

Australian Standard™

**Graphical symbols for general  
engineering**

**Part 3: Welding and non-destructive  
examination**

This Australian Standard was prepared by Committee WD-001, Welding Definitions and Symbols. It was approved on behalf of the Council of Standards Australia on 25 November 2004.  
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The following are represented on Committee WD-001:

Australian Industry Group  
Bureau of Steel Manufacturers of Australia  
New Zealand Heavy Engineering Research Association  
Welding Technology Institute of Australia

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STANDARDS AUSTRALIA

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**RECONFIRMATION**

**OF**

**AS 1101.3—2005**

**Graphical symbols for general engineering  
Part 3: Welding and non-destructive examination**

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Major stakeholders of this publication have reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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## NOTES

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**Graphical symbols for general  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WD-001, Welding Definitions and Symbols, to supersede AS 1101.3—1987.

The 1987 edition of the Standard was generally based on ANSI/AWS A2.4-79, Symbols for Welding and Non-destructive Testing, and the permission of the American Welding Society Inc. to use their Standard was acknowledged.

This edition continues to follow the ANSI/AWS A2.4, and takes cognizance of its 1998 edition.

The main changes in this edition include—

- (a) the use of a new symbol for edge weld to replace the symbols for flange edge and corner welds (see Section 6); and
- (b) the introduction of a symbol for stud weld (see Section 11).

In addition, the format of the Standard has been changed and editorial changes have been included in line with current Standards Australia policy.

The Standard provides a scheme whereby complete details of welds and welded joints can be delineated on drawings. A separate section covers symbols for use on drawings to specify requirements for non-destructive examination for determining the soundness of materials.

The method for symbolic representation of welds on engineering drawings used in this standard is consistent with the ‘third angle’ method of projection, which is the preferred method given in AS 1100, *Technical drawing*, Part 101: *General principles*. It should be noted, however, that the scheme is equally appropriate to drawings in which the ‘first angle’ method of projection is used.

The committee noted the practice currently adopted in ISO 2553, *Welded, brazed and soldered joints; symbolic representation on drawings*, in regard to the position of the symbols on drawings, viz., the dual reference line, and felt that this situation should not be carried over into this Standard. Therefore, the practice of using one continuous reference line remains unaltered in this edition.

Illustrations used with the text are intended only to show how symbols may be used to convey welding or testing information and do not necessarily represent good or accepted design practice.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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**STANDARDS AUSTRALIA****Australian Standard**  
**Graphical symbols for general engineering****Part 3: Welding and non-destructive examination****SECTION 1 SCOPE AND GENERAL****1.1 SCOPE**

This Standard describes symbols that provide the means of placing complete welding information on drawings. It covers the details of symbols and requirements for their application in various welding processes (including brazing), and non-destructive examination.

NOTE: Appendix A gives a listing of abbreviations normally used for welding and allied processes.

**1.2 REFERENCED DOCUMENTS**

The following Standard is referred to in this Standard:

AS

2812 Welding, brazing and cutting of metals—Glossary of terms

**1.3 DEFINITIONS**

For the purpose of this Standard, the definitions given in AS 2812 shall apply.

**1.4 DESIGN AND DIMENSIONS OF STANDARD SYMBOLS**

The design and dimensions of standard symbols shall be as shown in Appendix B.