

Australian/New Zealand Standard™

**Motor vehicles—Cargo restraint
systems—Transport chain and
components**



Standards Australia



STANDARDS
NEW ZEALAND
Te Kaitiaki Takekōwhiri

AS/NZS 4344:2001

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Australian Automobile Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Commercial Vehicle Industry Association of Australia
Consumers Federation of Australia
Federation of Automotive Products Manufacturers, Australia
Land Transport Safety Authority, New Zealand
Roads and Traffic Authority of New South Wales

Additional interests participating in the preparation of this Standard:

Chain manufacturers and suppliers
Vehicle transport industry

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Australian/New Zealand Standard™

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-048, Restraint Systems in Vehicles to supersede AS/NZS 4344:1995, *Cargo restraint systems—Transport chain and components*.

The objective of the Standard is to ensure that chains and associated components used in the transport industry for cargo restraint will have the strength and performance required to suit their application. Transport chains and associated components are not to be used for lifting or towing operations.

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.

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FOREWORD

In any tensioning, staying or restraining system, the working load of each component must 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 components of tensioning, staying or restraining systems be quickly and positively identified in service for size, capacity and if applicable, quality grade.

Where applicable, the quality grading system used in this Standard is based on the system incorporated in other Australian/New Zealand Standards covering components in lifting, tensioning, staying and restraining systems. This is intended to promote positive identification and easy selection because it relates to the mechanical properties of the finished product and not simply to the strength of the material. In some countries lashing capacity (LC) may be referred to as 'rated assembly strength' (RAS) and it is normally expressed in kilograms (kg) for ease of understanding in use rather than kilograms force (kgf).

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SECTION 1 SCOPE AND GENERAL REQUIREMENTS

1.1 SCOPE

This Standard specifies the requirements for chain and associated components used in the transport industry for developing cargo restraining systems and sets out (in Appendix A) a method for determining the strength of transport chain and its components.

NOTE: Guidance on information to be supplied with enquiries and orders is given in Appendix B and the means for demonstrating compliance with this Standard are given in Appendix C. Appendix D gives advice on the use of chain load restraint systems. Appendix E provides guidelines on care and maintenance of chain load restraint systems.

1.2 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
1171	Non-destructive testing—Magnetic particle testing of ferromagnetic products, components and structures
1199	Sampling procedures and tables for inspection by attributes
1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes
1816	Metallic materials—Brinell hardness test
2193	Methods for calibration and grading of force-measuring systems of testing machines

AS/NZS ISO

9000	Quality management systems—Fundamentals and vocabulary
9004	Quality management systems—Guidelines for performance improvements
HB 18	Guidelines for third-party certification and accreditation
HB 18.44	Guide 44—General rules for ISO or IEC international third-party certification schemes for products (SNZ HB 18.44)

1.3 DEFINITIONS

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

1.3.1 Acceptable quality level (AQL)

A quality level which corresponds to a relatively high probability of acceptance. It is the maximum percent defective or the maximum number of defects per one hundred items that, for purposes of sampling inspection, can be considered satisfactory as a process average.