

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

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**JIS Z 3604** : 2016

(JLWA/JSA)

**Recommended practice for inert gas  
shielded arc welding of aluminium  
and aluminium alloys**

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ICS 25.160.10;77.120.10

Reference number : **JIS Z 3604 : 2016 (E)**

Z 3604 : 2016

Date of Establishment: 1967-07-01

Date of Revision: 2016-03-22

Date of Public Notice in Official Gazette: 2016-03-22

Investigated by: Japanese Industrial Standards Committee  
Standards Board for ISO area  
Technical Committee on Metal and Inorganic  
Materials

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JIS Z 3604:2016, First English edition published in 2016-10

Translated and published by: Japanese Standards Association  
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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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 Japan Light Metal Welding Association (JLWA)/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 3604**:2002 is replaced with this Standard.

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# Recommended practice for inert gas shielded arc welding of aluminium and aluminium alloys

## Introduction

This Japanese Industrial Standard was established in 1967 and has gone through five revisions up to the present. The last revision was made in 2002, and the revision at this time is to expand its scope including the quality requirements in addition to the existing recommended practice.

## 1 Scope

This Standard specifies the recommended practice for inert gas shielded arc welding of aluminium materials and the comprehensive quality requirements related to the quality requirements for fusion welding of metallic materials specified in **JIS Z 3400**.

## 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) listed below shall be applied.

JIS H 4000 *Aluminium and aluminium alloy sheets, strips and plates*

JIS H 4040 *Aluminium and aluminium alloy bars and wires*

JIS H 4080 *Aluminium and aluminium alloy extruded tubes and cold-drawn tubes*

JIS H 4090 *Aluminium and aluminium alloy welded pipes and tubes*

JIS H 4100 *Aluminium and aluminium alloy extruded profiles*

JIS H 4140 *Aluminium and aluminium alloy forgings*

JIS H 5202 *Aluminium alloy castings*

JIS H 5302 *Aluminium alloy die castings*

JIS Z 2305 *Non-destructive testing—Qualification and certification of NDT personnel*

JIS Z 2343-1 *Non-destructive testing—Penetrant testing—Part 1: General principles—Method for liquid penetrant testing and classification of the penetrant indication*

JIS Z 3001 (series) *Welding and allied processes—Vocabulary*

JIS Z 3080 *Methods of ultrasonic angle beam examination for butt welds of aluminium plates*

JIS Z 3081 *Methods of ultrasonic angle beam examination for welds of aluminium pipes and tubes*

JIS Z 3082 *Methods of ultrasonic examination for T type welds of aluminium plates*