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Stress corrosion cracking testing of metals and alloys using reverse U-bend test method

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Contents

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Society of Corrosion Engineering (JSCE)/Japanese Standard Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently, **JIS G 0511** : 2006 is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

Stress corrosion cracking testing of metals and alloys using reverse U-bend test method

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 7539-10** published in 2013 with some modifications of the technical contents.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JC. Matters contained in Annex JA and Annex JB are unique contents of **JIS** that are not given in the corresponding International Standard.

1 Scope

This Standard specifies the methods of evaluating susceptibility mainly of Fe-based alloy and Ni-based alloy of austenitic materials to stress corrosion cracking in the environment of high temperature and high pressure water using reverse U-bend (hereafter abbreviated as "RUB") specimens.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 7539-10 : 2013 *Corrosion of metals and alloys — Stress corrosion testing — Part 10 : Reverse U-bend method* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

WARNING Persons carrying out tests based on this Standard should be familiar with normal laboratory practice. This Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) listed below shall be applied.

JIS R 6251 *Abrasive cloths*

JIS R 6252 *Abrasive papers*

JIS R 6253 *Waterproof abrasive papers*