

C R A N E S MOBILE, TOWER AND DERRICK— SELECTION AND OPERATION



STANDARDS ASSOCIATION OF AUSTRALIA

Incorporated by Royal Charter

This Australian standard was prepared by Committee ME/5, Cranes. It was approved on behalf of the Council of the Standards Association of Australia on 7 May 1982 and published on 19 July 1982.

The following interests were represented on the committee responsible for the preparation of this standard:

Aluminium Development Council

Association of Consulting Engineers, Australia

Australian Institute of Building

Bureau of Steel Manufacturers of Australia

Confederation of Australian Industry

Construction Equipment Importers and Manufacturers of Australia

Department of Construction

Department of Defence

Department of Industrial Affairs and Employment, South Australia

Department of Industrial Relations, N.S.W.

Department of Labour and Industry, Tasmania

Department of Labour and Industry, Victoria

Department of Labour and Industry, Western Australia

Department of Labour Relations, Queensland

Department of Mines and Energy, Northern Territory

Department of Productivity

Department of Public Works, N.S.W.

Department of the Capital Territory

Electricity Supply Association of Australia

Institute of Materials Handling

Maritime Services Board, N.S.W.

Metal Trades Industry Association of Australia

Metropolitan Water Sewerage and Drainage Board, N.S.W.

Mobile Crane Hirers Association of Victoria

Port of Melbourne Authority

Railways of Australia Committee

Telecom Australia

To keep abreast of progress in industry, Australian standards are subject to continuous review and are kept up-to-date by the issue of amendments or new editions as necessary. It is important therefore that standards users ensure that their standards are up-to-date. Full details of all SAA publications will be found in the Annual List of Australian Standards; these details are supplemented by listings in the SAA monthly journal 'The Australian Standard'. Information on the Annual List and 'The Australian Standard' may be obtained from any sales office of the Association, where details are also available of the current status of individual standards. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

This standard was issued in draft form for comment as DR 81226.

This is a free page sample. Access the full version online.

AUSTRALIAN STANDARD

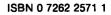
CRANES MOBILE, TOWER AND DERRICK— SELECTION AND OPERATION

AS 2550-1982

First published1982

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

SYDNEY



PREFACE

This standard was prepared by the Association's Committee on Cranes as part of the general revision and metrication of AS CB2—1960, SAA Crane and Hoist Code, which has been largely superseded by the various Parts of AS 1418, SAA Crane Code. This present standard incorporates Sections 22 and 23 of AS 1418, Part 1—1977 and material from BS:CP3010, Safe Use of Cranes (Mobile Cranes, Tower Cranes and Derrick Cranes). Acknowledgement is made of the assistance obtained from CP3010.

Preparation of this standard was prompted by the fact that cranes were being employed in an ever-widening variety of job applications and environmental conditions, together with the introduction of novel designs of cranes offering technical sophistication, increased capacities and new extremes of operating range.

The aims of the standard are therefore—

- (a) to describe the principal characteristics and applications of the various forms of cranes of the types most commonly used;
- (b) to draw attention to some of the more common hazards and potential dangers which may be encountered in their use; and
- (c) to specify general precautions to be taken and operational procedures to be followed.

A list of statutory authorities is given in Appendix D.

© Copyright -- STANDARDS ASSOCIATION OF AUSTRALIA 1982

Users of standards are reminded that copyright subsists in all SAA publications. No part of this publication may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing of the Standards Association of Australia.

·

•

CONTENTS

.

Page

SECTION	1. SCOPE AN	d Gene	ERAL									
1.1	Scope					••••	••••	••••		••••		4
1.2	Referenced D					••••	••••	••••		••••	••••	4
1.3	Definitions					••••	••••	••••	••••		••••	4
1.4	Selection		••••	••••		••••	••••	••••	, ••••	••••	••••	4
1.5	Operation		••••	· 			••••		••••		••••	4
SECTION 2. GENERAL REQUIREMENTS												
2.1	Scope of Sect	•										5
2.2	Selection of C											5
2.3	Crane											5
2.4	Crane Driver											5
2.5	Siting of Cran	-		-					•••••			5
2.6	Erection and								••••	••••		8
2.7 [·]	Precautions f	or Cran	es			••••		••••	••••	••••		8
2.8	Load Rating		••••			••••		••••	••••		••••	9
2.9	Operation an	d Contr	ol		••••				•••••			9
2.10							····.			••••		15
2.11	Hooks and H						••••	••••	••••	••••	••••	16
2.12	Maintenance		tion a	nd R	epair			••••	••••	••••		16
2.13	Fire Extingui	sher		••••	••••	••••	••••	••••	••••	••••	••••	16
SECTION	3. MOBILE C	RANES										
3.1	Scope of Sect											ŀ7
3.1	Types				····		••••	••••	••••	••••	••••	17
3.2	Selection				••••				••••	••••	••••	1.7
3.3	Siting				••••		••••				••••	17
3.5	Erection, Dis								••••		••••	17
3.6	Precautions		-						••••		••••	22
· 3.7	Load Rating	••••								•••••		22
3.8	Operation and				:							23
Section 4. Tower Cranes												
									•			
4.1	Scope of Sect							••••	••••	••••	••••	29
4.2 4.3	Types Crane Driver									••••	••••	29
4.5		•		•	•		•			••••	••••	34 34
4.4	Selection Siting				••••		••••	••••		••••	••••	34 34
4.5	Erection and				••••		••••	••••	••••	••••	••••	34
4.0 4.7	Precautions		unig	••••	••••	••••	••••	••••	••••	••••	••••	34
4.7	Load Rating	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••	37
4.8	Operation and	 d Contr	 ol		••••	••••	••••	••••	••••	••••	••••	38
	-			••••		••••	••••	••••	••••	••••	••••	50
SECTION 5. DERRICK CRANES												
5.1	Scope of Sect	ion		••••	••••	••••	••••	••••	••••	••••	••••	39
5.2	Types		••••	••••	••••	••••	••••	••••	••••	••••	••••	39
5.3	Selection	• ••••	••••	••••	••••	••••	••••	••••	••••	••••	•••• -	39
5.4	Siting			••••	••••	••••	••••	••••	••••	••••	••••	43
5.5	Erection and		-	••••	••••	••••		••••	••••	••••	••••	44
5.6	Precautions	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••	45
5.7	Load Rating	 d Comba		••••	••••	••••	••••	••••	••••	••••	••••	45
5.8	Operation and	a Contr	01	••••	••••	••••	••••	••••	••••	••••	••••	46
APPENDI	CES											
AS	Standards Rele	vantto	Crane	s		••••					••••	47
	Maintenance W											49
	Outrigger Safe I									-		50
СС	Julligger Sale i	Dearing	Cupu	ony o	1001	10						

•

•

Pa



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation