



## AM 3920 Machinable Grade

### Product Description

AM 3920 is a synthetic rebuild material for metal parts and surfaces, and is machinable. It has a smooth spreadable consistency which makes it easy to apply. AM 3920 is most often used in pitted steel repair but is also well suited to rebuilding tube sheets, shafts, bearing housings, etc.

### Product Features and Benefits

- 100% Solids, No VOCs
- Excellent UV stability
- Excellent impact resistance and corrosion protection

### Chemical Resistance:

Acetic Acid up to 10% Ammonium Hydroxide\* Aromatic & Aliphatic Solvents Black Liquor  
Butyl Acetate  
Butyl Carbitol  
Most Chlorides  
Hydrogen Sulfide  
Isopropyl Alcohol  
Mineral Acids  
Nitric Acid up to 45%  
Mild Organic Acids  
Most Phosphates  
Phosphoric Acid  
Potassium Hydroxide\*  
Sodium Hydroxide\*  
Most Sulfides  
Sulfuric Acid up to 80%  
1,1,1-Trichloromethane  
Urea Solutions  
White Liquor  
\*Ambient temperature only

### Adhesion:

ASTM D 4541 2,500 PSI

### Abrasion Resistance:

ASTM D4060 CS 17 WHEEL  
1000 CYCLES 1 KG 45MG

### Rockwell Hardness:

ASTM D 2240 80

### Compression Strength:

ASTM D 695 17,500PSI

### Flexural Strength:

13,000PSI

### Tensile Shear Adhesion:

ASTM D1002 3,000PSI

### Color:

Dark Gray

### Coverage Per Gallon (Theoretical):

12.8 sq. ft. per gallon @ 1/8" thickness packaged in 4 x 1 kg or by one gallon kits coverage rate per 1 kg is 1.24 sq ft at 1/8 "

### Mix Ratio by Volume/Weight:

3:1/5:1 (Resin:Hardener)

### Flash Point:

Greater than 250°F (121°C)

### Pull-Off Adhesion Test ASTM D 4541:

Minimum adhesion is 2850psi

### Coefficient of Thermal Expansion:

(10-6/per °F) 1.1

### Thermal Stability:

(weight loss after 48 hours @ 300°F)  
0.0003 grams

### Specific Gravity:

Resin: 2.12; Hardener: 1.59

### Volatile Organic Compounds (VOC):

0 grams/liter

### Weight Per Gallon:

13.37 lbs

### Pot Life:

40°F (4°C) 1 Hour 20 minutes  
75°F (24°C) 50 minutes  
92°F (33°C) 30 minutes

### Cure Schedule @ 70°F (21°C):

Recoat Window 1/2-2 hours  
Light Loading 12 hours  
Immersion (Aqueous) Service 48 hours  
Full or Chemical Service 5 days

### Service Temperature:

Dry Service 490°F (255°C)  
Spill/Splash 293°F (145°C)  
Immersion Service\* 194°F (90°C)

\* Immersion with solvents, mineral acids, or alkalines, or if over 150°F, contact factory.

### Note:

Do not keep the blended coating in the original container unless immediate use is planned. Otherwise, exothermic heat created during the curing process, will considerably shorten the pot life.

Pour the coating into a rolling tray or large aluminum-basting pan.

Try to keep the depth of the coating in the tray below 3/8".

See reverse side for limitations of our liability and warranty. See reverse side for application instructions.

## AM 3920 Instructions:

**1) TOP-COATING:** If the compound is to be coated, apply the coating within the re-coat window (see table below). If this is not possible, allow the compound to cure, then brush-blast, wire-brush or sand to create a mechanical profile on the surface before coating.

**2) JOINING ADJACENT SECTIONS:** When it is necessary to join multiple sections of the compound to create a continuous protective layer over a large area, do not attempt to feather and overlap adjoining sections. If adjoining sections cannot be applied within the re-coat window (see table below), continue the full thickness of the compound up to the joint between sections. Allow the first section to cure, then create a mechanical profile, using one of the means listed above, on the edge that will be joined to the next section to ensure a satisfactory bond.

**3) SAFETY:** Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and material safety data sheets before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.

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### NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

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We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications.

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