

AS 2214.1:2024



STANDARDS
Australia



Structural steelwork — Qualification of personnel

Part 1: Welding supervisors and inspectors

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- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Manufacturing Workers Union
- Australian Steel Association
- Australian Steel Institute
- Australian Welding Institute
- Better Regulation Division (Fair Trading, SafeWork NSW, TestSafe)
- Bureau of Steel Manufacturers of Australia
- Energy Networks Australia
- Engineers Australia
- Materials Australia
- National Association of Testing Authorities Australia
- Steel Reinforcement Institute of Australia
- The Australasian Corrosion Association
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Part 1: Welding supervisors and inspectors

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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee WD-003, Welding of Structures, to supersede AS/NZS 2214:2019, *Certification of welding supervisors — Structural steel welding*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this document as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this document is to specify the pre-examination qualifications and scope of examination required for granting certificates of qualification to welding supervisors engaged in the supervision of welders of steel structures, and welding inspectors engaged in the inspection of structural steel welding.

This document has been retitled and designated as Part 1 of AS 2214, to align with—

- (a) the personnel qualification and competencies for welding supervision and inspection within AS/NZS 5131 *Structural steelwork — Fabrication and erection*;
- (b) the latest edition of AS 1796, *Pressure equipment — Qualification of welders, welding supervisors and welding inspectors*; and
- (c) new requirements for the qualification of welding inspectors.

The inclusion of roles and responsibilities in AS 2214.1:2024 was approved by SDAC on 02/11/2023.

The terms “normative” and “informative” are used in Standards 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.

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Introduction

The Standard refers to the qualification of welding supervisors and welding inspectors where the requirements of industry demand a prescribed degree of quality in welding to meet the needs of safety and performance. Requirements in this document apply specifically to structural applications in the structural steel welding industry for the qualification of welding supervisors and welding inspectors.

It may also be a useful resource for other industries and applications where quality in welding is also of considerable importance. In these cases, qualification in accordance with this document may be useful or desirable, particularly where an application Standard does not specify welding supervisor or inspector qualifications. Such qualifications have their objective as the need to ensure that welding is performed according to the relevant Standards and other specified requirements, and is performed safely.

The requirements of this document apply specifically to structural applications. The requirements specified in AS 1796, *Pressure equipment — Qualification of welders, welding supervisors and welding inspectors*, for the qualification of welding supervisors and inspectors have also been considered in order to create a syllabus that will enable educational authorities to provide adequate facilities for the training of supervisors and inspectors for either application.

The welding supervisor is a person engaged in the supervision of welding and allied processes (including gouging and thermal cutting) —

- (a) intended to form part of steel structures constructed in accordance with AS/NZS 1554 (all parts) and AS/NZS 5131;
- (b) designed in accordance with AS 3990, AS 4100, AS/NZS 4600, AS 5100 (all parts), or AS 3600 or NZS 3404.1; and,
- (c) where appropriate, to form part of other welded structures.

Requirements for the syllabus for the theory component of the welding supervisor qualification are set out in [Section 3](#) and [Appendix A](#).

Included in this document is requirements for the qualification of inspectors of welded steel structures, which build on the knowledge of the theory and practice of welding in the welding supervisor qualification with a specific focus on inspection requirements.

Requirements for the syllabus for the practical and theory component of the welding inspector qualification are set out in [Section 4](#) and [Appendix B](#).

Qualification shall be in accordance with the general requirements of [Sections 1](#) and [2](#), and the following, as applicable.

- (i) For welding supervisors — see [Section 3](#).
- (ii) For welding inspectors — see [Section 4](#).

The possession of a welding supervisor's or inspector's qualification indicates that the holder has a high degree of knowledge on the theory and practice of welding in accordance with the appropriate requirements of an application Standard.

NOTES

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Part 1: Welding supervisors and inspectors

1 Scope and general

1.1 Scope

This document sets out the minimum requirements for the qualification of welding supervisors and welding inspectors employed in the supervision and/or inspection of welding processes used in the manufacture of welded structures as defined in AS/NZS 1554 (all parts).

This document may also be used for other applications requiring a prescribed standard in the theory and practice of welding.

This document also sets minimum requirements for examining bodies.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1101.3, *Graphical symbols for general engineering, Part 3: Welding and non-destructive examination*

AS 2812, *Welding, brazing and cutting of metals — Glossary of terms*

AS 3600, *Concrete structures*

AS 3990, *Mechanical equipment — Steelwork*

AS 4100, *Steel structures*

AS/NZS 1554 (series), *Structural steel welding*

AS/NZS 2980, *Qualification of welders for fusion welding of steels — Additional requirements for Australia and New Zealand*

AS/NZS 4600, *Cold-formed steel structures*

AS 5100 (series), *Bridge design*

AS/NZS 5131, *Structural steelwork — Fabrication and erection*

AS/NZS ISO 9001, *Quality management systems — Requirements*

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

AS/NZS ISO/IEC 17024, *Conformity assessment — General requirements for bodies operating certification of persons*

1.3 Terms and definitions

For the purposes of this document, the definitions given in AS 2812 and those below apply.