

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2205.6.1—2003

**Methods for destructive testing of welds in metal
Method 6.1: Weld joint hardness test**

RECONFIRMATION NOTICE

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.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 12 January 2018.

NOTES

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PREFACE

This Standard was prepared by the Standards Australia Committee WD-006, Testing of Welds to supersede AS 2205.6.1—1997.

The objective of this edition is to update the Standard and include editorial changes in accordance with current Standards Australia editorial policy.

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.

METHOD

1 SCOPE

This Standard sets out a method for hardness testing of a welded joint. The test measures the hardness of the weld metal, the heat affected zone (HAZ) and the parent metal on prescribed traverses located in the regions of expected maximum and minimum hardness.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

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| 1817 | Metallic materials—Vickers hardness test—Test methods (ISO 6507-1:1997, MOD) |
| 2205 | Methods for destructive testing of welds in metal |
| 2205.1.1 | Method 5.1: Macro metallographic test for cross-section examination |

3 PREPARATION OF TEST SPECIMEN

The test specimen shall be prepared in accordance with AS 2205.1 and the following:

- (a) The test specimen shall be cut from the weld zone as specified by the relevant application Standard. The regions in which hardness tests are to be made shall be at least 25 mm from the line of any flame cut.

NOTE: The dimension indicated in Figure 1 is usually adequate.

- (b) The surface finish of the test specimen shall be as described in an Appendix of AS 2205.5.1, except that polishing shall be continued at least to the stage where P1200 abrasive quality finish has been achieved.
- (c) Light etching should be carried out to define the weld zone and to allow hardness indentations to be properly positioned. Information about suitable etchants is given in AS 2205.5.1.