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(JWES/JSA)

Shielding gases for fusion welding and thermal cutting

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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 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 the Japan Welding Engineering Society (JWES)/Japanese Standards 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 Z 3253**: 2003 is replaced with this Standard.

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 or utility model right. 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 or the utility model right.

Shielding gases for fusion welding and thermal cutting

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 14175** published in 2008 without modifying the technical contents for the corresponding parts (classification and quality) but adding some specification contents (testing method, container and marking) that are not given in the corresponding International Standard.

The portions given sidelines or dotted underlines, and Annex JA are the matters not contained in the corresponding International Standard. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard specifies the following shielding gas, orifice gas and assist gas (hereafter referred to as "shielding gas") except the fuel gas used for fusion welding and thermal cutting, gas used for thermal spraying, gas for laser oscillation and air used for plasma arc cutting and laser cutting.

a) Shielding gas used for gas-shielded metal-arc welding

b) Orifice gas and shielding gas used for plasma arc welding

c) Orifice gas and assist gas used for plasma arc cutting

d) Shielding gas used for laser welding

e) Assist gas used for laser cutting

f) Shielding gas used for brazing with electric arc

g) Shielding gas used for laser beam brazing

h) Shielding gas used for gas backing

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

ISO 14175 : 2008 *Welding consumables — Gases and gas mixtures for fusion welding and allied processes* (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 references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (in-