

Australian Standard™

Welding of ferrous castings

Part 1: Steel castings



This Australian Standard was prepared by Committee MT-001, Iron and Steel. It was approved on behalf of the Council of Standards Australia on 28 March 2006. This Standard was published on 24 April 2006.

The following are represented on Committee MT-001:

Australian Railway Associations
Australian Building Codes Board
Australian Foundry Institute
Australian Industry Group
Australian Steel Institute
Bureau of Steel Manufacturers of Australia
Institute of Material Engineering Australasia

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Welding of ferrous castings

Part 1: Steel castings

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee MT-001, Iron and Steel to supersede AS 1988—1989, *Welding of steel castings*.

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

The objective of this edition is to revise the list of welding consumables and to introduce details on welded connections and the qualification of procedures and personnel.

Steel castings may require welding to make them satisfactory for their intended service, and this has long been accepted as part of the normal production process. The procedures in this Standard can be specified to ensure good welding practice during production, repair, rectification, and fabrication of steel castings. In fabrication, the use of welding has to be taken into account at the design and foundry stages.

During the preparation of this Standard, cognisance was taken of the following Standards.

AS/NZS

- 1554 Structural steel welding
- 1554.1 Part 1: Welding of steel structures

ISO

- 11970 Specification and approval of welding procedures for production welding of steel castings

This Standard is one of a series of Standard covering the range of cast irons and steels. The series comprises the following:

AS

- 1830 Grey cast iron
- 1831 Ductile cast iron
- 1832 Malleable cast iron
- 1833 Austenitic cast iron
- 1988 Welding of ferrous castings
- 1988.1 Part 1: Steel castings (this Standard)
- 1988.2 Part 2: Iron castings
- 2027 Wear-resistant white cast iron
- 2074 Cast steels
- 4314 Metal castings—Patterns, pattern equipment and coreboxes for the production of sand moulds and sand cores
- 4738 Metal castings
- 4738.1 Part 1: Ferrous sand moulded
- 5049 Cast iron—Designation of microstructure of graphite

Statements expressed in mandatory terms in notes to tables 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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