JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 0511 : 2006

(JSCE/JSA)

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

ICS 77.060

Reference number : JIS G 0511 : 2006 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japan Society of Corrosion Engineering (JSCE)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

Date of Establishment: 2006-06-20
Date of Public Notice in Official Gazette: 2006-06-20
Investigated by: Japanese Industrial Standards Committee
Standards Board
Technical Committee on Iron and Steel

JIS G 0511 : 2006, First English edition published in 2007-02

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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

Printed in Japan KA/HN

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1 Scope This Japanese Industrial Standard specifies the methods of stress corrosion cracking testing of iron-based alloy and nickel-based alloy of mainly austenitic materials in the environment of high temperature and high pressure water using reverse U-bend test method.

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) indicated below shall be applied.

JIS R 6251 *Abrasive cloths*

JIS R 6252 *Abrasive papers*

JIS R 6253 *Waterproof abrasive papers*

JIS Z 2201 *Test pieces for tensile test for metallic materials*

3 Terms and definitions For the purpose of this Standard, the following definitions shall apply.

a) **reverse U-bend test piece** test piece of tube material divided in two in the shaft direction or of tube material formed in the shape of tensile test piece, bent in the U-shape along the longitudinal direction of the tube shaft with the inner side of tube to the back side

b) **test piece** material shaped to the specified shape before reverse U-bend forming It is obtained from the tube or plate material of finally heat treated.

4 Types of test pieces The types of test pieces shall be in accordance with table 1. The applicable type of test piece shall be chosen from the following No. 1 to No. 5, according to the shape and size of material to be evaluated.