



## Short-link chain for lifting purposes



This Australian Standard® was prepared by Committee ME-025, Lifting Tackle. It was approved on behalf of the Council of Standards Australia on 22 August 2014. This Standard was published on 15 September 2014.

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  - Australian Die Casting Association
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  - Australian Maritime Safety Authority
  - Crane Industry Council of Australia
  - Department of Defence (Australia)
  - Department of Trade and Investment (NSW)
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  - National Association of Testing Authorities Australia
  - WorkCover New South Wales
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This Standard was issued in draft form for comment as DR AS 2321.

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.

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Australian Standard<sup>®</sup>

## Short-link chain for lifting purposes

Originated as AS 2321—1979.  
Previous edition 2006.  
Fourth edition designated as AS 2321:2014.

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Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 74342 836 8

## PREFACE

This Standard was prepared by the Standards Australia Committee ME-025, Lifting Tackle, to supersede AS 2321—2006.

The objective of all lifting tackle standards is to provide manufacturers, users, regulatory and accrediting authorities and importers with a basis for identifying products which are safe and fit for their purpose. AS 2321 is a Standard for Grade L(3), Grade P(5), Grade T(8) and Grade V(10) short link chains for lifting purposes.

NOTE: Each chain grade is referred to by a letter or one of three numbers shown below:

- (a) L, 3, 30 or 300.
- (b) P, 5, 50 or 500.
- (c) T, 8, 80 or 800.
- (d) V, 10, 100 or 1000.

This edition includes the following changes from the previous edition:

- (a) Revision to link tolerances.
- (b) Revision to chain marking.
- (c) Addition of Grade V(10, 100, 1000).
- (d) Provision for a bend test.
- (e) Delete Grades M and S.
- (f) Clarification of elongation requirements.
- (g) Specification of impact testing for specific Grade V materials.
- (h) Cognisance of ISO 3076, *Round steel short link chains for general lifting purposes—Medium tolerance slings for chain slings—Grade 8*.
- (i) Includes the basis for calculation of dimensions and tolerances of Grade T chain.
- (j) Includes the basis for working load limit and test requirements for Grades T and V chain.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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.

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STANDARDS AUSTRALIA

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**Australian Standard**

**Short-link chain for lifting purposes**

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## 1 SCOPE

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

### NOTES:

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

## 2 INNOVATION

It is not intended that this Standard should impose any unnecessary restriction on the use of new or unusual methods that meet its intent.

## 3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

NOTE: Documents that contain further information on this topic are listed in the Bibliography in Appendix H.

### AS

- |        |                                                                                                                       |
|--------|-----------------------------------------------------------------------------------------------------------------------|
| 1418   | Cranes, hoists and winches                                                                                            |
| 1418.1 | Part 1: General requirements                                                                                          |
| 1442   | Carbon steels and carbon-manganese steels—Hot-rolled bars and semi-finished products                                  |
| 1444   | Wrought alloy steels—Standard, hardenability (H) series and hardened and tempered to designated mechanical properties |
| 1544   | Methods for impact tests on metals                                                                                    |
| 1544.2 | Part 2: Charpy V-notch                                                                                                |
| 1627   | Metal finishing—Preparation and pretreatment of surfaces                                                              |
| 1627.6 | Part 6: Chemical conversion treatment of metals                                                                       |
| 1733   | Methods for the determination of grain size in metals                                                                 |
| 1789   | Electroplated zinc (electrogalvanized) coatings on ferrous articles (batch process)                                   |
| 2193   | Calibration and classification of force-measuring systems                                                             |

### AS/NZS

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

### ISO

- |      |                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------|
| 3076 | Round steel short link chains for general lifting purposes—Medium tolerance sling chains for chain slings—Grade 8 |
|------|-------------------------------------------------------------------------------------------------------------------|