



Standard Practice for Inspection of Marine Surface Preparation and Coating Application¹

This standard is issued under the fixed designation F941; 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

D3276 Guide for Painting Inspectors (Metal Substrates)

D4940 Test Method for Conductimetric Analysis of Water

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.

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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.

Soluble Ionic Contamination of Blasting Abrasives
F718 Specification 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 Applica-
tion of Paints and Related Products—Visual Assessment
of Surface Cleanliness

ISO 8502-1:1991 Preparation of Substrates Before Applica-
tions of Paints and Related Products—Tests for Assess-
ment of Surface Cleanliness: Soluble Iron Products

ISO 8502-2:1992 Preparation of Substrates Before Applica-
tions of Paints and Related Products—Tests for the
Assessment of Surface Cleanliness—Laboratory Determi-
nation of Chloride on Cleaned Surfaces

ISO 8502-3:1992 Preparation of Substrates Before Applica-
tions of Paints and Related Products—Tests for the
Assessment of Surface Cleanliness—Assessment of Dust
on Steel Surfaces Prepared for Painting (Pressure Sensi-
tive Tape Method)

ISO 8502-4:1993 Preparation of Substrates Before Applica-
tions of Paints and Related Products—Tests for the

³ Available from Society for Protective Coatings (SSPC), 40 24th St., 6th Floor, Pittsburgh, PA 15222-4656, http://www.sspc.org.

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, http://www.ansi.org.