AS 2089—1993

Australian Standard®

Sheave blocks for lifting purposes

This Australian Standard was prepared by Committee ME/25, Lifting Tackle. It was approved on behalf of the Council of Standards Australia on 22 March 1993 and published on 14 June 1993.

The following interests are represented on Committee ME/25:

Australian Chamber of Commerce and Industry

Australian Chamber of Manufactures

Australian Forging Group

Australian Maritime Safety Authority

Department of Defence

Department of Employment, Industrial Relations and Training, Tas.

Department of Employment, Vocational Education, Training and Industrial Relations, Qld

Department of Industry, Technology and Commerce

Department of Occupational Health, Safety and Welfare, W.A.

Metal Trades Industry Association of Australia

Occupational Health & Safety Authority, Vic.

Work Health Authority, N.T.

WorkCover Authority, N.S.W.

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic 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 they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS 2089-1993

Australian Standard®

Sheave blocks for lifting purposes

First published as AS B247—1968. Revised and redesignated AS 2089—1977. Second edition 1993.

PUBLISHED BY STANDARDS AUSTRALIA (STANDARDS ASSOCIATION OF AUSTRALIA) 1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 8141 7

PREFACE

This Standard was prepared by the Standards Australia Committee on Lifting Tackle, to supersede AS 2089—1977, *Sheave blocks (including ships' cargo blocks) of maximum lift* 60 t.

This edition does not limit carrying capacity and includes a number of other changes, including additional definitions, references to working load limit (WLL), more details regarding safe working load (SWL), allowances for friction due to sheaves, and changes to the requirements for materials, dimensions of sheaves and surface finish.

CONTENTS

Dago

	1	usc
1	SCOPE	3
2	REFERENCED DOCUMENTS	3
3	DEFINITIONS	5
4	MATERIALS	9
5	DESIGN AND MANUFACTURE	13
6	MECHANICAL PROPERTIES	18
7	MARKING	19
8	TESTING OF MECHANICAL PROPERTIES	19
9	PROOF TESTING	20
API A	PENDICES INFORMATION THAT SHOULD BE SUPPLIED WITH ENQUIRIES AND	
	ORDERS	21
В		
С	CARE AND USE	23
D	APPLICATIONS OF SHIPS' CARGO BLOCKS	24
Е	NON-LIFTING APPLICATIONS USING STEEL WIRE ROPE	27
F	DETERMINATION OF SAFE WORKING LOAD	28
G	B REEVED SYSTEMS—ALLOWANCE FOR FRICTIONAL EFFECTS	31
Η	I DESIGN OF SHEAVES	32
Ι	CONDITIONS FOR APPLICATION OF TEST FORCES	34
J	MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	35

© Copyright – STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

3

STANDARDS AUSTRALIA

Australian Standard Sheave blocks for lifting purposes

1 SCOPE This Standard specifies requirements for general purpose sheave blocks for lifting purposes that meet the performance requirements of the M3 group classification of crane mechanisms as specified in AS 1418.1.

This Standard does not cover power-operated sheave blocks specifically for use with natural fibre ropes or synthetic filament ropes, or sheave blocks used for lightweight lifting in the building industry and for general materials handling (known as 'gin blocks').

NOTES:

- 1 Sheave blocks used for applications other than lifting may have sheaves that are smaller in diameter than those specified herein.
- 2 This Standard covers sheave blocks with any type of bearing (i.e. frictionless or friction) and with any type of operating means (i.e. power driven or manual).
- 3 Guidance on information that should be supplied with enquiries and orders is given in Appendix A.
- 4 Standards for components that are used in lifting systems are listed in Appendix B.
- 5 Guidance on care and use is given in Appendix C.
- 6 Guidance on applications of ships' cargo blocks is given in Appendix D.
- 7 Guidance on use for non-lifting applications is given in Appendix E.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1065 Non-destructive testing—Ultrasonic testing of carbon and low alloy steel forgings
- 1110 ISO metric hexagon precision bolts and screws
- 1111 ISO metric hexagon commercial bolts and screws
- 1112 ISO metric hexagon nuts, including thin nuts, slotted nuts and castle nuts
- 1171 Methods for magnetic particle testing of ferromagnetic products and components
- 1199 Sampling procedures and tables for inspection by attributes
- 1236 Split cotter pins (metric series)
- 1237 Flat metal washers for general engineering purposes (metric series)
- 1252 High strength steel bolts with associated nuts and washers for structural engineering
- 1285 Prevailing torque steel hexagon locknuts (ISO metric series)
- 1399 Guide to AS 1199—Sampling procedures and tables for inspection by attributes
- 1418 SAA Crane Code
- 1418.1 Part 1: General requirements
- 1421 ISO metric hexagon socket set screws
- 1427 ISO metric machine screws



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