



Powered industrial trucks

Part 1: General requirements



This Australian Standard® was prepared by Committee ME-026, Industrial Trucks. It was approved on behalf of the Council of Standards Australia on 26 May 2015. This Standard was published on 22 June 2015.

The following are represented on Committee ME-026:

- Australian Industrial Truck Association
 - Australian Industry Group
 - Construction and Mining Equipment Industry Group
 - Hire and Rental Industry Association of Australia
 - Safety Institute of Australia
 - WorkCover New South Wales
 - WorkSafe Victoria
-

This Standard was issued in draft form for comment as DR 100455.

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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Australian Standard[®]

Powered industrial trucks

Part 1: General requirements

Originated as part of AS B270—1968.
Previous edition AS 2359.1—1995.
Fourth edition 2015.
Reissued incorporating Amendment No. 1 (May 2017).

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Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76035 104 5

PREFACE

This Standard was prepared by the Standards Australia Committee ME-026, Industrial Trucks, to supersede AS 2359.1—1995, *Powered industrial trucks, Part 1: General requirements*.

This Standard incorporates Amendment No. 1 (May 2017). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

For the AS 2359 series of Standards, wherever practicable, the relevant International Standards have been adopted. However, Parts 1, 2 and 12 continue to be locally developed, in the absence of suitable International Standards.

This Standard is Part 1 of AS 2359, *Powered industrial trucks*, which currently comprises the following parts and those proposed for revision listed below:

AS

- 2359 Powered industrial trucks
- 2359.1 Part 1: General requirements (this Standard)
- 2359.2 Part 2: Operations
- 2359.5 Part 5: Symbols for operator controls and other displays
- 2359.6 Part 6: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks (ISO 3691-1:2011, MOD)
- 2359.9 Part 9: Overhead guards—Specification and testing (ISO 6055:2004, MOD)
- 2359.10 Part 10: Fork-lift trucks—Hook-on type fork arms—Vocabulary
- 2359.12 Part 12: Hazardous areas
- 2359.14 Part 14: Fork arms—Technical characteristics and testing
- 2359.15 Part 15: Fork-arm extensions and telescopic fork arms—Technical characteristics and strength requirements
- 2359.16 Part 16: Safety signs and hazard pictorials—General principles
- 2359.19 Part 19: Additional stability tests for industrial variable-reach trucks handling freight containers of length 6 m and above

ISO is in the process of developing a number of new International Standards in relation to industrial trucks, e.g. on stability, safety, etc. It is intended that the ISO Standards will be adopted as Australian Standards under a new series number. The designation of existing Australian adoptions currently in the AS 2359 series will be changed by amendment. It is anticipated that the number of AS 2359 Standards will be reduced to only those parts that are written specifically for Australian conditions.

A1 | The following new Australian Standards have been published, which relate to industrial trucks:

- AS 5143:2015 Fork-lift trucks—Hook-on type fork arms and fork arm carriages—Mounting dimensions
- AS 5144.5:2015 Industrial trucks—Safety requirements and verification
Part 5: Pedestrian-propelled trucks

This Standard does not cover industrial tractors with a drawbar pull greater than 50 kN.

Visibility and noise level requirements are receiving considerable attention from ISO, but at this stage are not covered by this Standard. Lighting requirements are not included, but adequate lighting may be required to suit requirements of statutory authorities or to allow operation in areas of low light intensity.

This Standard needs to be read in conjunction with AS 2359.6. AS 2359.6 is a modified adoption of ISO 3691-1:2011. When ISO 3691-1:2011 was being developed it became clear that not all requirements relating to each country could be included in the ISO 3691 series of Standards. Therefore, the revision of AS 2359.1 provides general requirements but any provisions that duplicate those in Part 6 have been removed from this Standard.

NOTE: The regional requirements from ISO/TS 3691.8:2012 for Australia have been included in this Standard to ensure that they are complied with.

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.

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

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STANDARDS AUSTRALIA

Australian Standard Powered industrial trucks

Part 1: General requirements

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out additional requirements not found in AS 2359.6 for the design, manufacture, marking and testing of self-propelled industrial trucks (hereafter referred to as 'trucks') and their attachments, as defined in AS 2359.7. Therefore, this Standard and AS 2359.6 need to be read in conjunction.

Stability testing is specified in Appendix A.

NOTES:

- 1 Guidance on the principles of stability is given in Appendix B.
- 2 The operation of powered industrial trucks is covered by AS 2359.2.

1.2 APPLICATION

The duties of designers, manufacturers, importers, suppliers, users and owners of plant, including powered trucks, are set out in legislative requirements. This Standard offers a way in which designers, manufacturers, importers, suppliers, users and owners of powered trucks can meet these duties. However, compliance with this Standard may not ensure compliance to such legislation and legislation takes precedence where any contradiction occurs.

Designers, manufacturers, importers, suppliers, users and owners of multipurpose equipment (e.g. telehandlers) are advised to consult the legislative requirements and determine their specific obligations. This Standard may be applied to multipurpose equipment designed to be used as a powered industrial truck in order to control the specific risks unique to its operation in this mode; however, it is recognized that the duties under the law may be discharged in other ways, including compliance with other more appropriate Standards.

NOTES:

- 1 Telehandlers, also known as 'rough terrain variable reach trucks', are covered by AS 1418.19.
- 2 Because of the range of designs of multipurpose equipment currently on the market it is not possible to provide more precise advice on the application of this Standard to such equipment that will be valid in all instances.
- 3 It is not intended that multipurpose equipment be required to simultaneously comply with all of the requirements of a range of Standards.

1.3 INNOVATION

It is not intended that this Standard impose unnecessary restrictions on design, manufacture, marking and testing of trucks, or on the development and use of new, improved or unusual methods and materials.