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

GB/T 34430.5-2024

**Ships and marine technology - Protective coatings and
inspection method - Part 5: Assessment method for coating
damages**

船舶与海上技术 保护涂层和检查方法 第5部分：涂层破损的评估方法
(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 5 of GB/T 34430 "Protective coatings and inspection methods for ships and offshore technology".

The following parts were published.

- Part 1: Dedicated seawater ballast tanks;
- Part 2: Void spaces for bulk carriers and oil tankers;
- Part 3: Cargo oil tanks for crude oil carriers;
- Part 4: Automated measurement method for total water-soluble salt content;
- Part 5: Method for evaluating coating damage.

This document is equivalent to ISO 16145-5:2014 "Ships and offshore technology - Protective coatings and inspection methods - Part 5: Coating damage" Evaluation Methods.

Introduction

The Maritime Safety Committee (MSC) of the International Maritime Organization (IMO) formally adopted the Performance Standard for Protective Coatings in December.2006.

As a mandatory regulation, it can take ship painting to a higher level and also have a positive impact on the improvement of shipbuilding technology and procedures.

The quality of the coating itself depends largely on the surface preparation and coating application, so please follow the coating manufacturer's recommendations for proper surface preparation, Painting and inspection are crucial.

This document is developed to be used by shipowners, shipyards, coating manufacturers, coating inspectors and coating applicators during the new shipbuilding phase.

PSPC provides standards.

GB/T 34430 "Protective coatings and inspection methods for ships and offshore technology" is planned to consist of five parts.

--- Part 1: Dedicated seawater ballast tanks. For dedicated seawater ballast tanks of ships built after the specified time, protective coatings and its inspection method.

--- Part 2: Empty spaces for bulk carriers and oil tankers. For bulk carriers and oil tankers built after the specified time, protective coatings and their Gap inspection method.

--- Part 3: Cargo oil tanks of crude oil tankers. For cargo oil tanks of crude oil tankers with a deadweight of not less than 5000t built after the specified time, Protective coatings and their inspection methods are given.

--- Part 4: Automated determination of the total content of water-soluble salts. Describes a method for measuring the surface of a coating using an automated instrument.

The method for detecting the total content of water-soluble salts is intended to improve detection efficiency.

--- Part 5: Evaluation method for coating damage. Describes the coating damage of ship ballast tanks and cargo ship oil tanks that meet the requirements of PSPC.

The evaluation method is designed to standardize the evaluation of coating breakage.

Ships and offshore technology - Protective coatings and inspection methods Part 5:
Methods for evaluating coating damage

1 Scope

This document describes the method for assessing coating damage on ballast tanks of ships and oil tanks of cargo ships that are subject to IMOPSPC requirements.

The assessment of cabin coating damage can also be carried out by reference.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 34430.1-2017 Ships and offshore technology Protective coatings and inspection

methods Part 1: Dedicated seawater ballast tanks (ISO 16145-1:2012, IDT) Note. Since 5.4 refers to the specific content of ISO 16145-1, the equivalent standard GB/T 34430.1-2017 is used instead of ISO 16145-1.

Resolution IACSUISC223 MSC.215(82) adopted Regulation II-1/3-2 of the SOLAS Convention, "Seawater Pressure for All Types of Ships" (82)]. International Maritime Organization (IMO) IMOMSC.215(82) Performance standard for protective coatings for dedicated seawater ballast tanks of all types of ships and double side skin spaces of bulk carriers (Per-

3 Terms and Definitions

The following terms and definitions apply to this document.

coating damage During the shipbuilding process, the coating is damaged and reaches the steel surface due to welding, pyrotechnics, mechanical collision and other reasons.

Piggyback end erectionbutt Segmented pre-loaded and loaded ends.

4 Abbreviations

The following abbreviations apply to this document.