

Australian Standard[®]

Cranes, hoists and winches

Part 19: Telescopic handlers

STANDARDS
Australia



This Australian Standard® was prepared by Committee ME-005, Cranes. It was approved on behalf of the Council of Standards Australia on 23 July 2007.
This Standard was published on 18 October 2007.

The following are represented on Committee ME-005:

- Association of Consulting Engineers Australia
- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Institute for Non-Destructive Testing
- Bureau of Steel Manufacturers of Australia
- Construction and Mining Equipment Industry Group
- Crane Industry Council of Australia
- Department for Administrative and Information Services (South Australia)
- Department of Consumer and Employment Protection, WorkSafe Division (WA)
- Department of Labour New Zealand
- Elevating Work Platform Association of Australia
- Engineers Australia
- Vehicle Loading Crane Interests
- Victorian WorkCover Authority
- WorkCover New South Wales

Additional Interests:

- Australian Industrial Truck Association
-

This Standard was issued in draft form for comment as DR 06379.

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.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard[®]

Cranes, hoists and winches

Part 19: Telescopic handlers

First published as AS 1418.19—2007.

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8414 3

PREFACE

This draft was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-005, Cranes.

The objective of this Standard is to provide requirements for self-propelled telescopic handlers that are intended to handle loads using different types of attachments.

In the preparation of this Standard, cognizance was taken of BS EN 1459:1999, *Safety of industrial trucks—Self-propelled variable reach trucks* and AS 1418.5—2002, *Mobile cranes*.

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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 REFERENCED DOCUMENTS	5
1.3 DEFINITIONS	6
1.4 NEW DESIGNS, INNOVATIONS AND DESIGN METHODS	8
1.5 DESIGNATION OF TELEHANDLER TYPE.....	9
SECTION 2 DESIGN	
2.1 BASIS OF DESIGN	11
2.2 LOADINGS.....	11
2.3 SECURITY.....	12
2.4 BRAKES	12
2.5 CONTROLS	12
2.6 POWER SYSTEMS AND ACCESSORIES	14
2.7 SYSTEMS FOR LIFTING, TILTING, REACHING AND STEERING	15
2.8 OPERATOR POSITION	18
2.9 STABILITY	19
2.10 OPERATOR PROTECTIVE DEVICES	19
2.11 INDICATING AND LIMITING DEVICES	19
2.12 VISIBILITY	22
2.13 ENVIRONMENTAL CONDITIONS	22
2.14 TESTING	24
SECTION 3 INFORMATION FOR USE	
3.1 GENERAL	27
3.2 SPECIFIC INFORMATION	27
3.3 MARKING	28
APPENDICES	
A TYPICAL HAZARDOUS	32
B STABILITY TESTS	35
C INDUSTRIAL TELEHANDLERS—STABILITY TESTS.....	36
D ROUGH TERRAIN TELEHANDLERS—STABILITY TESTS.....	42
E TELEHANDLERS OPERATING WITH OFFSET LOAD—OFFSET BY POWERED DEVICES—ADDITIONAL STABILITY TESTS.....	48
F TELEHANDLERS OPERATING WITH OFFSET LOAD—OFFSET DETERMINED BY THE UTILIZATION—ADDITIONAL STABILITY TESTS ...	52
G PROCEDURE FOR TESTING STEERING WHEEL KICK-BACK.....	56

STANDARDS AUSTRALIA

Australian Standard

Cranes, hoists and winches

Part 19: Telescopic handlers

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard applies to self-propelled non-slewing and slewing, not greater than 5° either side of the longitudinal axis, of seated rider-operated telescopic handlers (hereinafter referred to as ‘telehandlers’), as defined in Clause 1.3.31, intended to handle loads, including freely suspended loads, using one of the attachments defined in Clause 1.3.

NOTE: Attachments may be mounted directly on the lifting means or on an auxiliary mast fixed at the end of the lifting means.

Telescopic handlers with the ability to slew greater than 5° will have to comply with AS 1418.5 in addition to the requirements of this Standard (excluding the static stability testing procedures as defined in Clause 2.9 and Appendices B to F).

The use of the term ‘slew’ from hereon refers to those telehandlers that can slew up to five degrees, except where clearly stated otherwise.

In addition, all telescopic handlers intended to support work platforms will have to comply with AS 1418.10.

This Standard does not apply to industrial variable reach trucks (‘reach stackers’) designed to handle series 1 freight containers 2.5 m long with the dimensional and securing characteristics specified in ISO 568 and ISO 3874.

Telehandlers are also known by a variety of terms, such as ‘variable reach trucks’ and ‘multi-purpose handlers’.

Two types of telehandlers are covered in this Standard, as follows:

- (a) Telehandlers for operation on substantially firm smooth, level and prepared surfaces, known as ‘industrial telehandlers’.
- (b) Rough terrain telehandlers for operation on unimproved natural terrain and disturbed terrain areas.

Telehandlers covered by this Standard may be equipped with fork tynes for normal industrial duties, or attachments for specific applications such as earth-moving buckets and jibs and the like. Telehandlers may be equipped with stabilizer/outriggers, axle locking or lateral levelling devices.

For hazards occurring during construction, transportation, commissioning, decommissioning and disposal, reference should be made to ISO 12100-2.