



## Wheels

**RiSSB**  
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

Rolling Stock Standard



This Australian Standard® AS 7514 Wheels was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

ARTC	Downer EDI	John Holland Group
Queensland Rail	Pacific National	Rail Corp
V/Line	Trans Adelaide	Amsted Rail
Gemco Rail	KiwiRail	Metro Trains
Aurizon	Varley Group	

This Standard was approved by the Development Group and the Rolling Stock Standing Committee in November, 2018. On November 26, 2018 the RISSB Board approved the Standard for release.

This Standard was issued for public consultation and was independently validated before being approved.

Development of the Standard was undertaken in accordance with RISSB's accredited process. As part of the approval process, the Standing Committee verified that proper process was followed in developing the Standard.

On June 22, 2021, the RISSB Board approved the Amended Standard AS 7514:2018 / Amdt 1:2021 for release.

RISSB wishes to acknowledge the positive contribution of subject matter experts in the development of this Standard. Their efforts ranged from membership of the Development Group through to individuals providing comment on a draft of the Standard during the open review.

I commend this Standard to the Australasian rail industry as it represents industry good practice and has been developed through a rigorous process.



**Deb Spring**  
Exec. Chair / CEO  
Rail Industry Safety and Standards Board

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# AS 7514:2018 / Amdt 1:2021

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## Document control

### Document identification

Designation / Title
AS 7514:2018 Wheels

### Document history

Publication Version	Effective Date	Reason for and Extent of Change(s)
AS 7514:2018 / Amdt 1	June 22, 2021	Addition of Appendix A13,B9. Grammatical corrections. (See note below *)
AS 7514:2018	November 26, 2018	First published
AS 7514:2010 (Parts 1,2,3,4)	18/03/2010	Aged review - superseded by 2018 edition

\* AS/RISSB 7514 : 2018 /Amdt 1

This amendment provides information previously published in AS 7514:2010 for WA electric railcar profiles. The inclusion of these profiles enables PTA of WA to directly reference AS 7514:2018.

Grammatical and referencing errors identified by RISSBs change request process have been addressed.

### Approval

Name	Date
Rail Industry Safety and Standards Board	22/06/2021

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## 1 Introduction

### 1.1 Purpose

This Standard describes requirements for rolling stock wheels.

The main purpose of the requirements are to reduce the risk of derailment arising from wheel failure or damage to infrastructure caused by wheel defects.

### 1.2 Scope

This document covers the design, construction, and maintenance of rolling stock wheels. It applies to:

- (a) new locomotive, freight, passenger, and infrastructure rolling stock wheels going into service after the date of publication;
- (b) existing locomotive, freight, passenger, and infrastructure rollingstock wheels going into service after modification.

Operation of rolling stock is not covered.

Rolling stock used on light rail, cane railway, and monorail networks are not covered.

Requirements for the assembly of wheels onto wheelsets and geometric tolerances of wheels fitted on wheelsets are not covered. These are covered in AS 7517.

Infrastructure maintenance rolling stock used for transportation of goods and material is treated as freight rolling stock.

### 1.3 Compliance

There are two types of control contained within Australian Standards developed by RISSB:

- (a) Requirements.
- (b) Recommendations.

**Requirements** – it is mandatory to follow all requirements to claim full compliance with the Standard.

Requirements are identified within the text by the term 'shall'.

**Recommendations** – do not mention or exclude other possibilities but do offer the one that is preferred.

Recommendations are identified within the text by the term 'should'.

Recommendations recognise that there could be limitations to the universal application of the control, i.e. the identified control cannot be applied or other controls can be appropriate / better.

For compliance purposes, where a recommended control is not applied as written in the standard it could be incumbent on the adopter of the standard to demonstrate their actual method of controlling the risk as part of their WHS or Rail Safety National Law obligations. Similarly, it could also be incumbent on an adopter of the standard to demonstrate their method of controlling the risk to contracting entities, or interfacing organisations where the risk may be shared.

Controls in RISSB standards address known railway hazards as included in an appendix.