

Australian Standard™

Powered industrial trucks

**Part 15: Fork-arm extensions and
telescopic fork arms—Technical
characteristics and strength
requirements**



This Australian Standard was prepared by Committee ME-026, Industrial Trucks. It was approved on behalf of the Council of Standards Australia on 23 June 2005. This Standard was published on 4 August 2005.

The following are represented on Committee ME-026:

Australian Chamber of Commerce and Industry
Australian Council of Trade Unions
Australian Electrical and Electronic Manufacturers Association
Australian Industrial Truck Association
Australian Industry Group
Construction and Mining Equipment Association of Australia
Department of Consumer & Employment Protection, WorkSafe Division W.A.
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RECONFIRMATION

OF

AS 2359.15—2005

Powered industrial trucks

**Part 15: Fork-arm extensions and telescopic fork arms—Technical characteristics
and strength requirements**

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Technical Committee ME-026 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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NOTES

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-026, Industrial Trucks. It is identical with, and has been reproduced, from, ISO 13284:2005, *Fork-lift trucks—Fork-arm extensions and telescopic fork arms—Technical characteristics and strength requirements*.

This Standard is Part 15 of AS 2359, *Powered industrial trucks*, which is published in parts as follows:

- Part 1: General requirements
- Part 2: Operation
- Part 3: Counterbalanced fork-lift trucks—Stability tests
- Part 4: Reach and straddle fork-lift trucks—Stability tests
- Part 5: Symbols for operator controls and other displays
- Part 6: Safety Code
- Part 7: Terminology
- Part 8: Pallet stackers and high-lift platform trucks—Stability tests
- Part 9: High-lift rider trucks—Overhead guards—Specification and testing
- Part 10: Fork-lift trucks—Hook-on type fork arms—Vocabulary
- Part 11: Fork-lift trucks—Hook-on type fork arms and fork carriers—Mounting dimensions
- Part 12: Hazardous areas
- Part 13: Brake performance and component strength
- Part 14: Fork arms—Technical characteristics and testing
- Part 15: Fork arm extension and telescopic fork arms—Technical characteristics and strength requirements (this Standard)
- Part 16: Safety signs and hazard pictorials—General principles
- Part 17: Stability tests for rough terrain trucks
- Part 18: Stability tests for industrial variable-reach trucks
- Part 19: Additional stability tests for industrial variable-reach trucks handling freight containers of length 6 m and above

As this Standard is reproduced from an International Standard, the following applies:

- (a) *Terminology* The words ‘This Australian Standard’ should replace the words ‘This International Standard’ whenever they appear.
- (b) The words ‘Powered Industrial Trucks’ should replace the words ‘Fork-lift trucks’ whenever they appear.
- (c) *Decimal comma* The decimal point should replace the decimal comma wherever it appears.

References to international Standards should be replaced by references, where appropriate, to the following Australian Standards:

Reference to International Standard

ISO

- 3691 Powered industrial trucks—Safety code
- 5053 Powered industrial trucks—Terminology
- 2330 Fork-lift trucks—Fork arms—Technical characteristics and testing

Australian Standard

AS

- 2359 Powered industrial trucks
- 2359.6 Part 6: Safety code
- 2359.7 Part 7: Terminology
- 2359.14 Part 14: Fork-arms—Technical characteristics and testing

INTRODUCTION

This International Standard was developed in response to worldwide demand for specifications for fork-arm extensions and telescopic fork arms.

Fork-arm extensions are used as an economic means of extending the effective blade length of fork arms on fork-lift trucks. They are available with either a closed rectangular cross-section or an open inverted-channel cross-section.

Where possible, preference should be given to using a longer fork rather than an extension. If extensions have to be used, preference should be given to the closed cross-section rather than an open type of extension.

Telescopic fork arms replace standard fork arms and provide the truck operator with the means of adjusting the fork-arm blade length. They are available either as simple variable-length fork arms for handling loads of varying dimensions or, alternatively, for reaching out or retracting palletized loads in double-deep stacking and destacking operations.

AUSTRALIAN STANDARD

Powered industrial trucks

Part 15:

Fork-arm extensions and telescopic fork arms—Technical characteristics and strength requirements

1 Scope

This International Standard specifies technical characteristics and strength requirements for fork-arm extensions and telescopic fork arms for fork-lift trucks. It applies to fork-arm extensions and telescopic fork arms designed for use on stacking lift trucks, as defined in ISO 5053, having fork-arm carriers and, in the case of fork-arm extensions, hook-on fork arms conforming to ISO 2330.

This International Standard does not apply to integral transverse telescopic fork devices or scissor-action reach devices.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2330:2002, *Fork-lift trucks — Fork arms — Technical characteristics and testing*

ISO 3691, *Powered industrial trucks — Safety code*

ISO 5053, *Powered industrial trucks — Terminology*

3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

3.1

parent fork arm

fork arm having the rated capacity at the rated load centre distance, blade length and blade cross-section for which a fork-arm extension is specifically designed

3.2

test load

F_{EX} and F_T

applied load for verifying the strength of fork-arm extension and telescopic fork arms by physical testing or calculation

4 Symbols

b	Fork arm blade width (mm)
C	Rated capacity of each parent fork arm (kg)
C_E	Rated capacity of each fork-arm extension (kg)