

Australian/New Zealand Standard™

**Quality requirements for fusion welding
of metallic materials**

**Part 5: Documents with which it
is necessary to conform to claim
conformity to the quality requirements
of AS/NZS ISO 3834.2, AS/NZS ISO
3834.3 or AS/NZS ISO 3834.4**



AS/NZS ISO 3834.5:2019

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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
- Australian Welding Institute
- Austrroads
- Bureau of Steel Manufacturers of Australia
- Energy Networks Australia
- Heavy Engineering Research Association, New Zealand
- New Zealand Non-Destructive Testing Association
- Steel Reinforcement Institute of Australia
- TAFE NSW
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- Weld 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 ISO 3834.5:2008, *Quality requirements for fusion welding of metallic materials — Part 5: Documents with which it is necessary to conform to claim conformity to the quality requirements of AS/NZS ISO 3834.2, AS/NZS ISO 3834.3 or AS/NZS ISO 3834.4.*

The objective of this Standard is to specify the adopted International Standards with which it is necessary to conform to claim conformity to the quality requirements of AS/NZS ISO 3834.2, AS/NZS ISO 3834.3, or AS/NZS ISO 3834.4. It can only be used in conjunction with AS/NZS ISO 3834.2, AS/NZS ISO 3834.3, or AS/NZS ISO 3834.4.

This Standard is identical with, and has been reproduced from, ISO 3834-5:2015, *Quality requirements for fusion welding of metallic materials — Part 5: Documents with which it is necessary to claim conformity to the quality requirements of ISO 3834-2, ISO 3834-3 or ISO 3834-4.*

As this document has been reproduced from an International Standard, the following applies:

- (a) In the source text “this International Standard” should read “this Australian/New Zealand Standard”.
- (b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards. At the time of publication, none of the ISO documents listed in Clause 2.2 had been adopted as Australian or Australian/New Zealand Standards.

The terms “normative” and “informative” are used in Standards to define the application of the annexes to which they apply. A “normative” annex is an integral part of a Standard, whereas an “informative” annex is only for information and guidance.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 44, *Welding and allied processes*, SC 10, *Unification of requirements in the field of metal welding*.

This second edition cancels and replaces the first edition (ISO 3834-5:2005), which has been technically revised. It also incorporates the Corrigendum ISO 3834-5:2005/Cor 1:2007.

ISO 3834 consists of the following parts, under the general title *Quality requirements for fusion welding of metallic materials*:

- *Part 1: Criteria for the selection of the appropriate level of quality requirements*
- *Part 2: Comprehensive quality requirements*
- *Part 3: Standard quality requirements*
- *Part 4: Elementary quality requirements*
- *Part 5: Documents with which it is necessary to conform to claim conformity to the quality requirements of ISO 3834-2, ISO 3834-3 or ISO 3834-4*
- *Part 6: Guidelines on implementing ISO 3834* [Technical Report]

Requests for official interpretations of any aspect of this part of ISO 3834 should be directed to the Secretariat of ISO/TC 44/SC 10 via your national standards body. A complete listing of which can be found at <http://www.iso.org>.

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1 Scope

This part of ISO 3834 specifies the International Standards with which it is necessary to conform to claim conformity to the quality requirements of ISO 3834-2, ISO 3834-3, or ISO 3834-4. It can only be used in conjunction with ISO 3834-2, ISO 3834-3, or ISO 3834-4.

2 Documents with which it is necessary to conform to claim conformity to the quality requirements of ISO 3834-2, ISO 3834-3, or ISO 3834-4

2.1 General

Conformity to the quality requirements of ISO 3834-2, ISO 3834-3, or ISO 3834-4 shall be claimed by a manufacturer in accordance with one or more of the following options:

- a) adopting the ISO documents listed in [2.2](#);
- b) adopting other documents that provide technically equivalent conditions to the ISO documents listed in [2.2](#); it is the responsibility of the manufacturer to demonstrate that the alternative standards selected have technically equivalent conditions to those in the corresponding International Standards when documents specified in [2.2](#) are replaced;
- c) adopting different supporting standards to those listed in [2.2](#), where these are required in application standards used by the manufacturers.

2.2 ISO documents

The following ISO documents are indispensable for the application of ISO 3834-2, ISO 3834-3, or ISO 3834-4, as specified in [2.1](#). The latest edition of the referenced document (including any amendments) applies.

ISO 9606-1, *Qualification testing of welders — Fusion welding — Part 1: Steels*

ISO 9606-2, *Qualification test of welders — Fusion welding — Part 2: Aluminium and aluminium alloys*

ISO 9606-3, *Approval testing of welders — Fusion welding — Part 3: Copper and copper alloys*

ISO 9606-4, *Approval testing of welders — Fusion welding — Part 4: Nickel and nickel alloys*

ISO 9606-5, *Approval testing of welders — Fusion welding — Part 5: Titanium and titanium alloys, zirconium and zirconium alloys*

ISO 9712, *Non-destructive testing — Qualification and certification of NDT personnel*

ISO 10863, *Non-destructive testing of welds — Ultrasonic testing — Use of time-of-flight diffraction technique (TOFD)*

ISO 13588, *Non-destructive testing of welds — Ultrasonic testing — Use of automated phased array technology*