

AS 2812—1985

Australian Standard[®]

**WELDING, BRAZING AND
CUTTING OF METALS—
GLOSSARY OF TERMS**

This Australian standard was prepared by Committee WD/1, Welding Definitions and Symbols. It was approved on behalf of the Council of the Standards Association of Australia on 18 June 1985 and published on 2 December 1985.

The following interests are represented on Committee WD/1:

Australian Welding Institute
Australian Welding Research Association
Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
CSIRO, Division of Manufacturing Technology
Department of Defence
Department of Employment and Industrial Affairs, Vic.
Electricity Supply Association of Australia
Melbourne and Metropolitan Tramways Board
Metal Trades Industry Association of Australia
Railways of Australia Committee
Royal Melbourne Institute of Technology

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 83249.

AS 2812—1985

Australian Standard[®]

**WELDING, BRAZING AND
CUTTING OF METALS—
GLOSSARY OF TERMS**

First published (as AS Z5, Part 1)	1958
Revised	1968
AS 2812 first published	1985

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 3855 4

PREFACE

This standard was prepared by the Association's Committee on Welding Definitions and Symbols. It supersedes AS Z5, Glossary of Metal Welding Terms and Definitions, Part 1—1968—General Terms for Welding, Brazing and Cutting. It provides definitions of terms used in connection with welding, brazing, and cutting of metals. Process abbreviations which are commonly used in industry, e.g. MMAW, are included.

The standard is intended to serve as a basis for securing uniformity in terminology in the welding industry, standards, and welding education throughout Australia.

Major technical changes which have been introduced in this standard include the addition of several new terms particularly in relation to health and safety, and to new processes such as 'laser-beam welding'.

Terms and definitions relating to processes in general have been grouped in a separate section. These terms are repeated in other sections, as appropriate.

The layout of the previous edition has been retained so that terms relating to various processes are listed and defined in individual sections. However, the terms in each section have been arranged in a purely alphabetical sequence.

Figures illustrating more than one term or repeated terms have been grouped in an appendix. This arrangement was made to facilitate reference to these figures. Figures showing derivation of various processes are included.

In some cases, more than one term is listed. The first term (printed in bold type) should be regarded as the preferred term.

An alphabetical index of all defined terms completes the standard.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
SECTION 1. DEFINITIONS OF PROCESSES	4
SECTION 2. GENERAL TERMS RELATING TO WELDING	12
SECTION 3. TERMS RELATING TO FUSION WELDING (WELDING WITHOUT PRESSURE)	
3.1 General Terms Relating to Fusion Welding	16
3.2 Terms Relating to Arc Welding	25
3.3 Terms Relating to Gas Welding	32
3.4 Terms Relating to Electron-beam and Laser-beam Welding	33
3.5 Terms Relating to Electroslag and Electrogas Welding	36
3.6 Terms Relating to Aluminothermic Welding	36
SECTION 4. TERMS RELATING TO WELDING WITH PRESSURE	
4.1 General Terms Relating to Welding With Pressure	37
4.2 Terms Relating to Resistance Welding	38
4.3 Terms Relating to Forge Welding	48
4.4 Terms Relating to Pressure Welding	49
4.5 Terms Relating to Stud Welding	49
4.6 Terms Relating to Ultrasonic Welding	50
4.7 Terms Relating to Friction Welding	50
4.8 Terms Relating to Diffusion Welding	50
4.9 Terms Relating to Explosive Welding	50
SECTION 5. TERMS RELATING TO BRAZE WELDING, BRAZING AND SOLDERING	
5.1 General Terms Relating to Braze Welding, Brazing and Soldering . .	52
5.2 Terms Relating to Braze Welding and Brazing	52
5.3 Terms Relating to Soldering	53
SECTION 6. TERMS RELATING TO THERMAL SPRAYING	54
SECTION 7. TERMS RELATING TO THERMAL CUTTING	
7.1 General Terms Relating to Thermal Cutting	55
7.2 Terms Relating to Oxygen Cutting	55
7.3 Terms Relating to Plasma Cutting	57
7.4 Terms Relating to Arc Cutting	57
7.5 Terms Relating to Spark-erosion Cutting	57
7.6 Terms Relating to Electron-beam and Laser-beam Cutting	57
SECTION 8. TERMS RELATING TO WELD IMPERFECTIONS	59
SECTION 9. TERMS RELATING TO DESTRUCTIVE TESTING	70
SECTION 10. TERMS RELATING TO HEALTH AND SAFETY	75
APPENDIX A. GENERAL ILLUSTRATIONS	77
INDEX	95

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-