Australian/New Zealand Standard™

Structural steel welding

Part 7: Welding of sheet steel structures





AS/NZS 1554.7:2006

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 7 September 2006 and on behalf of the Council of Standards New Zealand on 15 September 2006.

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Australian Chamber of Commerce and Industry
Australian Industry Group
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.

The objective of this Standard is to provide rules for the welding of a wide range of light gauge steel constructions designed in accordance with the requirements of AS/NZS 4600, although this Standard has been specifically prepared for steel structures, it may be usefully applied to machine frames and other types of steel constructions.

Given the historical links between the requirements of AS/NZS 4600, Cold-formed steel structures and the American Welding Society's AWS D1.3, Structural Welding Code—Sheet Steel, this Standard takes cognizance of the requirements and practices associated with AWS D1.3, and the similar requirements contained within AS/NZS 1554.1, Structural steel welding Part 1: Welding of steel structures, for category GP quality welds.

The Standard requires that weld preparations, welding consumables and welding procedures be qualified before commencement of welding. Prequalified joint preparations, welding consumables and welding procedures are also given in the Standard.

The Standard caters specifically for statically loaded structures and, similarly to AS/NZS 4600, does not consider brittle fracture requirements. Under circumstances where brittle fracture is considered likely, the user is instead referred to AS/NZS 1554.1. Whilst AS/NZS 4600 now caters for dynamic loading conditions, both AS/NZS 4600 and this Standard also refer the user to the more appropriate requirements of AS/NZS 1554.1 Category SP, or for high levels of dynamic loading (fatigue), to AS/NZS 1554.5, Structural steel welding Part 5: Welding of steel structures subject to high levels of fatigue loading. This will ensure that appropriate levels of supervision and inspection will be applied to the relevant parts of the structure.

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

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.

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