SUPERSEDED BY:

As 1353.2-1997

Under Relation See DR96095

AS 1353.2—1990

Australian Standard®

Flat synthetic-webbing slings

Part 2: Care and use



DD



This Australian Standard was prepared by Committee ME/25, Lifting tackle. It was approved on behalf of the Council of Standards Australia on 15 February 1990 and published on 4 June 1990.

The following interests are represented on Committee ME/25:

ACT Administration

Australian Chamber of Manufactures

Confederation of Australian Industry

Department of Defence

Department of Industrial Affairs, Qld

Department of Industrial Relations and Employment, N.S.W.

Department of Industry, Technology and Commerce

Department of Labour, Vic.

Department of Labour and Industry, Tas.

Department of Occupational Health, Safety and Welfare, W.A.

Department of Transport and Communications

Electricity Supply Association of Australia

Metal Trades Industry Association of Australia

Work Health Authority, N.T.

This Standard was issued in draft form for comment as DR 89049.

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up-to-date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australian Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS 1353.2-1990

Australian Standard®

Flat synthetic-webbing slings

Part 2: Care and use

First published in part as AS 1353-1974. Revised and redesignated AS 1353.2-1990.

PUBLISHED BY STANDARDS AUSTRALIA (STANDARDS ASSOCIATION OF AUSTRALIA) STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY NSW ISBN 0 7262 6188 2

PREFACE

This Standard was prepared by the Standards Australia Committee on Lifting Tackle, to supersede Appendix B of AS 1353–1974, Synthetic-webbing flat slings.

This Standard is written in mandatory terms, so that it can be applied by Statutory Authorities and included as a contract of employment condition by owners and users of flat synthetic-webbing slings. It is one of a series of Standards for components that are used in lifting systems. Standards for other components are listed below.

AS

- 1138 Thimbles for use with wire rope or fibre (natural or synthetic) rope
- 1353 Flat synthetic-webbing slings
- 1353.1 Part I: Product specification
- 1380 Fibre-rope slings (of natural or synthetic rope)
- 1438 Wire-coil flat slings
- 1504 Fibre rope—Three-strand, hawser laid
- 1666 Wire-rope slings
- 1752 Fibre rope—Eight-strand plaited
- 2076 Wire rope grips
- 2089 Sheave blocks (including ships' cargo blocks) of maximum lift 60 t
- 2317 Collared eyebolts
- 2318 Swivels for hoists
- 2319 Rigging screws and turnbuckles
- 2321 Short-link chain for lifting purposes (non-calibrated)
- 2740 Wedge-type sockets
- 2741 Shackles
- 2759 Steel wire rope—Application guide
- 2841 Galvanized steel wire strand
- 3569 Steel wire ropes
- 3585 End fittings for flat-webbing slings
- 3775 Chain slings—Grade T
- 3776 Lifting components for Grade T chain slings
- 3777 Shank hooks and large-eye hooks-Maximum 25 t
- B291 Lifting rings and links

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the Head Office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

		Page
1	SCOPE	4
2	APPLICATION	4
3	INNOVATION	4
4	REFERENCED DOCUMENTS	4
5	DEFINITIONS	4
6	SELECTION	4
7	STORAGE	5
8	USE	5
9	SAFE WORKING LOAD (SWL)	6
10	TYPES OF DAMAGE	8
11	INSPECTION	10

STANDARDS AUSTRALIA

4

Australian Standard Flat synthetic-webbing slings

Part 2: Care and use

1 SCOPE. This Standard specifies practices for the care and use of flat synthetic-webbing slings, but does not consider repairs to slings.

NOTES:

- 1. The cause of accidents involving flat synthetic-webbing slings often includes some degree of human influence. This Standard requires the slings to comply with AS 1353.1, and places a responsibility on the user of the slings to have adequate knowledge, skill, and sense of responsibility about their use and to use them at all times in a sensible and responsible manner and within their performance capabilities.
- 2. Statutory authorities may have requirements additional to those in this Standard applying to the use of flat synthetic-webbing slings.

2 APPLICATION. This Standard is for application by responsible and competent persons and organizations. It does not have legal authority in its own right, but may acquire legal standing in any of the following ways:

(a) Adoption by a Statutory Authority.

(b) Reference to compliance with the Standard as a contract of employment condition.

3 INNOVATION. It is not intended that the Standard should impose any unnecessary restriction on the use of new or unusual methods that are as safe as those set out herein.

4 REFERENCED DOCUMENTS. The following documents are referred to in this Standard: AS

1353 Flat synthetic-webbing slings

1353.1 Part I: Product specification

1418 SAA Crane Code

1418.1 Part 1: General requirements

3585 End fittings for flat-webbing slings

5 DEFINITIONS. For the purpose of this Standard, the definitions given in AS 1353.1 and those below apply.

5.1 Competent person—a person having practical and theoretical knowledge and relevant experience, such as will enable that person to detect and evaluate any defects and any weaknesses that may affect the intended performance of the equipment.

5.2 Shall—indicates that a statement is mandatory.

5.3 Should—indicates a recommendation.

5.4 Statutory Authority—an authority with statutory powers to control the use of flat synthetic-webbing slings.

5.5 Working load.

5.5.1 Working load limit (WLL)—the maximum load that may be applied to the sling, in tension uniformly distributed across its full width, under general conditions of use.

5.5.2 Safe working load (SWL)—the maximum load that may be applied to the sling under the particular conditions of use (see Clause 9).

6 SELECTION.

6.1 Product specification. Flat synthetic-webbing slings shall comply with AS 1353.1.

6.2 Material. The sling shall be resistant to any degrading effects from the environment, such as moisture, microbiological attack, ultraviolet light, heat, and surface abrasion.

The sling should be designed to minimize any ingress of harmful particles. This is normally achieved by using a suitable tight weaving, by using a protective sleeve, by heat setting the webbing, or by applying a protective coating.

Also, sling materials should have adequate resistance to any chemicals, or sunlight to which the sling may be subjected. A combination of heat with an acid or alkali will accelerate any deterioration, which will reduce its service life.