PRESERVATION PROCESS INSTRUCTION (PPI) for
REPAIR TO MIL-PRF-24441 & AMERON BAR RUST 235 COATING
SYSTEMS IN BILGES
to be used in conjunction with
CORE PPI 63101-000 with a
Surface Preparation Method of Abrasive Blasting with Sponge Jet Media

Test and Evaluation Only

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>Approved by:</th>
<th>DTE</th>
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</thead>
<tbody>
<tr>
<td>NAVSEA 05M1</td>
<td>Approved by:</td>
<td>10 Sep 03</td>
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<tr>
<td>TYCOM (if required)</td>
<td>Approved by:</td>
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<td>TYCOM (if required)</td>
<td>Approved by:</td>
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1. **SCOPE:**

1.1 Cleaning, Surface Preparation and Painting Requirements for Spot Repair of Bilges.

2. **REFERENCES:** (REFER TO THE CORE PPI)

3. **APPENDICES:** (REFER TO CORE PPI EXCEPT FOR APPENDIX 10)

4. **REQUIREMENTS:** (REFER TO THE CORE PPI)

5. **PRE-SURFACE PREPARATION:** (THE FOLLOWING ELEMENTS AUGMENTS THE CORE PPI)

5.3 **SOLVENT CLEAN (SSPC-SP-1):** Prior to surface preparation use Super High Flash Naphtha to remove all surface contaminants such as sea salts, grease, oil and other contaminants before surface preparation. Accomplish the requirements of SSPC-SP-1.

5.3.1 Mark areas to be repaired with white, black or red board marker.

6. **SURFACE PREPARATION:** (REFER TO CORE PPI AND AUGMENT IT WITH THE FOLLOWING CORRELATE/SUPPLEMENTAL ELEMENTS)

6.2 **METHOD 1: ABRASIVE BLASTING AND OR HAND TOOL CLEANING:**

**NOTES:**

WHEN AREAS OF BARE SUBSTRATE ARE EXPOSED, THE PREFERRED SURFACE PREPARATION METHOD IS EQUIVALENT TO SURFACES PREPARED TO AN SSPC-SP-11 BY USING ABRASIVE BLAST WITH SPONGE JET MEDIA.

WHEN AREAS OF BARE SUBSTRATE ARE EXPOSED, THE MINIMUM SURFACE PREPARATION METHOD IS EQUIVALENT TO SURFACES PREPARED TO AN SSPC-SP-15 BY USING ABRASIVE BLAST WITH SPONGE JET MEDIA.

SPONGE JET MEDIA DOES NOT RICOCHET AND DAMAGE OR CONTAMINATE ADJACENT AREAS AS OTHER BLAST MEDIA, HOWEVER CARE SHOULD BE TAKEN TO CONTAIN, CONTROL AND COLLECT SPONGE MEDIA.

IMPLEMENTING AUTHORITY WILL DESIGNATE SURFACE PREPARATION METHOD TO USE.

6.2.1 For areas with rust or coating damage that exposes bare substrate, accomplish the repair surface preparation requirements equivalent to SSPC-SP-11 by using abrasive blast with sponge jet media and IAW Table 631-11-1, (Surface Preparation), for the location/area being prepared.

6.2.2 For areas with rust or coating damage that exposes bare substrate, accomplish the repair surface preparation requirements equivalent to SSPC-SP-15 by using abrasive blast with sponge jet media and IAW Table 631-11-1, (Surface Preparation), for the location/area being prepared.

6.2.3 Hand Cleaning: For areas with loose rust, mill scale or paint, accomplish the repair surface preparation requirements of Table 631-1-3 and 631-11-1, (Surface Preparation), for the location/area being prepared. Minimum requirement is SSPC-SP-2.

6.2.4 Feather edges of adherent paint in adjacent areas remaining after cleaning.

6.3 **Not Applicable to this PPI**
6.4 POWER TOOL AND/OR HAND TOOL CLEANING ON SURFACES INACCESSIBLE TO METHOD 1:


IMPLEMENTING AUTHORITY WILL DESIGNATE SURFACE PREPARATION METHOD TO USE, SSPC-SP-11 OR SSPC-SP-15.

