

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

---

**JIS Z 3001-1** : 2018

(JWES)

**Welding and allied processes—  
Vocabulary—Part 1: General**

---

ICS 01.040.25;25.160.01

Reference number : **JIS Z 3001-1 : 2018 (E)**

Z 3001-1 : 2018

Date of Establishment: 2008-03-20

Date of Revision: 2018-02-20

Date of Public Notice in Official Gazette: 2018-02-20

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

---

JIS Z 3001-1:2018, First English edition published in 2018-12

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

---

In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

© JSA 2018

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

HT/AT

PROTECTED BY COPYRIGHT

## Contents

	Page
Introduction .....	1
1 Scope .....	1
2 Normative references .....	1
3 Classification .....	1
4 Terms and definitions .....	2
4.1 General .....	2
4.2 Testing .....	24
4.3 Safety and hygiene .....	29
4.4 Arc welding .....	32
4.5 Resistance welding .....	32
4.6 Other welding .....	32
4.7 Gas welding and thermal cutting .....	36
Annex A (informative) Table of correspondence between numbers of terms in current and previous editions .....	42

## 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) 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 3001-1:2013** 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 patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

**JIS Z 3001** series consists of the following 7 parts under the general title “*Welding and allied processes—Vocabulary*”:

*Part 1: General*

*Part 2: Welding processes*

*Part 3: Soldering and brazing*

*Part 4: Imperfections in welding*

*Part 5: Laser welding*

*Part 6: Resistance welding*

*Part 7: Arc welding*

# Welding and allied processes— Vocabulary—Part 1: General

## Introduction

**JIS Z 3001** was first established in 1958, and then replaced with a standard series consisting of four parts, **JIS Z 3001-1** to **JIS Z 3001-4**, in 2008.

This Japanese Industrial Standard was last revised in 2013, and has been revised at this time as part of the overall reconstruction of the **JIS Z 3001** standard series.

There is currently no International Standard corresponding to this Standard; however, the 2016 edition of **ISO/TR 25901-1** has been referred to in drafting of this Standard.

## 1 Scope

This Standard contains general and basic terms and definitions that are applicable to welding and allied processes. It does not contain terms and definitions related to specific processes and particular aspects of welding and applied processes that are covered in Parts 2 to 7 of the standard series.

## 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 Z 2300 *Terms and definitions of nondestructive testing*

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

JIS Z 3001-4 *Welding and allied processes—Vocabulary—Part 4: Imperfections in welding*

JIS Z 3001-6 *Welding and allied processes—Vocabulary—Part 6: Resistance welding*

JIS Z 3001-7 *Welding and allied processes—Vocabulary—Part 7: Arc welding*

## 3 Classification

Terms are classified according to the following aspects.

- a) General
- b) Test
- c) Safety and hygiene
- d) Arc welding
- e) Resistance welding
- f) Other welding
- g) Gas welding and thermal cutting