

SSPC: The Society for Protective Coatings

PAINTING SYSTEM NO. 10.02

Cold-Applied Coal Tar Mastic Painting System

1. Scope

1.1 This specification covers a cold-applied coal tar painting system for underground and underwater steel structures, consisting of two cold-applied coats.

1.2 This system is suitable for use on parts or structures exposed in Environmental Zones 2C (fresh water immersion), 3B (chemical, neutral), and 3C (chemical, alkaline). It has fairly good abrasion resistance and is suitable for underground use. It must be used with discretion for immersion in corrosive chemicals since the coating is dissolved by some organic solvents and attacked by oxidizing solutions.

1.3 The coal tar mastic must be topcoated with coal tar emulsion when exposed to sunlight to prevent checking and alligating.

2. Description

2.1 This painting system consists of surface preparation by commercial blast cleaning or pickling and two coats of cold-applied coal tar mastic. This paint is self-priming and does not require a separate prime coat. A final topcoat of coal tar emulsion is to be applied when exposed to sunlight. This system is not recommended for potable water or high temperatures.

3. Reference Standards

3.1 The standards referenced in this guide are listed in Section 3.4 and 3.5 and form a part of the 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 the specification, the requirements of the specification shall prevail.

3.4 SSPC STANDARDS AND JOINT STANDARDS:

PA 1	Shop, Field, and Maintenance Painting of Steel
PA 2	Measurement of Dry Coating Thickness With Magnetic Gages

PA Guide 4	Guide to Maintenance Repainting with Oil Base or Alkyd Painting Systems
Paint 12	Cold Applied Asphalt Mastic (Extra Thick Film)
Paint 32	Coal Tar Emulsion Coating
SP 5/NACE No. 1	White Metal Blast Cleaning
SP 6/NACE No. 3	Commercial Blast Cleaning
SP 8	Pickling
SP 10/NACE No. 2	Near-White Blast Cleaning

3.5 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARD:

D 3925	Practice for Sampling Liquid Paints and Related Pigmented Coatings
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3.7 FEDERAL STANDARDS AND SPECIFICATIONS:

MIL-C-15203	(canceled) Coating Compound, Bituminous, Emulsion Type, Coal Tar Base [See SSPC-Paint 32.]
MIL-C-18480	Coating Compound, Bituminous, Solvent, Coal Tar Base

4. Surface Preparation

4.1 SSPC-SP 6, "Commercial Blast Cleaning," or SSPC-SP 8, "Pickling." If specified in the procurement documents better degrees of cleaning shall be substituted (SSPC-SP 5, "White Metal Blast Cleaning," or SSPC-SP 10, "Near-White Blast Cleaning").

5. Paints

5.1 **PRIMER:** MIL-C-18480, "Coating Compound, Bituminous, Solvent, Coal Tar Base."

5.2 **SECOND COAT:** The second coat shall be the same coating as the first coat.

5.3 **THIRD COAT (when required):** All surfaces that are to be exposed to sunlight shall be given a third coat consisting of MIL-C-15203, "Coating Compound, Bituminous, Emulsion Type, Coal Tar Base." This coat shall be applied no sooner than two weeks after the second coat is applied.

6. Paint Application

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

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

6.3 MAINTENANCE PAINTING: This specification applies to maintenance painting, provided specific instructions are included on the degree and amount of solvent cleaning, spot cleaning, spot priming, priming, and finish painting. For additional information on maintenance painting procedures, see SSPC-PA Guide 4, "Guide to Maintenance Repainting with Oil Base or Alkyd Painting Systems."

6.4 NUMBER OF COATS: Minimum of two.

6.5 DRY FILM THICKNESS OF PAINT SYSTEM: Not less than the following as measured in accordance with SSPC-PA 2, "Measurement of Dry Coating Thickness with Magnetic Gages": primer 380 micrometers (15 mils); second coat 250 micrometers (10 mils); for the two-coat painting system 635 micrometers (25 mils); third coat (when required) 250 micrometers (10 mils); for the three-coat system 890 micrometers (35 mils).

7. Inspection

7.1 All work and materials supplied under this specification are 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. (See Note 9.1.) In case of dispute, unless otherwise specified, the arbitration or settlement procedure established in the procurement documents shall be followed. If no arbitration procedure is established, the

procedure specified by the American Arbitration Association shall be used.

7.2 Samples of paints under this painting system may be requested by the purchaser and shall be supplied upon request along with the manufacturer's name and identification for the materials. Samples may be requested at the time the purchase order is placed, or may be taken from unopened containers at the job site.

7.3 Unless otherwise specified, the sampling shall be in accordance with ASTM D 3925.

8. Disclaimer

8.1 While every precaution is taken to ensure that all information furnished in SSPC standards and specifications is as accurate, complete, and useful as possible, SSPC cannot assume responsibility nor incur any obligation resulting from the use of any materials, coatings, or methods specified herein, or of the specification or standard itself.

8.2 This specification does not attempt to address problems concerning safety associated with its use. The user of this specification, as well as the user of all products or practices described herein, is responsible for instituting appropriate health and safety practices and for insuring compliance with all governmental regulations.

9. Note

Notes are not a requirement of this specification.

9.1 The procurement documents should establish the responsibility for samples, testing, and any required affidavit certifying full compliance with the specification.

9.2 If an electrical inspection is required, use a holiday detector of the Tinker-Raser, Bird Dog, or other approved type having a range of 67.5 to 75 volts.