

Australian Standard™

Round steel wire for ropes



This Australian Standard was prepared by Committee MT-001, Steel Wire. It was approved on behalf of the Council of Standards Australia on 30 April 2001 and published on 29 June 2001.

The following interests are represented on Committee MT-001:

- Australasian Railway Association
- Australian Building Codes Board
- Australian Foundry Institute
- Australian Industry Group
- Bureau of Steel Manufacturers of Australia
- Institute of Materials Engineering, Australasia

Additional interests participating in the preparation of this Standard:

- Steel wire manufacturers
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STANDARDS AUSTRALIA

RECONFIRMATION
OF
AS 1394—2001
Round steel wire for ropes

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NOTES

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MT-001, Iron and Steel, to update the requirements of AS 1394—1984, *Round steel wire for ropes*.

During this revision, cognizance was taken of the International Standard ISO 2232:1990, *Round drawn wire for general purpose non-alloy steel wire ropes and for large diameter steel wire ropes — Specifications*.

The reason that ISO 2232 was not endorsed is because it only applies to a limited number of wire grades and does not cover zinc/aluminium-alloy coatings.

This Standard is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

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

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An informative appendix is only for information and guidance.

CONTENTS

	<i>Page</i>
1 SCOPE.....	3
2 REFERENCED DOCUMENTS.....	3
3 DEFINITIONS.....	4
4 DESIGNATION.....	4
5 MANUFACTURE.....	5
6 REQUIREMENTS OF THE WIRE.....	5
7 TESTING.....	7
8 MARKING.....	8
9 ROUNDING OF TEST RESULT VALUES.....	14

APPENDICES

A PURCHASING GUIDELINES.....	15
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD.....	17

STANDARDS AUSTRALIA

Australian Standard Round steel wire for ropes

1 SCOPE

This Standard specifies requirements for cold-drawn, carbon steel wire of round cross-section in diameters 0.20 mm and over, intended for the manufacture of rope and strand.

The Standard covers wire supplied in the bright (black) condition, drawn metallic coated condition (drawn after coating) or finally metallic coated condition (coated as a final operation).

The metallic coating may be applied by either the hot-dip process or an electrolytic (electrodeposition) process.

NOTES:

- 1 A supplementary non-metallic coating may be applied to the metallic coating by agreement between manufacturer and purchaser.
- 2 Advice and recommendations on information to be supplied by the purchaser at the time of enquiry and/or order are contained in Appendix A.
- 3 Means for demonstrating compliance with this Standard are given in Appendix B.

This Standard does not cover wires removed from manufactured ropes, or stranded tendons for prestressed concrete (refer to AS 1311).

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- | | |
|---------------|--|
| 1199 | Sampling procedures and tables for inspection by attributes |
| 1311 | Steel tendons for prestressed concrete—7-wire stress-relieved steel strand for tendons in prestressed concrete |
| 1391 | Methods for tensile testing of metals |
| 1399 | Guide to AS 1199—Sampling procedures and tables for inspection by attributes |
| 1442 | Carbon steels and carbon-manganese steels—Hot-rolled bars and semifinished products |
| 2505 | Methods for bend and related testing of metals |
| 2505.1 | Part 4: Wire |
| 2505.5 | Part 5: Torsion and wrapping tests on wire |
| 2700 | Numerical values—Rounding and interpretation of limiting values |
| 3942 | Quality control—Variables charts—Guide |
| AS/NZS | |
| 4534 | Zinc and zinc/aluminium-alloy coatings on steel wire |
| ISO 9000 | Quality management systems—Fundamentals and vocabulary |