Australian Standard®

Hot-rolled spring steels

This Australian Standard® was prepared by Committee MT-001, Iron and Steel. It was approved on behalf of the Council of Standards Australia on 26 April 2007.
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The following are represented on Committee MT-001:

- Australasian Railway Association
- Australian Building Codes Board
- Australian Foundry Institute
- Bureau of Steel Manufacturers of Australia
- Materials Australia
- New Zealand Heavy Engineering Research Association

This Standard was issued in draft form for comment as DR 06607.

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 public comment period.

STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 1447—2007
Hot-rolled spring steels

RECONFIRMATION NOTICE

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.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

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

The following are represented on Technical Committee MT-001:

Australian Building Codes Board
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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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australian/Standard New Zealand Committee MT-001, Iron and Steel, to supersede AS 1447—1991, *Hot-rolled spring steels*.

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

The objective of this Standard is to specify the general technical delivery requirements for carbon steels and carbon-manganese steels in the hot-rolled spring steels, including the requirements for sampling and testing.

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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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for hot-rolled carbon, carbon-chromium, nickel-chromium-molybdenum and silicon-manganese spring steels which are in either the as-rolled, annealed or normalized condition. It specifies chemical composition and manufacturing tolerance requirements for all grades and end-quench hardenability requirements for hardenability grades. This Standard permits the addition of boron and micro-alloying elements for the achievement of special properties.

NOTES:

1 Advice and recommendations on information to be supplied by the purchaser at the time of enquiry and order are contained in the purchasing guidelines in Appendix A.

2 For a guide to a means of complying with the Standard refer to Appendix B.

1.2 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 system

1199.1 Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

1733 Methods for determination of grain size in metals

1770 Steel—Hardenability test by end quench (Jominy test)

2003 Carbon and low alloy steel—Measurement of decarburization

2062 Non-destructive testing—Penetrant testing of products and components

2084 Non-destructive testing—Eddy current testing of metal tubes

2338 Preferred dimensions of wrought metal products

2706 Numerical values—Rounding and interpretation of limiting values

AS/NZS

1050 Methods 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

HB 18.28 Conformity assessment—Guidance on a third-party certification system for products