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

GB/T 7790-2008

Replacing GB/T 7790-1996

**Paints and varnishes -- Determination of resistance to cathodic
disbonding of coatings exposed to sea water**

色漆和清漆 暴露在海水中的涂层耐阴极剥离性能的测定

(English Translation)

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Foreword

This revised standard adopts ISO 15711. "Paints and varnish coating is exposed to seawater cathodic disbondment performance of" 2003 (English Chinese Version).

This standard is based on ISO 15711:2003 redrafted.

Taking into account the situation of our country, the present standard and ISO 15711:2003 compared with the following major differences.

--- The ISO 15711:2003 is referenced in ISO standards, to the corresponding national standards;

--- The standard Chapter, article number and its contents with the ISO 15711:2003 there is a change on the order;

--- The standard ISO 15711:2003 "on a typical circuit diagram of cathodic protection 1 and 2" was modified;

--- This standard ISO 15711:2003 Appendix B "sacrificial anode --- zinc alloy composition" Move text form in Table 3 Formula listed and one of the "calcium" amended to read "Chrome";

--- This standard does not adopt ISO 15711:2003 in the "precision" "supplementary information required" section and Appendix A.

This standard replaces GB/T 7790-1996 "Test Method for cathodic stripping rust-resistant." this standard compared with GB/T 7790-1996, mainly for the following changes.

--- Change the standard name;

--- Revised cathodic disbondment test method using the original standard test method only provides a magnesium alloy anode, impressed current revised Sacrificial anode and two test methods.

The standard proposed by China Shipbuilding Industry Corporation.

This standard by the National Standardization Technical Committee Marine boat marine materials application technology at the Technical Committee.

This standard was drafted. China Shipbuilding Industry Corporation seventh twenty-five Institute.

1 Scope

This standard specifies the test methods for coating exposed to seawater cathodic disbondment performance measurement, including. principle of the method, the test solution, the test Test apparatus, and the sample preparation, test procedure, coating inspection and test results evaluation, test reports.

This standard applies to ships and marine engineering and other exposed structures on a metal substrate seawater coating.

This standard does not apply to assess the coating structure on the land.

Test methods specified in this standard includes the following two.

- a) Method A. Impressed current law;
- b) Method B. sacrificial anode.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 712 hull structural steel GB/T 1765 Determination of resistance to humidity, salt spray, weather resistance (artificial acceleration) Preparation of the film GB/T 1766 Paints and rating methods (GB/T 1766-1995, neq ISO 4628-1. 1980) clearcoat aging GB/T 3097 water quality standards GB/T 3186 Paints, varnishes and raw materials for paints and varnishes - Sampling (GB/T 3186-2006, ISO 15528:2000, IDT) GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD) GB/T 8923-1988 before painting steel surface rust grades and preparation grades (ISO 8501-1. 1988, EQV) GB/T 9278 paint sample conditioning and testing temperature and humidity (GB/T 9278-2008, ISO 3270. 1984, IDT) Evaluation of GB/T 13288 steel surface before coating roughness level (comparison specimens Act) (GB/T 13288-1991, neq ISO 8503-2. 1988) GB/T 13452.2 Paints and varnishes - Determination of film thickness (GB/T 13452.2-2008, ISO 2808:2007, IDT)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Caused by the adhesion of coating and cathodic protection of metal surfaces between failure. Often starting in the coating system of a defect, such as coating Accidental injury, construction defect or coating permeability as excessive.

4.1 Method A

Cathodic protection circuit control test potential.