

ICS 77.060



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

GB/T 15970.4-2000

**Corrosion of metals and alloys. Stress corrosion testing. Part 4:
Preparation and use of uniaxially loaded tension specimens**

金属和合金的腐蚀 应力腐蚀试验 第4部分:单轴加载拉伸试样的制备和应用

(English Translation)

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Table of Contents

Foreword	3
Introduction	4
1 Scope	6
2 Normative References	6
3 Definitions	6
4 Principle	7
5 Specimens	7
6 Procedure	9
7 Assessment of Results	11
8 Test Report	11

Foreword

This Standard equivalently adopts international standard of ISO 7539-4:1989 Corrosion of Metals and Alloys - Stress Corrosion Testing - Part 4. Preparation and Use of Uniaxially Loaded Tension Specimens.

GB/T 15970 includes the following parts under the general title of "Corrosion of Metals and Alloys - Stress Corrosion Testing".

- Part 1. (GB/T 15970.1-1995) General Guidance on Testing Procedures;
- Part 2. (GB/T 15970.2-2000) Preparation and Use of Bent-Beam Specimens;
- Part 3. (GB/T 15970.3-1995) Preparation and Use of U-Bend Specimens;
- Part 4. (GB/T 15970.4-2000) Preparation and Use of Uniaxially Loaded Tension Specimens;
- Part 5. (GB/T 15970.5-1998) Preparation and Use of C-Ring Specimens;
- Part 6. (GB/T 15970.6-1998) Preparation and Use of Pre-Cracked Specimens;
- Part 7. Slow Strain Rate Testing;
- Part 8. Preparation and Use of Specimens to Evaluate Weldments.

The Part 8 shall be developed thereafter.

1 Scope

1.1

This Part of GB/T 15970 covers procedures for designing, preparing and using uniaxially loaded tension test specimens for investigating the susceptibility of a metal to stress corrosion.

The term "metal" as used in this Part of GB/T 15970 includes alloys.

1.2

Tension test specimens are adaptable for testing a wide variety of product forms, including plate, rod, wire, sheet and tubes, as well as parts joined by welding, riveting, or other methods. Notched specimens may also be used (see 5.1.3).

1.3

Uniaxially loaded tensile specimens may be stressed quantitatively with equipment for application of either a constant load, a constant strain or an increasing load or strain.

2 Normative References

The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. At the time of publication, the editions indicated are valid. All standards are subject to revision. The parties who are using this Standard shall explore the possibility of using the latest version of the following standards.

GB/T 228-1987 Metallic Materials -Tensile Testing at Ambient Temperature

GB/T 15970.1-1995 Corrosion of Metals and Alloys - Stress Corrosion Testing - Part 1: General Guidance on Testing Procedures

GB/T 15970.6-1998 Corrosion of Metals and Alloys - Stress Corrosion Testing - Part 6: Preparation and Use of Pre-Cracked Specimens

3 Definitions

For the purposes of this Part of GB/T 15970, the definitions given in GB/T 15970.1-