AS 3775.1:2014
(Incorporating Amendment Nos 1 and 2)

AS 3775.1:2014

Australian STANDARD

Chain slings for lifting purposes—Grade T(80) and V(100)

Part 1: Product specification

STANDARDS Australia

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- Australian Die Casting Association
- Australian Industry Group
- Australian Maritime Safety Authority
- Crane Industry Council of Australia
- Department of Defence
- Department of Trade and Investment, NSW
- Engineers Australia
- Institute of Quarrying Australia
- National Association of Testing Authorities Australia
- WorkCover New South Wales
- Worksafe Victoria

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Part 1: Product specification

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-025, Lifting Tackle, to supersede AS 3775.1—2004, *Chain slings—Grade T*, Part 1: *Product specification*.

This Standard incorporates Amendment No. 1 (August 2015) and Amendment No. 2 (November 2015). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide requirements for the manufacture, marking and testing of Grade T and V chain slings.

The objective of all lifting tackle Standards is to provide users, regulatory and accrediting authorities and importers with a basis for identifying products which are safe and fit for their purpose. This Standard applies to Grade T(80) and Grade V(100) chain slings for lifting purposes.

This edition includes the following changes from the previous edition:

(a) Inclusion of Grade V(100) chain slings.

(b) Upgrading the requirements in the definition of 'competent person'.

(c) Alignment of definitions with AS 2321:2014, *Short-link chain for lifting purposes*.

(d) Additional clarification and explanation on the correct assembly of slings using connecting links.

A1 (e) Application of inline shortening devices are included.

(f) Maximum included angles reduced to 60° for two-leg reeved and two-leg basket slings.

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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FOREWORD

In any lifting, tensioning, or staying system, the working load limit of each component has to take account of the conditions of use and be compatible with any loads inherent in, and applied to, the system, and each component should readily connect with each adjacent component. Therefore, it is important that chain slings be quickly and positively identified in service for size, lifting capacity and quality grade.

The quality grading system in this Standard provides for the variations in mechanical properties of the finished product. Each grade is identified by a letter in the series T(80) or V(100) which allows for positive identification and easy selection.

STANDARDS AUSTRALIA

Australian Standard
Chain slings for lifting purposes—Grade T(80) and V(100)

Part 1: Product specification

1 SCOPE

This Standard specifies requirements for chain slings using Grade T(80) and V(100) chain complying with AS 2321.

NOTES:

1 AS 2321 specifies chain in terms of the international quality grade designation system. The ISO system also permits Grade T to be designated as Grade 80 and Grade V as Grade 100.

2 Guidance on information that should be supplied with enquiries and orders is given in Appendix A.

3 Requirements and recommendations for the care and use of Grade T and Grade V chain slings are set out in AS 3775.2.

4 Cautions relating to the use and application of chain slings are given in Appendix B.

5 Standards for components that are used in lifting systems are listed in Appendix C.

6 The Standard is prepared for general purpose conditions of use, equivalent to a group classification of crane mechanisms of M3 as specified in AS 1418.1.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

NOTE: Documents that provide additional information are listed in the Bibliography in Appendix F.

AS

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

1418 Cranes, hoists and winches

1418.1 Part 1: General requirements

1816 Metallic materials—Brinell hardness test

1816.1 Method 1: Test method (ISO 6506-1:2005,MOD)

2193 Calibration and classification of force-measuring systems

2321 Short-link chain for lifting purposes

3775 Chain slings for lifting purposes—Grade T(80) and V(100)

3775.1 Part 1: Product specifications

3775.2 Part 2: Care and use

3776 Lifting components for Grade T(80) and V(100) chain slings

3978 Non-destructive testing—Visual inspection of metal products and components

AS/NZS ISO

31000 Risk management—Principles and guidelines