

Australian Standard™

**Non-destructive testing—Terminology
of and abbreviations for fusion weld
imperfections as revealed by
radiography**



S t a n d a r d s Australia

This Australian Standard was prepared by Committee MT-007, Non-destructive Testing of Metals and Materials. It was approved on behalf of the Council of Standards Australia on 30 April 2001 and published on 20 November 2001.

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Australian Aerospace Non-Destructive Testing Committee
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MT-007, Non-destructive Testing of Metals and Materials, to supersede, in Australia, AS Z5.2—1968, *Glossary of metal welding terms and definitions, Part 2: Terminology of and abbreviations for fusion weld imperfections as revealed by radiography*.

AS Z5.2 was an endorsement of BS 499: Part 3:1965, *Welding terms and symbols Part 3: Terminology of and abbreviations for fusion weld imperfections as revealed by radiography*, which has been withdrawn.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

The objective of this revision is to upgrade the Standard which is widely used by the non-destructive testing industry in Australia.

Cognizance has been taken of the International Standard, ISO 6520-1:1998, *Welding and allied processes—Classification of geometric imperfections in metallic materials, Part 1: Fusion welding* and AS 2812—1985, *Welding, brazing and cutting of metals—Glossary of terms*.

Acknowledgment is given to Agfa (Australia) for supplying many of the radiographs contained in this Standard.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

Non-destructive testing—Terminology of and abbreviations for fusion weld imperfections as revealed by radiography**1 SCOPE**

This Standard defines and describes weld imperfections using, where appropriate, schematic diagrams and reference radiographs, as follows:

- (a) Surface imperfections in the weld or the adjacent parent metal.
- (b) Internal imperfections in the weld.

It also includes abbreviations for the imperfection types.

NOTES:

- 1 A scheme for the coding of imperfections and their location is given in Appendix A.
- 2 Methods of carrying out radiography on welded butt joints in metal are given in AS 2177.1.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 2177 Non-destructive testing—Radiography of welded butt joints in metal
- 2177.1 Part 1: Methods of test
- 2812 Welding, brazing and cutting of metals—Glossary of terms

3 SURFACE IMPERFECTIONS IN THE WELD OR ADJACENT PARENT METAL

Descriptions of typical surface imperfections, in or adjacent to a weld, as revealed by radiography, are given in Table 1.

NOTE: A visual examination of surface imperfections revealed by radiography should be carried out, where possible, to assist interpretations.

4 INTERNAL IMPERFECTIONS IN THE WELD

Descriptions of typical internal imperfections in weld metal, as revealed by radiography, are given in Table 2.