

Australian/New Zealand Standard™

**Qualification of welders for fusion
welding of steels—Additional
requirements for Australia and New
Zealand**



AS/NZS 2980:2018

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WD-003, Welding of Structures. It was approved on behalf of the Council of Standards Australia on 5 February 2018 and by the New Zealand Standards Approval Board on 31 January 2018.
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The following are represented on Committee WD-003:

Australasian Corrosion Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Steel Association
Australian Steel Institute
Austroads
Bureau of Steel Manufacturers of Australia
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PREFACE

This Standard was prepared by the joint Standards Australia/Standards New Zealand Committee WD-003, Welding of Structures, to supersede AS/NZS 2980:2007, *Qualification of welders for fusion welding of steels*.

This Standard incorporates Amendment No. 1 (March 2020). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This edition of the Standard is intended to provide a transition from AS/NZS 2980:2007 to AS/NZS ISO 9606.1:2017.

This Standard continues to give cognizance to the ISO welder qualifications Standard for steels, ISO 9606-1:2012, *Approval testing of welders—Fusion welding, Part 1. Steels*, which has been adopted as the Australian/New Zealand Standard, AS/NZS ISO 9606.1:2017. This edition of AS/NZS 2980 references AS/NZS ISO 9606.1 in its entirety and is intended to be read and interpreted in conjunction with AS/NZS ISO 9606.1. Additional requirements are set out in Australian and New Zealand industry-specific normative appendices, and guidance is provided in informative appendices as follows:

- (a) Appendix A—Guidance on the application of AS/NZS ISO 9606.1 and AS/NZS 2980 (informative).
- (b) Appendix B—Welder qualification assessment for welds in structural steel (normative).
- (c) Appendix C—Welder qualification test for stainless steel tube for the New Zealand Dairy Industry (normative for New Zealand).
- (d) Appendix D—Material groups (informative).

As figures in this Standard are complete only to the extent necessary for illustration, reference needs to be made to the requirements specified in the text.

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.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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FOREWORD

This Standard and AS/NZS ISO 9606.1, together, provide a set of technical rules for a systematic qualification test of the welder that enables such qualifications to be independent of the type of product, location, and examiner or examining body.

The principle of this Standard is that a qualification test qualifies the welder not only for the conditions used in the test, but also for all joints that are considered easier to weld provided that the welder has received appropriate training and/or has industrial practice within the range of qualification.

The testing of a welder's skill in accordance with this Standard depends on welding techniques and conditions used in which uniform rules are conformed to, and standard test pieces are used.

When qualifying welders, the emphasis is placed on the welder's ability to manually manipulate the electrode, welding torch or welding blowpipe, thereby producing a weld of acceptable quality.

The ability of a welder to follow verbal or written instructions and verification of a person's skills are important factors in ensuring the quality of the welded product.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Qualification of welders for fusion welding of steels—Additional requirements for Australia and New Zealand****1 SCOPE**

This Standard specifies additional requirements to be used in conjunction with AS/NZS ISO 9606.1 for qualification testing of welders for fusion welding of steels, which are for certain unique Australian and New Zealand conditions. For all other situations, the requirements of AS/NZS ISO 9606.1 apply.

NOTE: Appendix A provides guidance on the application of AS/NZS ISO 9606.1 in relation to this Standard.

This Standard applies to welding processes including fusion-welding processes that are designated as manual and mechanized welding. It does not cover fully automated welding processes.

This Standard does not deal with the certification of welders.

2 APPLICATION

This Standard shall be read and applied in conjunction with the requirements of AS/NZS ISO 9606.1. The requirements of AS/NZS ISO 9606.1 apply other than where requirements within the normative Appendices of this Standard specifically indicate otherwise.

The qualification tests prescribed in this Standard are intended to provide a method to qualify welders for the welding of steel structures (in Australian and New Zealand). However, they may also be suitable for the qualification of welders for other applications by agreement. In which case, the tests will be performed in accordance with the requirements of a welding procedure specification (WPS) produced for the purpose.

The qualification test may be used to qualify both a welding procedure and a welder, provided that all the relevant requirements, e.g. test piece dimensions, are satisfied. Where a test is intended as both a procedure qualification and a welder qualification, the welder qualification is not achieved unless the requirements for procedure qualification are also met.

Qualifications in accordance with AS/NZS 2980:2007, requiring prolongation (revalidation) after the date of publication of this Standard, shall be interpreted in accordance with the requirements of AS/NZS 2980:2018.

Welder qualification tests are not intended to be used as a guide for welding during actual construction.

NOTE: Where a welder fails the specified tests, the performance may be used as a basis for measuring the value of further training.

3 REFERENCED DOCUMENTS**3.1 Documents referred to in this Standard**

Documents referred to in Appendices B and C are listed in those appendices. Documents referred to in the rest of this Standard are as follows:

AS	
1450	Steel tubes for mechanical purposes
1548	Fine grained, weldable steel plates for pressure equipment