

Under Revision See DR5075
Reconfirmed - Sept 1983

AS 2076-1977
UDC 621.86.065

SUPERSEDED BY AS 2076-1996

Australian Standard 2076-1977

WIRE ROPE GRIPS



STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter



THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Associated Chambers of Manufactures of Australia
Australasian Steamship Owners Federation
Australian Chamber of Commerce
Bureau of Steel Manufacturers of Australia
Department of Defence
Department of Labour Relations and Consumer Affairs, Qld
Department of Northern Australia
Department of Productivity
Department of the Capital Territory
Department of Transport
Departments of Labour and Industry
Electricity Supply Association of Australia
Master Builders Association of N.S.W.
Metal Trades Industry Association of Australia
Railways of Australia Committee

This standard, prepared by Committee ME/25, Lifting Tackle, was approved on behalf of the Council of the Standards Association of Australia on 7 July 1977, and was published on 1 November 1977.

To keep abreast of progress in industry, Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

This standard was issued in draft form for public review as DR 76030.

AUSTRALIAN STANDARD SPECIFICATION

WIRE ROPE GRIPS

AS 2076—1977

First published (as AS B290) 1971
Revised and issued as AS 2076 1977

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

ISBN 0 7262 1285 7



PREFACE

This standard was prepared by the Association's Committee on Lifting Tackle as the metrication and revision of AS B290-1971, Bulldog Grips, which it accordingly supersedes. The opportunity was taken to alter the title to one which is more descriptive of the function of the grip. The standard applies to grips for use with wire ropes of diameters from 8 to 40 mm. Cognizance was taken of BS 462, Bulldog Grips, and acknowledgement is made of the assistance received therefrom.

When properly applied, the grips afford a simple mechanical means of securing the end of a wire rope. They are also useful for securing the ends of temporary ropes and ropes which might need shortening, but they should not be used for temporarily securing ropes which are to be later lengthened from the gripped end. Furthermore, they are not intended for the permanent fastening of ropes which are subject to high dynamic loading.

The proportions and dimensions of the grips are based on wide acceptance of the configuration, and conform to the best practice. Certain dimensions of the bridge are not specified so that design may vary within the limits specified in the leading dimensions. Generally, the grooves in the bridges are scored to suit a round rope of six strands with right-hand lay.

Specifications for grey cast iron have been omitted because it is considered that this material is unsuitable for the bridge of a wire rope grip.

Appendices cover the care and use of wire rope grips, the method of their application to wire ropes, information for ordering and enquiry, and finishes.

This standard may require reference to the following standards:

- AS 1112 ISO Metric Hexagon Nuts, Including Thin Nuts, Slotted Nuts and Castle Nuts
- AS 1442 Hot-rolled Carbon Steels and Carbon-Manganese Steels (Bars and Semi-finished Products)
- AS 1627 Code of Practice for Preparation and Pretreatment of Metal Surfaces Prior to Protective Coating
Part 6—Phosphate Treatment of Iron and Steel Surfaces*
- AS 1650 Galvanized Coatings on Ferrous Metals
- AS 1721 General Purpose Metric Screw Threads
- AS 1789 Electroplated Coatings of Zinc on Iron and Steel
- AS 1790 Electroplated Coatings of Cadmium on Iron and Steel
- AS 1831 Spheroidal or Nodular Graphite Iron Castings
- AS 1832 Malleable Iron Castings
- AS 2074 Steel Castings for General Engineering Purposes

*AS CK9, Part VI redesignated.

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CONTENTS

	<i>Page</i>
SPECIFICATION	
1 Scope	4
2 Definitions	4
3 Materials	4
4 Manufacture	5
5 Nominal Size	5
6 Dimensions and Tolerance	5
7 Marking	5
APPENDICES	
A Care and Use of Wire Rope Grips	8
B Method of Applying Wire Rope Grips to Wire Rope	9
C Information to be Supplied with Enquiry and Order	10
D Finishes for Wire Rope Grips Other than Self-colour	11

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard Specification for WIRE ROPE GRIPS

1 SCOPE. This specification applies to self-coloured wire rope grips for use with steel wire ropes having diameters ranging from 8 to 40 mm. Materials, dimensions, manufacture, and marking of the grips are specified.

NOTE: For wire rope grips other than self-coloured refer to Appendix D.

2 DEFINITIONS. For the purpose of this specification, the following definitions apply.

Shall and should—'shall' is taken to be mandatory; 'should' is taken to be advisory.

Statutory Authority—an Authority having statutory powers to control the design, manufacture and use of components and fittings for wire rope terminations in the State or Territory within the Commonwealth of Australia in which the components or fittings are used.

Approved and approval—approved by, or the approval of, the Statutory Authority concerned.

3 MATERIALS.

3.1 Bridge.

3.1.1 Specifications. The bridge of the wire-rope grip shall be forged from steel, or cast from carbon steel, spheroidal or nodular graphite cast iron or malleable iron materials, as specified in the following Australian standards, or from other approved materials:

AS 1442 Hot-rolled Carbon Steels and Carbon-Manganese Steels
(Bars and Semi-finished Products)

- Grade S3 or Grade S1021

AS 1831 Spheroidal or Nodular Graphite Iron Castings

- Grades 370-230-17, 400-250-12 or 500-320-7

AS 1832 Malleable Iron Castings

- Whiteheart malleable, Grade 340-3 or 410-4

- Blackheart malleable, Grade 340-12

- Pearlitic malleable, Grade 440-7 or 510-7

AS 2074 Steel Castings for General Engineering Purposes

- Grade C3.

3.1.2 Forged bridge. If the bridge is forged it shall, after forging, be allowed to cool in still air to a temperature below the critical range. It shall then be normalized at a temperature between 890°C and 930°C.