

Australian Standard™

Rigging screws and turnbuckles



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 31 August 2001 and published on 12 October 2001.

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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)
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Australian Standard™

Rigging screws and turnbuckles

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-025, Lifting Tackle, to supersede AS 2319—1984.

The objective of this Standard is to promote the safe use of rigging screws and turnbuckles.

This edition includes the following changes from the superseded edition:

- (a) Redefining the term 'working load limited' and deleting the term 'safe working load', to align with international practices.
- (b) Including sizes for rigging screws with nominal sizes up to 100 mm.
- (c) Including typical pin types that comply with this Standard.
- (d) Defining the effective length to be the distance between the bearing surfaces, for both open types and closed types.

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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FOREWORD

Rigging screws and turnbuckles are used in lifting, tensioning and staying systems to make adjustments to the length of the systems. They are used with guys for masts, towers and other tall structures where relatively small forces are applied or small adjustments are required.

The same quality grading system is used by other Australian Standards covering components in lifting, tensioning and staying systems. It allows for positive identification and easy selection, and relates to the mechanical properties of the finished product and not simply to the strength of the material.

STANDARDS AUSTRALIA

Australian Standard Rigging screws and turnbuckles

1 SCOPE

This Standard specifies requirements for forged rigging screws and forged turnbuckles used in tension. It does not apply to rigging screws or turnbuckles that are used in compression.

NOTES:

- 1 Rigging screws and turnbuckles of sizes smaller than 10 mm are not included, as they can be easily overloaded by excessive tensioning.
- 2 Guidance on information that should be supplied with enquiries and orders is given in Appendix A.
- 3 Guidance on care and use is given in Appendix B.
- 4 Standards for components used in lifting systems are listed in Appendix C.

2 REFERENCED DOCUMENTS

The following standards are referred to in this Standard:

AS

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| 1065 | Non-destructive testing—Ultrasonic testing of carbon and low alloy steel forgings |
| 1171 | Non-destructive testing—Magnetic particle testing of ferromagnetic products, components and structures |
| 1199 | Sampling procedures and tables for inspection by attributes |
| 1214 | Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series) |
| 1399 | Guide to AS 1199—Sampling procedures and tables for inspection by attributes |
| 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 |
| 1627 | Metal finishing—Preparation and pretreatment of surfaces |
| 1627.6 | Part 6: Chemical conversion treatment of metals |
| 1654 | ISO system of limits and fits |
| 1654.2 | Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts |
| 1721 | General purpose metric screw threads |
| 1789 | Electroplated coatings—Zinc on iron or steel |
| 1816 | Metallic materials—Brinell hardness test |
| 2193 | Methods for calibration and grading of force-measuring systems of testing machines |

AS/NZS

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| 4680 | Hot-dipped galvanized (zinc) coatings on fabricated ferrous articles |
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| ISO 9000 | Quality management systems—Fundamentals and vocabulary |
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| ISO 9004 | Quality management systems—Guidelines for performance improvements |
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