

Australian Standard[®]

Motor vehicles—Light alloy road wheels



This Australian Standard® was prepared by Committee MT-003, Aluminium and Aluminium Alloys. It was approved on behalf of the Council of Standards Australia on 1 February 2008. This Standard was published on 6 March 2008.

The following are represented on Committee MT-003:

- Australian Aluminium Council
 - Australian Automotive Aftermarket Association
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Motor vehicles—Light alloy road wheels

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PREFACE

This Standard was prepared by the Australian members of Standards Australia/Standards New Zealand Committee MT-003, Aluminium and Aluminium Alloys, to supersede AS 1638—1991, *Motor vehicles—Light alloy road wheels*.

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

The objective of this revision is to reconfirm the test methods and requirements and introduce additional requirements on safety issues related to modifications of wheels and wheel damage. Advice on compliance with the Standard is included in an Appendix.

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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STANDARDS AUSTRALIA

Australian Standard
Motor vehicles—Light alloy road wheels**1 SCOPE**

This Standard specifies the minimum requirements for the type approval based on performance testing of light aluminium alloy and magnesium alloy road wheels for vehicles with a gross mass not exceeding 3.5 t. The wheels may be cast, wrought or of composite construction.

It applies to wheels which are designed for normal driving conditions, and does not purport to apply to wheels which will not fracture or fail under conditions such as may be experienced in an accident. It should be noted that wheels conforming to this Standard may fracture under conditions similar to those which produce severe buckling or failure in steel wheels.

This Standard does not specify the materials to be used in the manufacture of the wheels. Suitable alloy designations may be selected from AS 1874, for aluminium alloys, and EN 1753 for magnesium alloys.

NOTES:

- 1 This Standard does not apply to trailer wheels, caravan wheels and motorcycle wheels.
- 2 Wheels complying with this Standard are also required to comply with the requirements of relevant statutory authorities
- 3 For guidance on how to comply with this Standard refer to Appendix B.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS

- 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 limit (AQL) for lot-by-lot inspection

- 1874 Aluminium and aluminium alloys—Ingots and castings

AS ISO

- 1302 Geometrical product specification (GPS)—Indication of surface texture in technical product documentation

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

ISO

- 7141 Road vehicles—Light alloy wheels—Impact test

EN

- 1753 Magnesium and magnesium alloys—Magnesium alloys ingots and castings