

Australian Standard™

**Cranes, hoists and winches—Safe use**

**Part 3: Bridge, gantry, portal (including  
container cranes) and jib cranes**

This Australian Standard was prepared by Committee ME-005, Cranes. It was approved on behalf of the Council of Standards Australia on 18 January 2002 and published on 24 June 2002.

---

The following are represented on Committee ME-005:

Association of Consulting Engineers Australia  
Australian Chamber of Commerce and Industry  
Australian Elevator Association  
Australian Industry Group  
Australian Institute for Non-destructive Testing  
Bureau of Steel Manufacturers of Australia  
Construction and Mining Equipment Association of Australia  
Crane Industry Council of Australia  
Department of Administrative and Information Services (South Australia)  
Department of Industries and Business (NT)  
Department of Infrastructure, Energy and Resources (Tas)  
Institution of Engineers Australia  
State Chamber of Commerce  
University of New South Wales  
Victorian WorkCover Authority  
WorkCover New South Wales  
WorkSafe Western Australia

---

#### **Keeping Standards up-to-date**

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.com.au](mailto:mail@standards.com.au), or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

---

*This Standard was issued in draft form for comment as DR 98536.*

Australian Standard™

**Cranes, hoists and winches—Safe use**

**Part 3: Bridge, gantry, portal (including  
container cranes) and jib cranes**

First published as AS 2550.3—2002.

**COPYRIGHT**

© Standards Australia International

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 International Ltd  
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 4359 5

## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-005, Cranes. 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 Standard is intended for use in conjunction with AS 2550.1, *Cranes, hoists and winches—Safe use, Part 1: General requirements*.

The objective of this Standard is to provide acceptable requirements for the safe use of bridge, gantry, portal (including container cranes), jib and monorail cranes. ‘Safe use’ is intended to mean planning, selection, siting, erection and dismantling, operation, maintenance, inspection and repair of the crane.

Standards Australia uses the term ‘shall’ to indicate those requirements that have to be met in order to be in compliance with the objectives and intent of the Standard in question. Compliance with this Australian Standard is not required by legislation in any Australian jurisdiction, unless the Australian Standard has been specifically incorporated by an Act or regulation in the jurisdiction.

The Commonwealth, State and Territory governments may choose to incorporate this Australian Standard into their occupational health and safety law. The exact manner of incorporation will determine whether the whole document is incorporated or whether specific sections or provisions of this Standard are incorporated. The manner of incorporation will determine which of the Standard’s requirements (‘shall’ statements) have been made a legal requirement in a jurisdiction. As a general principle, where an Australian Standard is incorporated by a regulation, the legal status of the Standard’s requirements and recommendations is made clear by the incorporation provisions of the regulation.

Jurisdictions may also choose to incorporate this Australian Standard (either in whole or in part) in an Approved Code of Practice made under OH&S law. The purpose of an Approved Code of Practice is to provide practical guidance on how to meet the obligations arising from the enabling OH&S Act or regulations made under the Act.

Readers will need to refer to their jurisdiction’s Approved Codes of Practice to determine which parts of this Australian Standard (if any) have been incorporated into Codes of Practice and the manner of incorporation.

Published Standards in the series are the following:

### AS

2550	Cranes—Safe use
2550.1	Part 1: General requirements
2550.4	Part 4: Tower cranes
2550.5	Part 5: Mobile cranes
2550.6	Part 6: Guided storing and retrieving appliances
2550.7	Part 7: Builders’ hoists and associated equipment
2550.10	Part 10: Elevating work platforms
2550.13	Part 13: Building maintenance units
2550.15	Part 15: Concrete placing equipment
2550.16	Part 16: Mast climbing work platforms

### AS/NZS

2550.9	Part 9: Vehicle hoists
--------	------------------------

It is intended to publish the following part:

Special purpose appliances

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.

## CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	5
1.2 APPLICATION .....	5
1.3 REFERENCED DOCUMENTS.....	5
1.4 DEFINITIONS.....	6
1.5 INSTRUCTIONS.....	6
SECTION 2 PLANNING	
2.1 GENERAL.....	7
2.2 PLANNING.....	7
2.3 MATTERS TO BE CONSIDERED .....	7
SECTION 3 SELECTION.....	9
SECTION 4 SITING	
4.1 GENERAL.....	10
4.2 LOCATION.....	10
SECTION 5 ERECTION AND DISMANTLING	
5.1 GENERAL.....	11
5.2 RUNWAYS OR MONORAIL BEAMS.....	11
SECTION 6 OPERATION	
6.1 OPERATIONAL INSTRUCTIONS.....	12
6.2 MANAGEMENT OF OPERATION .....	12
6.3 OPERATION OF THE CRANE .....	13
SECTION 7 MAINTENANCE, INSPECTION AND REPAIR	
7.1 GENERAL.....	14
7.2 MAINTENANCE .....	14
7.3 INSPECTIONS .....	15
7.4 ASSESSMENT FOR SUITABILITY FOR CONTINUED SAFE USE .....	17
7.5 REPAIRS.....	17
7.6 RECORDS.....	18
APPENDICES	
A INSPECTION AND TESTING CERTIFICATE.....	19
B PARTS OF CRANE TO BE CHECKED WHEN ASSESSING A CRANE FOR SUITABILITY FOR INTENDED USE .....	27
C SAFE OPERATING PROCEDURES .....	31

## STANDARDS AUSTRALIA

### Australian Standard Cranes, hoists and winches—Safe use

#### Part 3: Bridge, gantry, portal (including container cranes) and jib cranes

## SECTION 1 SCOPE AND GENERAL

### 1.1 SCOPE

This Standard specifies the recommendations for the safe use of bridge, gantry, portal (including container cranes) and jib cranes. It also provides recommended means to appraise in situ cranes that do not have detailed records of their past use. It is complementary to AS 2550.1, but the requirements given herein take precedence.

### 1.2 APPLICATION

This Standard shall apply to the safe use of bridge, gantry, portal (including container cranes) and jib cranes as defined in AS 2549.

### 1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

#### AS

1418	Cranes (including hoists and winches)
1418.1	Part 1: General requirements
1418.2	Part 2: Serial hoists and winches
1418.3	Part 3: Bridge, gantry and portal cranes (including container cranes)
1418.14	Part 14: Requirements for cranes subject to arduous working conditions
1418.18	Part 18: Crane runways and monorails
2549	Cranes (including hoists and winches)—Glossary of terms
2550	Cranes—Safe use
2550.1	Part 1: General requirements

#### AS/NZS

3000	Electrical installations (known as the Australian/New Zealand Wiring Rules)
4360	Risk management

#### ISO

12482	Cranes—Condition monitoring
12482.1	Part 1: General

#### BS

7608	Code of practice for fatigue design and assessment of steel structures
7752	Lifting appliances—Controls—Layout and characteristics
7752.5	Part 5: Overhead travelling cranes and portal bridge cranes

#### NOHSC

1007	National Code of Practice for Management and Protection of Hearing at Work
2009	National Standard for Occupational Noise