



Standard Pictorial Surface Preparation Standards for Painting Steel Surfaces¹

This standard is issued under the fixed designation D 2200; 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.

1. Scope

1.1 The visual surface preparation standards consist of a series of color prints available as separate publications. Three different sets of photographs are described in this standard, designated as Method A (ISO/Swedish Standard²) and Method B and C (SSPC Standards³). The three methods differ in the depiction of the initial surface, in the definition and depiction of the cleaning conditions, and in the number of cleaning methods included. Because of these differences, the specifier should state whether Method A, Method B, or C should be used.

1.2 The colored visual surface preparation standards represent different conditions of hot rolled steel before and after surface preparation. Prior to cleaning, there are four rust grades, A to D, that cover the range from intact mill scale to 100 % rusted and pitted steel. The standards then depict the appearance of the four grades after cleaning by one or more methods (for example, blast cleaning) to various degrees of thoroughness. In addition, Method C includes three painted conditions that contain various degrees of rusting. The Standard⁴ depicts these conditions after various grades of hand and power tool cleaning.

¹ This standard is under the jurisdiction of ASTM Committee D-1 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.46 on Industrial Protective Coatings.

The pictorial standards described were prepared by the Swedish Corrosion Inst. and have been jointly approved by ASTM, the Steel Structures Painting Council (Vis 1), and the Swedish Standardizing Commission.

Current edition approved April 15, 1995. Published June 1995. Originally published as D 2200 – 66. Last previous edition D 2200 – 91 ϵ ¹.

² The pictorial surface preparation standard Method A is available from ASTM Headquarters (order Adjunct ADJD2200); the Steel Structures Painting Council, 4516 Henry St., Suite 301, Pittsburgh, PA 15213-3728; and Sveriges Standardiseringskommission, Box 3295, Stockholm 3, Sweden.

³ The Visual Standards Method B and surface cleanliness definitions are available from ASTM Headquarters (order Adjunct ADJD22001) or the Steel Structures Painting Council.

⁴ The Visual Standards Method C and the surface cleanliness definitions are available from the Steel Structures Painting Council.

2. Referenced Documents

- 2.1 ASTM Adjuncts:
Pictorial Surface Preparation Standards^{2,3,4}
Surface Cleanliness Definitions^{3,4}

3. Terminology

3.1 Definitions:

3.1.1 The cleanliness definitions for the Method A visual surface preparation standard appear in the text of the pictorial surface preparation standards publication.² The definitions for Methods B and C are found in a separate publication.^{3,4}

4. Significance and Use

4.1 The appearance of the various degrees of blast cleaning are influenced by the initial rust grades of the steel being cleaned. The standards aid visually in judging and evaluating the degree of rusting before cleaning and the degree of cleaning of steel surfaces prior to painting.

4.2 Three methods for visual standards have evolved because of differences in the practice of using visual standards throughout the world. In Europe, the visual standards (Method A) are used as the primary means of determining the degree of cleaning. In the US, the SSPC written definitions take precedence with the visual standards used as a supplement. The visual standards of Methods B and C comply with the SSPC definitions.

5. Procedure and Interpretation

Method A—ISO/Swedish Standard (Hand Tool Cleaning, Power Tool Cleaning, Abrasive Blasting, Flame Cleaning)

5.1 Determine the method of cleaning to be used (for example, hand/power tool cleaning, abrasive blast cleaning, or flame cleaning).

5.2 Determine the initial condition of the steel in accordance with four initial grades (A, B, C, or D).

5.3 Following the cleaning operation, compare the surface