

Translated and Published by Japanese Standards Association

JIS Z 3223:2010

(JWES/JSA)

Covered electrodes for molybdenum steel and chromium molybdenum steel

ICS 25.160.20

Reference number: JIS Z 3223: 2010 (E)

Z 3223: 2010

Date of Establishment: 1966-03-01

Data of Revision: 2010-02-22

Date of Public Notice in Official Gazette: 2010-02-22

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Welding

JIS Z 3223: 2010, First English edition published in 2011-05

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.

© JSA 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan KA/SW

Contents

	Page
Intro	oduction1
1	Scope1
2	Normative references ·······1
3	Terms and definitions ······2
4	Classification and symbol indication method ······3
5 5.1 5.2 5.3 5.4 5.5	Quality4Dimensions, tolerances and product conditions of electrode4Chemical composition of deposited metal4Mechanical properties of deposited metal6Welding position to which electrode is applicable and type of current8Hydrogen content of deposited metal8
6 6.1 6.2 6.3 6.4 6.5	Test methods8Determination method of lot8Chemical analysis test of deposited metal8Tensile test of deposited metal9Fillet weld test9Hydrogen content test of deposited metal10
7	Inspection ·······11
8	Designation of product · · · · · · · · · · · · · · · · · · ·
9 9.1 9.2	Marking12Marking on product12Marking on packaging12
10	Packaging ······12
11	Inspection certification · · · · · 12
Anne	ex A (informative) ISO 3580 System A ·······13
Anne	ex JA (informative) Comparison table between JIS and corresponding International Standard21

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 3223: 2006 is replaced with this Standard.

This JIS document is protected by the Copyright 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.

Covered electrodes for molybdenum steel and chromium molybdenum steel

JIS Z 3223: 2010

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of ISO 3580 published in 2004 with some modifications of the technical contents. ISO 3580 is a combined standard of EN 1599 and the standard used around the Pacific Rim, and either of them may be used in different global markets. According to this, this Standard gives requirements corresponding to the Pacific Rim (System B of ISO 3580) in the text, and those of EN 1599 (System A of ISO 3580) in Annex A.

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 JA.

1 Scope

This Standard specifies the covered electrodes used after the execution of the post weld heat treatment for the ferritic and martensitic creep-resisting molybdenum steel and chromium molybdenum steel of low alloy steel (hereafter referred to as "electrodes").

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

ISO 3580:2004 Welding consumables—Covered electrodes for manual metal arc welding of creep-resisting steels—Classification (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 (including amendments) indicated below shall be applied.

JIS G 0321 Product analysis and its tolerance for wrought steel

JIS G 3101 Rolled steels for general structure

JIS G 3106 Rolled steels for welded structure

JIS Z 3001-1 Welding and allied processes - Vocabulary - Part 1: General

JIS Z 3001-2 Welding and allied processes-Vocabulary-Part 2: Welding processes