

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

---

JIS Z 3001-7 : 2018

(JWES)

**Welding and allied processes—  
Vocabulary—Part 7: Arc welding**

---

ICS 01.040.25;25.160.01

Reference number : JIS Z 3001-7 : 2018 (E)

Date of Establishment: 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 3001-7:2018, 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

## Contents

	Page
Introduction .....	1
1 Scope .....	1
2 Normative reference .....	1
3 Classification .....	1
4 Terms and definitions .....	1
4.1 Basic aspects of welding .....	2
4.2 Welding processes .....	2
4.3 General aspects of welding execution .....	9
4.4 Welding consumables .....	25
4.5 Welding equipment .....	29
Annex A (informative) Table of correspondence between numbers of terms in current and previous editions .....	32

## Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment 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.

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 7: Arc welding

## Introduction

This Japanese Industrial Standard has been established to provide definitions of terms specifically related to arc welding, which used to be divided over Part 1 and Part 2 in the **JIS Z 3001** series established in 2008. The establishment of this Standard has been undertaken 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 25901-4** has been referred to in drafting of this Standard.

## 1 Scope

This Standard contains terms and definitions applicable to arc welding.

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

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

## 3 Classification

Terms are classified according to the following aspects.

- a) Basic aspects of welding
- b) Welding processes
- c) General matters of welding execution
- d) Welding consumables
- e) Welding equipment

## 4 Terms and definitions

NOTE 1 Parentheses attached after the Japanese terms contain the readings of kanji characters that are difficult to read.

NOTE 2 Parentheses attached before the Japanese terms contain modifiers with or without which the term concerned can be used; however, the terms without the modifiers in parentheses are preferred.

NOTE 3 The rightmost column contains in its heading the number of **ISO/TR** which has been referred to, and in the rows below, the numbers of relevant clauses or sub-clauses in that **ISO/TR** that correspond to respective terms. Where other **ISO/TR** than indicated in the heading or an **ISO** Standard has been referred to, parentheses are given after the clause or