

Australian Standard™

Railway track material

Part 1: Steel rails

This Australian Standard was prepared by Committee CE-002, Railway Track Materials. It was approved on behalf of the Council of Standards Australia on 14 June 2002 and published on 1 August 2002.

The following are represented on Committee CE-002:

Australasian Railway Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Bureau of Steel Manufactures of Australia
Rail Track Association Australia

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

AS 1085.1—2002

Australian Standard™

Railway track material

Part 1: Steel rails

Originated as AS E1-1925T and AS 1085.11—1985.
Previous edition AS 1085.1—2000.
Sixth edition 2002.

COPYRIGHT

© Standards Australia International

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 4619 5

PREFACE

This Standard was prepared by the Standards Australia Committee CE-002, Railway Track Materials, to supersede AS 1085.1—2000, *Railway permanent way material*, Part 1: *Steel rails*.

The objective of this Standard is to provide purchasers and suppliers, including owners, operators, designers and manufacturers of railway rail with requirements for as-rolled and hardened steel rails, made from continuously cast blooms for railway purposes.

This Standard is Part 1 of the AS 1085 series (*Railway track material*) comprised of the following parts:

- Part 1: Steel rails
- Part 2: Fishplates
- Part 3: Sleeper plates
- Part 4: Fishbolts and nuts
- Part 7: Spring washers
- Part 8: Dogspikes
- Part 10: Rail anchors
- Part 12: Insulated joint assemblies
- Part 13: Spring fastening spikes for sleeper plates
- Part 14: Prestressed concrete sleepers
- Part 15: Aluminothermic rail welding
- Part 17: Steel sleepers

New parts also under development are Part 18: *Screw spikes and threaded inserts*, Part 19: *Resilient fastening assemblies* and Part 20: *Welding of steel rail*.

Of interest to users of this series are the following:

AS 3818.2, *Timber—Heavy structural products—Visually graded*, Part 2: *Railway track timbers*

AS 2758.7, *Aggregates and rock for engineering purposes*, Part 7: *Railway ballast*

Changes to the previous edition are as follows:

- (a) Change of title of the AS 1085 series (previously *Railway permanent way material*).
- (b) Referenced documents list has been revised.
- (c) Reference to the surface hardness test in Clause 9.1.1.
- (d) Amendments to dimensions in Figures D1 and D4.
- (e) Changes to the tolerances for 68 kg rail.
- (f) Column 6 of Table E3 noted as minimum values.
- (g) The most recent version of the informative Appendix 'Means of demonstrating compliance with this Standard' has been included.

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.

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

CONTENTS

	<i>Page</i>
1 SCOPE	4
2 PURPOSE AND CONTEXT OF USE	4
3 REFERENCED DOCUMENTS	4
4 DEFINITIONS	5
5 ROUNDING OF NUMBERS	5
6 DESIGNATION	5
7 TRACK SYSTEM COMPATIBILITY	6
8 SERVICE LIFE	6
9 MATERIAL INTEGRITY	6
10 SUITABILITY FOR CONNECTION	8
11 SUITABILITY FOR MAINTENANCE	8
12 HANDLING	8
13 MARKING	9

APPENDICES

A	INFORMATION TO BE SUPPLIED BY THE PURCHASER	11
B	MEANS OF DEMONSTRATING COMPLIANCE WITH THIS STANDARD	12
C	RESIDUAL STRESSES	14
D	TRACK SYSTEM COMPATIBILITY	22
E	MATERIAL PROPERTIES	33
F	MATERIAL INTEGRITY	35

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-