

Steel Structures Painting Council

PAINTING SYSTEM SPECIFICATION NO. 8.01

One-Coat Rust Preventive Painting System with Thick-Film Compounds

1. Scope

1.1 This specification covers four types of thick-film rust-preventive compound protective painting systems for steel.

1.2 This system is suitable for steel that will require long time protection in sheltered (Environmental Zone 1A, interior, normally dry) or inaccessible places. It is also suitable for short term or temporary protection in more corrosive environments when the rust-preventive compound can be replaced as needed, or temporary protection where an easily removable coating is required (e.g., machined surfaces that will not be painted, but require protection).

2. Description

2.1 Extensive surface preparation is not required due to the excellent wetting properties of the coating.

2.2 The coatings specified in this painting system are based upon U.S. Maritime Administration Specification 52-MA-602*; "Compounds: Rust Preventive." The types and uses are as follows:

2.1.1 Type A, Light, is used for wire cables, bearing surfaces, standing and running rigging.

2.1.2 Type B, Medium, is used for davits, turnbuckles, machinery, and tools. It is a grease-like, soft petroleum type of compound containing 15-25% volatile thinner and a small amount of chromate; applied by brushing or daubing, or melting to about 150-180° F (66-82° C) and spraying or dipping; may be thinned with mineral spirits and sprayed cold; used to protect machined surfaces during shipment and erection, threads, gears, bearings, bulkheads, water tanks, damp and humid surfaces, water coolers, steel exposed to brine, steel in contact with insulation or wood, cables, chains, etc. It shall not be used in potable water tanks, or easily removed by mineral spirits, and should not be slippery and dangerous to walk on.

2.1.3 Type C, Heavy (pigmented), is primarily for hot application to certain faying surfaces and to inaccessible spaces. It contains little solvent, and has 20-25% of rust inhibitive pigment, including some soluble chromate. It is used for faying surfaces in contact with damp or porous material, inaccessible places subjected to corrosion, steel plate under wooden decks, under machinery foundations, floodable voids of ships or dry docks, fresh or salt water tanks, but not for potable water tanks.

2.1.4 Type D, Firm, produces a hard wax-like coating for general use. It is a heavy liquid applied by brush, dip, or spray, and contains 40-50% volatile solvent.

3. Reference Standards

3.1 The standards referenced in this specification are listed in Sections 3.4 and 3.5 and form a part of this specification.

3.2 The latest issue, revision, or amendment of the reference standards in effect on the date of invitation to bid shall govern unless otherwise specified.

3.3 If there is a conflict between the requirements of any of the cited reference standards and this specification, the requirements of this specification shall prevail.

3.4 STEEL STRUCTURES PAINTING COUNCIL (SSPC) SPECIFICATIONS:

PA 1	Shop, Field, and Maintenance Painting
PA Guide 3	A Guide to Safety in Paint Application
PA Guide 4	Guide to Maintenance Repainting with Oil Base or Alkyd Painting Systems
SP 2	Hand Tool Cleaning
SP 3	Power Tool Cleaning

3.5 MARITIME ADMINISTRATION SPECIFICATION:

52-MA-602	Compounds: Rust Preventive
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4. Surface Preparation

4.1 SSPC-SP 2, "Hand Tool Cleaning", or SSPC-SP 3, "Power Tool Cleaning."

5. Paints

5.1 COATING: 52-MA-602*, "Compounds: Rust Preventive," Type B, Medium.

5.2 ALTERNATIVE COATING: If specified in the procurement documents, a coating complying with U.S. Maritime Administration Specification 52-MA-602*, "Compounds: Rust Preventive," Type A, Light, Type C, Heavy (pigmented), or Type D, Firm, shall be applied in place of the standard coating.

6. Paint Application

6.1 PAINT APPLICATION: Follow requirements of SSPC-PA 1, "Shop, Field, and Maintenance Painting." The

soft-film and firm-film types are easily applied by brush or swab at temperatures of 60° F (15° C) or above. Below that temperature they may require warming. They may be applied by high-pressure pump spray equipment, or thinned with mineral spirits and sprayed with conventional equipment. The medium and heavy films are applied hot. Dipping, brushing, flow coating, or hot spray are also used.

6.2 TOUCH-UP PAINTING: In accordance with specification SSPC-PA 1, "Shop, Field, and Maintenance Painting" and in particular with the Section thereof entitled "Field Painting."

6.3 MAINTENANCE PAINTING: For maintenance painting procedures, see SSPC-PA Guide 4, "Guide to Maintenance Repainting with Oil Base and Alkyd Painting Systems."

6.4 NUMBER OF COATS: Minimum of one.

6.5 WET FILM THICKNESS OF PAINT SYSTEM: Not less than 30 mils (760 microns).

7. Inspection

7.1 All work and materials supplied under this specification shall be subject to timely inspection by the purchaser or his authorized representative. The contractor shall correct such work or replace such material as is found defective under this specification. In case of dispute the arbitration or settlement procedure established in the procurement documents, if any, shall be followed. If no arbitration or settlement procedure is established, the procedure specified by the American Arbitration Association shall be used.

7.2 Samples of paints used under this painting system should be supplied upon request along with the supplier's name and identification for the materials.

7.3 Unless otherwise specified, the methods of sampling and testing should be in accordance with Federal

Test Method Standard No. 141, or applicable methods of the American Society for Testing and Materials.

7.4 The procurement documents covering work or purchase should establish the responsibility for samples, testing, and any required affidavit certifying full compliance with the specification.

8. Safety

8.1 All safety requirements stated in this specification and its component parts apply in addition to any applicable federal, state, and local rules and requirements. They also shall be in accord with instructions of the paint manufacturer and requirements of insurance underwriters.

8.2 Paints are hazardous because of their flammability and potential toxicity. Proper safety precautions shall be observed to protect against these recognized hazards. Safe handling practices are required and should include, but not be limited to, the provisions of SSPC-PA Guide 3, "A Guide to Safety in Paint Application."

8.3 The paints specified herein may not comply with some air pollution regulations because of their hydrocarbon solvent content.

8.4 Soft rust-preventive compounds create hazards due to their slipperiness. Hard or firm film compounds minimize slipping.

9. Note

9.1 While every precaution is taken to insure that all information furnished in SSPC specifications is as accurate, complete, and useful as possible, the SSPC cannot assume responsibility or incur any obligation resulting from the use of any materials, paints, or methods specified therein, or of the specification itself.

*This specification (52-MA-602) is no longer referenced by the Maritime Administration. MIL-C-11796 is a possible replacement.