6.4.1 For areas with rust or coating damage that exposes bare substrate, accomplish the repair surface preparation requirements of SSPC-SP-11 and Table 631-11-1, (Surface Preparation), for the location/area being prepared. Minimum requirement is SSPC-SP-11.

6.4.2 For areas with rust or coating damage that exposes bare substrate, accomplish the repair surface preparation requirements of SSPC-SP-15 and Table 631-11-1, (Surface Preparation), for the location/area being prepared. Minimum requirement is SSPC-SP-15.

6.4.3 Surface preparation accomplished using a surface preparation device such as a disk sander or power wire wheel that burnishes, polishes or smoothes the surface is not authorized. Accomplish a surface profile of 1 mil minimum.

6.4.4 Hand Cleaning: For areas with loose rust, mill scale or paint, accomplish the repair surface preparation requirements of Table 631-1-3 and 631-11-1, (Surface Preparation), for the location/area being prepared. Minimum requirement is SSPC-SP-2.

6.4.5 Feather edges of adherent paint in adjacent areas remaining after cleaning.

6.4.6 The Responsible Implementing Authority shall have the authority to reject this method in any area if the surface can be shown to have adequate accessibility for Abrasive Blasting using abrasive blast with sponge jet media.

6.5.2.3 If conductivity measurements for surfaces prepared to an SSPC-SP-11, SSPC-SP-15 or SSPC-SP-2 in an isolated area exceed the respective values, circle area and perform spot solvent cleaning (Super High Flash Naphtha) followed by retest.

7. PAINTING REQUIREMENTS:

NOTE: IMPLEMENTING AUTHORITY WILL DESIGNATE COATING SYSTEM TO BE APPLIED.

7.9.1 Reactivated adjacent coated surfaces to be painted IAW Ref. 2.c.

APPENDIX 1: QA INSPECTION FORM – ENVIRONMENTAL READING
APPENDIX 2: QA INSPECTION FORM – SURFACE SOLUBLE SALT CONDUCTIVITY LOG
APPENDIX 3: QA INSPECTION FORM – SURFACE PROFILE LOG
APPENDIX 4: QA INSPECTION FORM – DRY FILM THICKNESS MEASUREMENTS
APPENDIX 5: CHECKPOINTS & MILESTONES COMPLETION LOG
APPENDIX 6: CERTIFIED COATING INSPECTOR’S CHECKPOINT SIGN OFF LOG
APPENDIX 7: PAINT APPLICATION EQUIPMENT & PAINT CONSUMPTION LOG
APPENDIX 8: SURFACE CONDUCTIVITY TESTING PROCEDURE
APPENDIX 9: (NOT APPLICABLE TO THIS PPI)
APPENDIX 10: COATING SYSTEM (S)
**APPENDIX 10**

**COATING SYSTEMS**

<table>
<thead>
<tr>
<th>Coating</th>
<th>EuroNavy ES 301 K, L and S</th>
<th>Interbond 998</th>
<th>Alocit 28.15</th>
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<tbody>
<tr>
<td>Prime</td>
<td>4 – 6 mils DFT (ES-301 K/L)</td>
<td>6 – 7 mils DFT</td>
<td>5 – 7 mils DFT</td>
</tr>
<tr>
<td>Stripe</td>
<td>4 – 6 mils DFT (ES-301 S)</td>
<td>6 – 7 mils DFT</td>
<td>5 – 7 mils DFT</td>
</tr>
<tr>
<td>Top</td>
<td>4 – 6 mils DFT (ES-301S)</td>
<td>6 – 7 mils DFT</td>
<td>5 – 7 mils DFT</td>
</tr>
<tr>
<td>System DFT</td>
<td>8 – 12 mils DFT</td>
<td>12 – 14 mils DFT</td>
<td>10 – 14 mils DFT</td>
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<tr>
<td></td>
<td>12 – 18 mils DFT with stripe coat</td>
<td>18 – 21 mils DFT with stripe coat</td>
<td>15 – 21 mils DFT with stripe coat</td>
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