

Australian Standard™

**Qualification of welders for fusion
welding of steels**

This Australian Standard was prepared by Committee WD-003, Welding of Structures. It was approved on behalf of the Council of Standards Australia on 25 October 2004.

This Standard was published on 17 December 2004.

The following are represented on Committee WD-003:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Steel Institute
AUSTROADS
Bureau of Steel Manufacturers of Australia
Electricity Supply Association of Australia
Institution of Engineers Australia
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AS 2980—2004

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First published 1987.
Second edition 2004.

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Published by Standards Australia, GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 6415 0

PREFACE

This Standard was prepared by the Standards Australia's Committee WD-003, Welding of Structures, to supersede AS 2980—1987.

Whilst the 1987 edition generally followed the requirements of the then current edition of AWS D1.1—85, *Structural Welding Code—Steel*, the methods of testing and criteria of acceptance were based on current Australian Standards. This edition gives cognizance to the ISO welder qualifications Standard for steels ISO 9606-1:1994, *Approval testing of Welders—Fusion Welding, Part 1: Steels*, by adopting largely its principles and methodologies; however, due to incompatibilities between the European-based approach of the ISO Standard and the North American basis for many of the Australian and New Zealand welding Standards, it could not be adopted in its entirety.

The key differences and similarities with ISO 9606-1 and this revision of the Standard are as follows:

- (a) Requirements are included for the qualification of welders using mechanized and automatic welding processes for which no equivalent ISO requirements currently exist.
- (b) Requirements for the qualification of welders producing plug welds has been maintained from the previous edition of AS 2980 plus requirements for the oxy-acetylene gas welding process recognized in ISO 9606-1 included.
- (c) ISO 9606-1 does not incorporate allowance for the use of welding consumables whose properties are based on tensile strength, this being the system of classification in use in Australia and New Zealand and many other Pacific Rim countries.
- (d) Reference to the Australian weld testing Standards series AS 2205 has been retained.
- (e) The criteria of acceptance remains based on the current Australian and New Zealand Standards AS/NZS 1554.1 category SP.
- (f) The optional technical knowledge requirements of ISO 9606-1 have been included.
- (g) The requirements for welders to demonstrate maintenance of their qualifications (conformation) have now been included and are consistent with the requirements of the major application Standards used in Australia and New Zealand.
- (h) Requirements have been included for a system of prolongation where welders can demonstrate a higher level of ongoing confirmation than that possible under previous editions of this Standard.

Readers should note that whilst this Standard provides the welder with a broad range of approvals, application Standards may offer the welder a limited approval option, which in some cases may be of some economic benefit to the fabricator.

As drawings in this Standard are complete only to the extent necessary for illustration, reference is 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 and figures are deemed to be requirements of this Standard.

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