

Australian Standard[®]

Steel tubes for mechanical purposes

STANDARDS
Australia



This Australian Standard® was prepared by Committee MT-001, Iron and Steel. It was approved on behalf of the Council of Standards Australia on 7 May 2007. This Standard was published on 9 October 2007.

The following are represented on Committee MT-001:

- Australasian Railway Association
 - Australian Building Codes Board
 - Australian Foundry Institute
 - Australian Industry Group
 - Bureau of Steel Manufacturers of Australia
 - Materials Australia
-

This Standard was issued in draft form for comment as DR C 607.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 1450—2007

Steel tubes for mechanical purposes

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Technical Committee MT-001 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 04 June 2017.

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Australian Steel Association
Australian Steel Institute
Bureau of Steel Manufacturers of Australia
Employers and Manufacturers Association
Materials Australia
New Zealand Heavy Engineering Research Association
Society of Automotive Engineers- Australasia

NOTES

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Australian Standard[®]

Steel tubes for mechanical purposes

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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 1450—1983, *Steel tubes for mechanical purposes*.

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

The objective of the Standard is to specify the general technical delivery requirements for carbon steels and carbon-manganese steels tubes of round, square, rectangular or other non-circular cross-sections that have been either cold or hot formed.

The objective of this revision is to update the referenced documents and to apply current style.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard
Steel tubes for mechanical purposes

1 SCOPE

This Standard specifies requirements for the production and supply of carbon and carbon-manganese steel tubes of round, square, rectangular or other non-circular cross-section, produced by either cold-forming or hot-forming, and intended for use in mechanical applications.

NOTES:

- 1 The purchasing requirements that should be specified by the purchaser at the time of enquiry or order are referred to in Appendix A.
- 2 The means for demonstrating compliance with the Standard is shown in Appendix B.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- | | |
|--------|--|
| 1171 | Non-destructive testing—Magnetic particle testing of ferromagnetic products, components and structures |
| 1199 | Sampling procedures for inspection by attributes |
| 1199.0 | Part 0: Introduction to the ISO 2859 attribute sampling systems |
| 1199.1 | Part 1: Sampling schemes indexed by acceptance quality limits (AQL) for lot-by-lot inspection |
| 1391 | Metallic materials—Tensile testing at ambient temperature |
| 2084 | Non-destructive testing—Eddy current testing on metal tubes |
| 2706 | Numerical values—Rounding and interpretation of limiting values |

AS/NZS

- | | |
|--------|---|
| 1050 | Method for the analysis of iron and steel |
| 1050.1 | Part 1: Sampling iron and steel for chemical analysis |

AS/NZS ISO

- | | |
|-----------|---|
| 9001 | Quality management systems—Requirements |
| 9004 | Quality management systems—Guidelines for performance improvements |
| ISO 17018 | Conformity assessment—Guidance on a third-party certification system for products |
| ISO 2566 | Steel—Conversion of elongation values |
| 2566-1 | Part 1: Carbon and low alloy steels |

3 DEFINITIONS

For the purpose of this Standard, the following definitions apply: