.

#### **Surface Preparation - Manual**











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- All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
- All surfaces must be mechanically abraded using handheld grinders to ISO 8501/4 ST3 (SSPC SP3 ST3).
- Once abraded, the surface must be degreased and cleaned using MEK or similar type material.
- All surfaces must be repaired before gingering or oxidation occurs.

#### **Environmental Checks**

Prior to mixing, please ensure the following:

- The base component is at a temperature between 15-25°C.
- The ambient & surface temperature is above 5°C or less than 3°C above dew point.

#### **Mixing**

- Mix Part B with Part A in full units as supplied.
- For small quantities us a mixing ratio of 3:2 BY VOLUME OR 1.7:1 BY WEIGHT
- When mixing both materials, it is very important to have a uniform streak free fluid.

Use all mixed material within 60 minutes at 20°C.

#### **Product Application**

- Using a short-bristled brush, spatula, or applicator tool, apply the material to the prepared repair area.
- Ensure the product is pressed into any holes, scars or cracks before building up to the quired thickness.

#### **Over-coat Times**

- Minimum the applied material can be over-coated as soon as it is touch dry.
- Maximum the over-coating time should not exceed 6 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.

#### **Technical Information**

Appearance Base

Activator

Mixed

Dark grey

paste

Light grey

paste



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		Mid grey paste
Mixing Ratio	By Weight By Volume	1.67:1 3:2
Density	Base	2.7
Density	Activator	2.4
	Mixed	2.58
Volume Capacity		388cc/kg
Solids Content		100%
Slump Resistance	Nil at	2.0 cm
Usable Life	20°C 30°C	60 minutes 30 minutes
Coverage	1kg at a thickness of 1.0mm	0.38m2
Cure Times @ 20°C	Movement without load or immersion: Machining and light loading: Full loading: Immersion:	5 hours 12 hours 4 days 7 days
Storage Life	Unopened and stored in dry conditions (15-30°C)	5 years
Adhesion	Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75-micron profile	180kg/cm² 2550psi
Compressive Strength	Tested to ASTM D 695	839kg/ cm² 11,900psi
Flexural Strength	Tested to ASTM D790	585kg/cm² (8300psi)
Hardness	Shore D to ASTM D2240	87





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60°C

Heat Resistance Suitable for long term water immersion at temperatures

up to 60°C. Resistant to dry heat more than 180°C 180°C

dependant on load.

Chemical The product resists attack by a wide variety of inorganic

Resistance acids, alkalis, salts, and organic media.

#### **Legal Notice**

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.

Maxkote accepts no liability arising out of the use of this information or the product described herein.









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