



Railway track material

Part 21: Turnouts, switches and crossings

STANDARDS
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- Monash University
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Australian Standard[®]

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Part 21: Turnouts, switches and crossings

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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

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	5
1.2 CONTEXT AND PURPOSE OF USE.....	5
1.3 REFERENCED DOCUMENTS.....	5
SECTION 2 TERMINOLOGY AND DRAWINGS	
2.1 GENERAL.....	7
2.2 GENERAL TERMS.....	7
SECTION 3 TURNOUT DESIGN	
3.1 GENERAL.....	27
3.2 DESIGN PARAMETERS.....	27
3.3 TANGENTIAL.....	32
3.4 SECANT.....	36
SECTION 4 MANUFACTURE	
4.1 MATERIALS, TESTS AND STANDARDS.....	39
4.2 RAILS, FISHPLATES AND SLEEPER PLATES.....	39
4.3 CASTINGS.....	40
4.4 MANGANESE STEEL CASTINGS.....	40
4.5 FASTENING.....	44
4.6 FLAME CUTTING.....	45
4.7 WELDING.....	45
4.8 HARDENING.....	45
4.9 RAIL DRILLING.....	46
4.10 SAWING AND MACHINING.....	46
4.11 RIVETING.....	46
4.12 FITTING.....	46
4.13 FORGINGS.....	46
4.14 CAST IRON BLOCKS.....	46
4.15 CAST STEEL BLOCKS.....	47
4.16 SPECIAL STEEL BOLT FERRULES.....	47
4.17 NYLON FISHPLATES.....	47
4.18 EPOXY GLUING OF CROSSINGS.....	47
4.19 SWITCH ASSEMBLY.....	47
4.20 CROSSING ASSEMBLY.....	48
4.21 TOLERANCES.....	48
4.22 STAMPING.....	48
4.23 MATCH MARKING.....	51
4.24 PAINTING AND COATING.....	51
4.25 FINAL ASSEMBLY AND INSPECTION.....	51
4.26 PREPARATION FOR DISPATCH.....	51
SECTION 5 INTERFACES	
5.1 GENERAL.....	52
5.2 OPERATING EQUIPMENT.....	52
5.3 INSULATION.....	52
5.4 INSTALLATION.....	53
5.5 TRACK AND STRUCTURE INTERFACES.....	53

SECTION 6 PRODUCT ACCEPTANCE

6.1	GENERAL.....	54
6.2	TYPE APPROVAL.....	54
6.3	CERTIFICATE OF COMPLIANCE.....	54
6.4	TRIAL ASSEMBLY.....	54
6.5	ASSEMBLY MAINTENANCE MANUALS AND DRAWINGS	54
APPENDIX A INFORMATION TO BE SUPPLIED BY THE PURCHASER.....		55

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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