

Translated and Published by Japanese Standards Association

JIS Z 3317: 2011

(JWES/JSA)

Solid wire electrodes, wires and rods for gas-shielded arc welding of molybdenum steel and chromium molybdenum steel

**ICS** 25.160.20

**Reference number : JIS Z 3317 : 2011 (E)** 

Z 3317:2011

Date of Establishment: 1985-04-01

Date of Revision: 2011-03-22

Date of Public Notice in Official Gazette: 2011-03-22

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Welding

JIS Z 3317:2011, First English edition published in 2012-10

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 2012

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

# Contents

	Page
Intro	duction1
1	Scope1
2	Normative references
3	Terms and definitions ————————————————————————————————————
4	Classification and designation by symbols2
5 5.1	Quality
5.2 5.3	Chemical composition of filler metals and solid wires
6 6.1 6.2 6.3	Test methods
7	Inspection10
8	Designation of products ————————————————————————————————————
9	Packaging12
10 10.1 10.2	Marking12Marking on the product12Marking on the package12
11	Certificate of inspection ————————————————————————————————————
Anne	x A (informative) ISO 21952 System A13
Anne	x JA (informative) Comparison table between JIS and corresponding International Standard

### 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 3317:2007 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 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.

### JIS Z 3317:2011

# Solid wire electrodes, wires and rods for gas-shielded arc welding of molybdenum steel and chromium molybdenum steel

#### Introduction

This Japanese Industrial Standard has been prepared based on the first edition of ISO 21952 published in 2007 with some modifications of the technical contents. ISO 21952 is a combined standard of EN 12070 and the standard used around the Pacific Rim. Either or both of the standards may be applied to the specific global markets. According to this, this Standard gives requirements corresponding to the standards used in Pacific Rim (ISO 21952 System B) in the text, and those corresponding to EN 12070 (ISO 21952 System A) in Annex A for information.

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 solid rods and solid wires (hereafter generically referred to as "filler metals") used for TIG welding, and solid wires used for MAG welding and MIG welding of molybdenum steel and chromium molybdenum steel.

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

ISO 21952:2007 Welding consumables—Wire electrodes, wires, rods and deposits for gas-shielded arc welding of creep-resisting steels—Classification (MOD)

The 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 0203 Glossary of terms used in iron and steel (Products and quality)
- JIS G 0320 Standard test method for heat analysis of steel products
- JIS G 3103 Carbon steel and molybdenum alloy steel plates for boilers and pressure vessels
- JIS G 4109 Chromium-molybdenum alloy steel plates for boilers and pressure vessels