AS 1085.21:2014

Railway track material

Part 21: Turnouts, switches and crossings

This Australian Standard® was prepared by Committee CE-002, Railway Track Materials. It was approved on behalf of the Council of Standards Australia on 13 June 2014.
This Standard was published on 27 June 2014.

The following are represented on Committee CE-002:

- Australasian Railway Association
- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Monash University
- Permanent Way Institute
- Rail Track Association Australia
- Railway Technical Society of Australasia

Additional Interests:

- Austrak
- Australian Rail Track Corporation
- Brookfield Rail
- Department of Transport Victoria
- John Holland
- Martinus Rail
- Pacific Rail Engineering
- Pandrol Australia
- Queensland Rail
- Railcorp
- Rail Industry Safety and Standards Board
- Romberg Rail Australia
- Voestalpine VAE Railway Systems
- Vossloh Cogifer Australia

This Standard was issued in draft form for comment as DR AS 1085.21.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that 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Standards may also be withdrawn.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 that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Railway track material

Part 21: Turnouts, switches and crossings

First published as AS 1085.21:2014.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 74342 788 0

PREFACE

This Standard was prepared by the Standards Australia Committee CE-002, Railway Track Materials.

The objective of this Standard is to provide information and requirements for the design and manufacture of turnouts, switches and crossings and their components.

This Standard does not cover the use of existing or re-used materials. Users should satisfy themselves that such materials are satisfactory for the application intended.

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 are deemed to be requirements of this Standard.

Notes to the text contain information and guidance and are not an integral part of the Standard.

CONTENTS

Page

Page

STANDARDS AUSTRALIA

Australian Standard
Railway track material

Part 21: Turnouts, switches and crossings

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the design and manufacture of turnouts, switches and crossings and their components.

NOTE: Purchasing and usage guidelines are given in Appendix A, including information to be supplied by Purchasers and Suppliers.

1.2 CONTEXT AND PURPOSE OF USE

1.2.1 Function

Turnout switches and crossings are vital track components that allow and control the safe diversion of rail vehicles from one track to another or to cross other tracks.

1.2.2 Action

Turnouts, switches, crossings and their components are subject to effects resulting from the following actions:

(a) Passage of rolling stock (including effects of vertical, lateral and longitudinal forces, vibration, acceleration and deceleration).

(b) Maintenance operations.

(c) Exposure to the elements.

(d) Electrical potential, if present.

These actions may result in fatigue, wear, corrosion and material degradation.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS
1085 Railway track material
1085.1 Part 1: Steel rails
1085.2 Part 2: Fishplates
1085.3 Part 3: Sleeper plates
1085.4 Part 4: Fishbolts and nuts
1085.12 Part 12: Insulated joint assemblies
1085.14 Part 14: Prestressed concrete sleepers
1085.17 Part 17: Steel sleepers
1085.19 Part 19: Resilient fastening assemblies

1442 Carbon steels and carbon-manganese steels—Hot rolled bars and semi-finished products

1816 Metallic materials