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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 8923.1-2011

Replacing GB/T 8923-1988

**Preparation of steel substrates before application of paints and related products -- Visual
assessment of surface cleanliness -- Part 1: Rust grades and preparation grades of
uncoated steel substrates and of steel substrates after overall removal of previ**

(English Translation)

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References

Foreword

GB/T 8923 "steel substrates before application of paints Visual assessment of surface cleanliness" is divided into the following sections.

--- Part 1. uncoated steel surfaces and fully remove the original steel surface coating after Rust grades and preparation grades;

--- Part 2. coated steel surface has a partial removal of previous coatings after processing level;

--- Part 3. surface defects of welds, edges and other areas of the processing level;

--- Part 4. with high-pressure water jetting treatment-related initial surface state, the process level and flash rust grades.

This section GB/T 8923 Part 1.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 8923-1988 "before painting steel surface rust grades and rust grades" (eqv ISO 8501-1. 1988), and GB/T 8923-1988 compared to the main technical changes are as follows.

--- Adds different abrasive blast cleaning of steel due to the apparent change in the typical photo model (see Chapter 5 and Appendix A).

This section uses the translation method identical with ISO 8501-1:2007 "steel substrates before application of paints Visual assessment of surface cleanliness Part 1. uncoated steel

surfaces and of steel surfaces after overall removal of previous coatings Rust grades and grade. " this part made the following editorial changes.

--- Delete Chapter 1 concerning standard language publication "Note 2";

--- Increase the informative appendix NA "international standards of steel substrates before application of paints and corresponding national standard directory" to Guide to use.

This part is proposed by the China State Shipbuilding Corporation.

This part of the National Standardization Technical Committee before painting and metal surface treatment and painting processes Technical Committee paint pigment (SAC/TC5/SC6) centralized.

This section drafted by. China Shipbuilding Technology and Economy Research Institute, China Shipbuilding Industry Corporation 11th Institute, Shandong Kai Tai Group Co., Ltd., Guangzhou Huangpu Shipbuilding Shipbuilding Co., Ltd., Shandong Zibo large-Metal Technology Co., Ltd., Zhejiang Jialong anti-corrosion Engineering Co., Ltd., Chongqing Springfield Painting Equipment Co., Ltd. Guangzhou Longxue shipbuilding.

1 Scope

GB/T 8923 provisions of this part of a series of steel surface rust grades and preparation grades (see Chapters 2 and 3 respectively). each Common species level defined by the narrative and the typical model photos that are in line with a typical example of the narrative.

This section applies to a jet cleaning, hand and power tool cleaning and flame cleaning up other methods of heat before application of paints Rolled steel surface, although these methods are difficult to obtain results comparable. Essentially, these methods are suitable for hot-rolled steel, but these parties Law, in particular jet cleaning method, but also for having a sufficient thickness to resist shocks due to abrasive or power tool cleaning due to deformation Cold-rolled steel.

This section also applies to steel other than residual scales also tightly adherent coating residue and other foreign matter (see 3.1 Note 1) surface.

Note: The surface of the coated steel is only partial treatment after the removal of previous coatings rating see ISO 8501-2.

This part of the visual appearance of steel to represent its surface cleanliness. In most cases, this is sufficient, but is likely to Placed in harsh environments, such as a coating immersion environment and continuous condensation environment, you should consider using physical and chemical methods to detect visually is clear Soluble salts on the surface cleaning and other pollutants is not observed, the specific detection methods, see the provisions of the various parts of ISO 8502. rough surface Reference should also be

characteristic of the provisions of ISO 8503.

Rust grades 2

The degree of corrosion of the steel surface, respectively, A, B, C and D represent four rust grades, text description as follows.

A large area is covered with scales and almost no rust steel surface;

B corrosion has occurred, and the scale has begun to flake steel surface;

C scale has been due to corrosion and flaking, or you can scrape, and under normal vision to observe slight pitting visible steel surfaces;

D scale has been due to corrosion and peeling, and the steel surface pitting visible under normal vision widespread observation.

Rust grades typical model photos See Chapter 5.

Level 3 Processing

3.1 General

This section provides several processing level represent different surface treatment methods and cleanliness. Ratings by processing described later treated surface the appearance of the text to define the status, see 3.2 to 3.4. A typical model photos See Chapter 5 processing levels.

Each letter grade treated with the appropriate representative of the type of treatment "Sa", "St" or "Fl" represents. The number following the letter indicates clear Scale, rust and extent of the original coating.

Marked with the original pre-treatment Rust grades and graduated symbol photo, for example, BSa21/2.

Note 1: 3.2 to 3.4 using the "extraneous matter" may include water-soluble salts and welding residues. These pollutants by dry blast-cleaning, hand and