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Investigation of brazeability — Spreading test and gap filling test

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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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Foreword

This Japanese Industrial Standard has been 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 The Japan Welding Engineering Society (JWES)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS Z 3191** : 2003), which has been technically revised.

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

Investigation of brazeability — Spreading test and gap filling test

Introduction

This Japanese Industrial Standard has been prepared based on ISO 5179 : 2021, Edition 2, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies test methods for investigating brazeability.

A spreading test is applied to the investigation of wettability of a brazing filler metal to a parent material by measuring the spread area of the filler metals relative to the parent material.

For the gap filling test, methods for two tests, a T-joint test and a varying gap test, are specified. The T-joint test measures the filling state of the brazing filler metal in a linear gap consisting of plates, while the varying gap test measures the filling state of the brazing filler metal in a gap consisting of two tubes. Both tests are applicable when investigating the gap-filling properties of brazing filler metal.

This Standard does not apply to the investigation of aluminium brazing sheets.

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

ISO 5179 : 2021 *Investigation of brazeability with spreading and gap-filling test* (MOD)

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

2 Normative reference

Part or all of the provisions of the following standard, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

JIS Z 3001-3 *Welding and allied processes — Vocabulary — Part 3 : Soldering and brazing*

NOTE Normative reference in the corresponding International Standard : ISO 857-2 *Welding and allied processes — Vocabulary — Part 2 : Soldering and brazing processes and related terms*