

RISSB

RAIL INDUSTRY SAFETY AND STANDARDS BOARD

STANDARDS

AS 7502

Road Rail Vehicles



**Australian
STANDARD**

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The Rolling Stock Standing Committee verified that RISSB's accredited process was followed in developing the product, before the RISSB Board approved the document for publication.

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 comments 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.



Alan Fedda
Chief Executive Officer
Rail Industry Safety and Standards Board

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Approval

Name	Date
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Preface

This document was prepared by the Road Rail Vehicles Development Group, overseen by the RISSB Rolling Stock Standing Committee.

Objective

The objective of this document is to set the core requirements for the safe design, construction, testing, maintenance, decommissioning and modifications of road rail vehicles and to ensure compatibility with rail networks.

This document is intended to complement the rolling stock compliance certification process outlined in AS 7501.

The document has been significantly amended from the previous version with major changes throughout the document. It is recommended a thorough comprehensive review is undertaken for any users of the current version that will be applying this new revision of AS 7502.

Compliance

There are four types of provisions contained within Australian Standards developed by RISSB:

- (a) Requirements.
- (b) Recommendations.
- (c) Permissions.
- (d) Constraints.

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 recognize that there could be limitations to the universal application of the control, i.e. the identified control is not able to be applied or other controls are more appropriate or better.

Permissions – conveys consent by providing an allowable option. Permissions are identified within the text by the term ‘may’.

Constraints – provided by an external source such as legislation. Constraints are identified within the text by the term ‘must’.

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.

RISSB Standards address known hazards within the railway industry. Hazards, and clauses within this Standard that address those hazards, are listed in Appendix B.

Appendices in RISSB Standards may be designated either “normative” or “informative”. A “normative” appendix is an integral part of a Standard and compliance with it is a requirement, whereas an “informative” appendix is only for information and guidance.

Commentary

Commentary *C Preface*

This document includes a commentary on some of the clauses. The commentary directly follows the relevant clause, is designated by 'C' preceding the clause number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the document.

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Section 1 Scope and general

1.1 Scope

This document applies to all road rail vehicles (RRVs).

The following items are not covered in this document:

- (a) Network registration of RRVs by RIMs.
- (b) Operation of RRVs with respect to network safe working rules and route standards.
- (c) RRVs operating on cane railways.
- (d) Remotely controlled RRVs.
- (e) Specialist shunt vehicles that have a minimal off rail capability.

Commentary C1.1

For clarity:

- An RRV that conforms to this document will not be rail capable if the rail guidance system (RGE) is removed.
- An RRV which once the ground operating equipment (e.g. road wheels) is removed resulting in a rail only bound vehicle, is not conformant with the intent of this document.
- A specialist shunt vehicle is a vehicle that operates primarily on rail moving other rolling stock (e.g. in yards and maintenance facilities) with limited off rail capability (i.e., only intended for minor off tracking to relocate vehicle or clear from a rail line).

1.2 Normative references

There are two specific sets of normative references for RRVs. The first set of references relate to all RRVs; the second relates to only those vehicles that are also required to operate on public roads and therefore must meet and/or have a legally approved exemption to the ADR requirements.

1.2.1 Normative standards applicable to all RRV units:

- AS 1210, *Pressure vessels*
- AS 1319, *Safety signs for the occupational environment*
- AS 1418, *Cranes, hoists and winches*
- AS 2074, *Cast steel specifications*
- AS 2444, *Portable fire extinguishers and fire blankets - Selection and location*
- AS 2671, *Hydraulic fluid power – General rules and safety requirements for systems and their components*
- AS 2729, *Roller bearings – Dynamic load ratings and rating life*
- AS 3788, *Pressure equipment in-service inspection*
- AS 3990, *Mechanical equipment - steelwork*
- AS 4100, *Steel structures*
- AS 7479, *Track Maintenance and Road Rail Vehicles – Collision Avoidance and Proximity Warning*
- AS 7486, *Railway energy storage - Rolling stock onboard electrical energy storage*
- AS 7501, *Rolling Stock Compliance Certification*