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

**GB/T 30790.5-2014**

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**Paints and varnishes -- Corrosion protection of steel structures  
by protective paint systems -- Part 5: Protective paint systems**

色漆和清漆 防护涂料体系对钢结构的防腐蚀保护 第5部分：防护涂料体系

**(English Translation)**

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## Foreword

GB/T 30790 "Paints and varnishes protective coating systems for corrosion protection of steel structures" is divided into eight sections.

--- Part 1. General;

--- Part 2. Classification of environments;

--- Part 3. Design Basis;

--- Part 4. Types of surface and surface treatment;

--- Part 5. Protective paint systems;

--- Part 6. Laboratory performance test methods;

--- Part 7. Coating of implementation and management;

--- Part 8. Create and maintain technical specifications development.

This section GB/T Part of 530,790.

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

This section uses redrafted Law Amendment uses ISO 12944-5:2007 "Paints and varnishes

protective coating systems for corrosion protection of steel structures Corrosion protection - Part 5. Protective paint systems. " this part of ISO 12944-5:2007 technical differences exist compared to the terms of these differences has been involved through its outer margins Vertical single-line position (I) have been marked, Appendix E gives the list of the corresponding technical differences and their causes.

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Standardization Technical Committee and the pigment coating (SAC/TC5) centralized.

This section drafted by. CNOOC Changzhou coating Chemical Research Institute, Beijing Red Lion Paint Co., Ltd., Hempel (China) Co., Ltd., Nanjing Yangtze River Paint Co., Ltd., Akzo Nobel Protective Coatings (Suzhou) Co., Jotun (Zhangjiagang) Co., forever remember making painting Industry (Kunshan) Co., Ltd., Nippon Paint (China) Co., Ltd. Zhejiang fly whale Paint Co., Ltd., Shandong Pentium Paint Co., Ltd., Ye Jian new Materials Co., Ltd., COSCO Kansai Paint Chemical Co., Ltd., Beijing Air Materiel Biam new materials technology Engineering Co., Ltd., Ningbo of Chemical Co., Ltd., Fujian flowers Chemical Co., Ltd., Anqing Linghu Paint Co., Ltd. Shenzhen Hirota green paint.

## 1 Scope

GB/T 30790 in this section describes the type of paint and coating systems for corrosion protection of steel structures. This section also provides a suitable for different environments (GB/T 30790.2), different surface treatments Ratings (GB/T 30790.4) and expected durability rating (GB/T 30790.1) Selection Guide of the coating system. The durability of the coating system is divided into low, medium, and high class.

## 2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 8923.1 steel substrates before application of paints and Visual assessment of surface cleanliness - Part 1. uncoated steel sheet Surface and fully remove the original steel surface coating after Rust grades and grade (GB/T 8923.1-2011, ISO 8501-1:2007, IDT) GB/T 8923.3 steel substrates before application of paints and Visual assessment of surface cleanliness - Part 3. welds, edges and other the level of surface defects treated area (GB/T 8923.3-2009, ISO 8501-3:2006, IDT) GB/T 13452.2 Paints and varnishes - Determination of film thickness (GB/T 13452.2-2008, ISO 2808:2007, IDT) GB/T 30790.1 Paints and varnishes protective coating systems for corrosion protection of steel structures - Part 1. General (GB/T 30790.1-2014, ISO 12944-1:1998, MOD) GB/T 30790.2 Paints and varnishes protective coating systems for corrosion protection of steel structures - Part 2.

Classification of environments (GB/T 30790.2-2014, ISO 12944-2:1998, MOD) Corrosion protection of steel structures GB/T 30790.4 Paints and varnishes protective paint systems - Part 4. Types of surface and surface Processing (GB/T 30790.4-2014, ISO 12944-4:1998, MOD) GB/T 30790.6 Paints and varnishes protective coating systems for corrosion protection of steel structures - Part 6. Laboratory performance test the method (GB/T 30790.6-2014, ISO 12944-6:1998, MOD) ISO 3549 Paints zinc pigment specifications and test methods (Zinc dust pigments for paints - Specifications and test methods) the number and size of the ISO 4628-1 Paints and varnishes - Evaluation of degradation of coatings defects and uniformity of appearance change logo Part 1. General and identification system (Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 1. General introduction and designation system) the number and size of the ISO 4628-2 Paints and varnishes - Evaluation of degradation of coatings defects and uniformity of appearance change logo Part 2. Evaluation of gassing (Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 2. Assessment of degree of blistering) the number and size of the ISO 4628-3 Paints and varnishes - Evaluation of degradation of coatings defects and uniformity of appearance change logo