

Australian Standard™

Short-link chain for lifting purposes



S t a n d a r d s Australia

This Australian Standard was prepared by Committee ME-025, Lifting Tackle. It was approved on behalf of the Council of Standards Australia on 22 June 2001 and published on 1 August 2001.

The following interests are represented on Committee ME-025:

Australian Chamber of Commerce and Industry
Australian Forging Group
Australian Industry Group
Australian Maritime Safety Authority
Crane Industry Council of Australia
Department of Defence
Department of Infrastructure, Energy and Resources (Tasmania)
Institute of Quarrying Australia
Institution of Engineers, Australia
National Association of Testing Authorities Australia
Victorian WorkCover Authority
WorkCover New South Wales

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 Standards may also be withdrawn.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 the 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 website at 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, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

Australian Standard™

Short-link chain for lifting purposes

Originated as AS 2321—1979.
Second edition 2001.

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 3999 7

PREFACE

This Standard was prepared by the Standards Australia Committee ME-025, Lifting Tackle, to supersede AS 2321—1979, *Short-link chain for lifting purposes (non-calibrated)*.

This edition includes the following changes from the previous edition:

- (a) Deletion of the term ‘statutory authority’.
- (b) Revision to the gauge lengths and methods of testing.
- (c) Revision to link tolerances and chain marking.
- (d) Deletion of information on instruments for measuring the diameter of chain material.

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>
1 SCOPE	3
2 REFERENCED DOCUMENTS	3
3 DEFINITIONS	3
4 MATERIAL	5
5 DESIGN AND MANUFACTURE	6
6 MECHANICAL PROPERTIES	9
7 MARKING	9
8 TESTING OF MECHANICAL PROPERTIES	9
9 PROOF TESTING	10

APPENDICES

A INFORMATION THAT SHOULD BE SUPPLIED WITH ENQUIRIES AND ORDERS	11
B CARE AND USE	12
C STANDARDS FOR COMPONENTS USED IN LIFTING SYSTEMS	14
D CHAIN FINISHES OTHER THAN SELF-COLOUR	15
E TEST FORCES AND CONDITIONS FOR THEIR APPLICATION	16
F MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	18

STANDARDS AUSTRALIA

Australian Standard Short-link chain for lifting purposes

1 SCOPE

This Standard specifies requirements for non-calibrated short-link chain for lifting purposes, manufactured from electrically welded round-steel short links.

NOTES:

- 1 Guidance on information that should be supplied with enquiries and orders is given in Appendix A.
- 2 Guidance on care and use of chain is given in Appendix B.
- 3 Standards for components that are used in lifting systems are listed in Appendix C.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- | | |
|--------|--|
| 1199 | Sampling procedures and tables for inspection by attributes |
| 1399 | Guide to AS 1199—Sampling procedures and tables for inspection by attributes |
| 1418 | Cranes (including hoists and winches) |
| 1418.1 | Part 1: General requirements |
| 1442 | Carbon steels and carbon-manganese steels—Hot-rolled bars and semifinished products |
| 1444 | Wrought alloy steels—Standard hardenability (H) series and hardened and tempered to designated mechanical properties |
| 1627 | Metal finishing—Preparation and pretreatment of surfaces |
| 1627.6 | Part 6: Chemical conversion treatment of metals |
| 1789 | Electroplated coatings—Zinc on iron or steel |
| 2193 | Methods for calibration and grading of force-measuring systems of testing machines |

AS/NZS

- | | |
|------|---|
| 4680 | Hot-dip galvanized (zinc) coatings on fabricated ferrous articles |
|------|---|

- | | |
|----------|--|
| ISO 9000 | Quality management systems — Fundamentals and vocabulary |
|----------|--|

- | | |
|----------|--|
| ISO 9004 | Quality management systems — Guidelines for performance improvements |
|----------|--|

- | | |
|----|--------------------------------|
| HP | [Standards Australia Handbook] |
|----|--------------------------------|

- | | |
|-------|--|
| 18.28 | Guidelines for third-party certification and accreditation |
|-------|--|

- | | |
|-------|---|
| 18.28 | Guide 28: General rules for a model third-party certification system for products |
|-------|---|

3 DEFINITIONS

For the purpose of this Standard, the definitions below apply:

3.1 Barrel

The straight side of a link, which may include the weld zone adjoining the curved ends.