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

GB/T 24195-2009

**Corrosion of metals and alloys -- Accelerated cyclic tests with
exposure to acidified salt spray, ??dry?? and ??wet??
conditions**

金属和合金的腐蚀 酸性盐雾、“干燥”和“湿润”条件下的循环加速腐蚀试验
(English Translation)

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Foreword

This standard is equivalent to using ISO 16151:2005 cycles under "Corrosion of metals and alloys acidic salt spray," dry "and" wet "conditions Accelerated Corrosion Test "(in English).

For ease of use, this standard made the following editorial changes.

"," --- With a decimal point instead of a comma as the decimal point, "";

--- Deleted international standards foreword;

--- Normative references by corresponding national standards were changed;

--- Delete Note Chapter 11;

--- Delete reference.

This standard Annex A, Annex B and Annex C is informative appendix.

The standard proposed by China Iron and Steel Association.

This standard is under the jurisdiction of the National Steel Standardization Technical Committee.

This standard was drafted. Baoshan Iron & Steel Co., Ltd., Metallurgical Industry Information Standards Institute.

Introduction

Corrosion of metallic material, with or without corrosion protection, the environment will be affected by many factors, the impact depends on the metal material the kind and the type of environment. Since the laboratory impossible to design that contains all of the environmental factors that affect the corrosion accelerated corrosion test Inspection, so laboratory tests are used to simulate the impact of several major environmental factors on the corrosion of metallic materials.

May promote lower metal material is exposed to acid rain and salt contamination of the outdoor climatic conditions of corrosion, accelerated corrosion test mentioned in this

standard Test method is to simulate this environment and accelerate corrosion on metallic materials. The development of standards to technical papers and reports for reference (See References).

Test methods include the sample is exposed to acid salt spray cycle, dry conditions and wet conditions. Test method is mainly used for comparative tests, test the results do not represent the whole of this metal in the actual working environment of the final corrosion resistance, however, the material is exposed to a salt similar test conditions Pollution/acid rain environment relative corrosion resistance, this test method can provide valuable information.

GB/T 24195-2009/ISO 16151:2005 Corrosion of metals and alloys Acid salt spray, "dry" and "wet" conditions Cyclic accelerated corrosion test

1 Scope

This standard specifies two accelerated corrosion test methods. Method A and Method B, in the comparative evaluation of outdoor salt pollution/acid rain environment with with or without permanent or temporary corrosion protection corrosion properties of metal materials. Standard also provides test equipment. These two test methods Including sample loop is exposed to acid salt spray, "dry" and "wet" test conditions.

Neutral salt spray test (NSS) of the test with conventional accelerated corrosion test, such as GB/T 10125-1997 provisions compared to its maximum the advantage is that it can better simulate corrosion occurred in the outdoor salt pollution/acid rain environment. These two methods of evaluation of corrosion appearance is also very it works.

A method is suitable for.

- Metals and their alloys;
- Metal coating (cathode coating);
- Anodized coating;
- Organic coatings on metallic materials.

Method B Applicable to.

- Anode coating on a steel plate;

Conversion Coatings anodic coatings on steel with ---.

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/T 6461 on the metal base metals and other inorganic coatings by etching after the test specimens and ratings (GB/T 6461-2002, ISO 10289:1999, IDT) GB/T 10125-1997 Corrosion tests in artificial atmospheres - salt spray test (eqvISO 9227.1990) GB/Clear T 16545 corrosion test specimens of metals and alloys corrosion products (GB/T 16545-1996, ISO 8407.

1991, IDT)

GB/T 19746-2005 Corrosion of metals and alloys week salt solution immersion test (ISO 11130:1999, IDT) ISO 3574 commercial and drawing cold rolled carbon steel sheet Part 1 specifies general assessment of the extent of the defect ISO 4628-1 pigment and varnish paint coats erosion, the number and size of Score. General principles and rating tables Part 2 of the general provisions assess the extent of the defect ISO 4628-2 pigment and varnish paint coats erosion, the number and size of Score. degree of blistering provisions Part 3 specifies assessment ISO 4628-3 pigment and varnish paint coating defects erosion general level, the number and size of Score. Rusty degree requirements Part 4 provides assessment ISO 4628-4 Paints and varnishes coating defects erosion general level, the number and size of Score. Crack degree requirements GB/T 24195-2009/ISO 16151:2005