



Standard Practice for Inspection of Marine Surface Preparation and Coating Application¹

This standard is issued under the fixed designation F 941; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This practice is intended to serve as a guide for determining specific inspection requirements for marine surface preparation and coating application during new construction, major retrofit, or routine maintenance contracts.

1.2 It is intended that this practice be used to coordinate inspection activities between ship owner, ship builder, coatings manufacturer and coatings applicator, and that specific requirements be developed before the commencement of surface preparation or coating application, or both.

1.3 This practice does not provide a means of recording required data (for example, film thicknesses, temperatures, relative humidity, and so forth), but instead establishes a format for deciding what data must be recorded, when during the preparation/coating process, and by whom.

1.4 This practice does not establish accept/reject criteria for surface preparation or coating inspection, nor does it address methods of repairing deficiencies found. It does, however, provide a means of determining them.

1.5 *This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

- D 3276 Guide for Painting Inspectors (Metal Substrates)
- D 4940 Test Method for Conductimetric Analysis of Water Soluble Ionic Contamination of Blasting Abrasives
- F 718 Standard for Shipbuilders and Marine Paints and Coatings Product/Procedure Data Sheet

2.2 SSPC Standards:³

- SSPC PA 2 Measurement of Film Thickness
- SSPC-SP 1 Solvent Cleaning
- SSPC-SP 3 Power Tool Cleaning
- SSPC-SP 5 White Metal Blast Cleaning
- SSPC-SP 6 Commercial Blast Cleaning
- SSPC-SP 7 Brush-Off Blast Cleaning
- SSPC-SP 10 Near-White Blast Cleaning
- SSPC VIS-1 Pictorial Surface Preparation Standards for Painting Steel Surfaces

2.3 JSRA Standard:⁴

- SPSS Standard for the Preparation of Steel Surface Prior to Painting

2.4 ISO Standards:⁵

- ISO 8501-1:1988 Preparation of Substrates Before Application of Paints and Related Products—Visual Assessment of Surface Cleanliness
- ISO 8502-1:1991 Preparation of Substrates Before Applications of Paints and Related Products—Tests for Assessment of Surface Cleanliness: Soluble Iron Products
- ISO 8502-2:1992 Preparation of Substrates Before Applications of Paints and Related Products—Tests for the Assessment of Surface Cleanliness—Laboratory Determination of Chloride on Cleaned Surfaces
- ISO 8502-3:1992 Preparation of Substrates Before Applications of Paints and Related Products—Tests for the Assessment of Surface Cleanliness—Assessment of Dust on Steel Surfaces Prepared for Painting (Pressure Sensitive Tape Method)
- ISO 8502-4:1993 Preparation of Substrates Before Applications of Paints and Related Products—Tests for the Assessment of Surface Cleanliness—Guidance on Estimation of the Probability of Condensation Prior to Paint Application
- ISO 8502-6 Preparation of Substrates Before Applications

¹ This practice is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.01 on Structures.

Current edition approved May 1, 2005. Published May 2005. Originally approved in 1985. Last previous edition approved in 1999 as F 941 – 99.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from Society for Protective Coatings (SSPC), 40 24th St., 6th Floor, Pittsburgh, PA 15222-4656.

⁴ JSRA standards are available from Shipbuilding Research Assoc. of Japan, Sempakushinko Bldg., 15-16 1-Chome Toranomon Minato-Ku, Tokyo 105.

⁵ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.