

AS 7702:2023



Rail Equipment Type Approval

RiSSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

Infrastructure Standard



This Australian Standard® AS 7702 Rail Equipment Type Approval was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

Sigtech	Mott MacDonald	Yarra Trams
Ozzytech	RTBU	ARTC
MTM	TfNSW	CPB
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The Standard was approved by the Development Group and the Train Control Standing Committee in June, 2023. On June 21, 2023 the RISSB Board approved the Standard for release.

This standard was issued for public consultation and was independently reviewed 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.

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.



Damien White
Chief Executive Officer
Rail Industry Safety and Standards Board

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This Standard was prepared by the Rail Industry Safety and Standards Board (RISSB) Development Group AS 7702 Rail Equipment Type Approval. Membership of this Development Group consisted of representatives from the organisations listed on the inside cover of this document. This Standard supersedes AS 7702:2014

Objective

The objective of this standard is to provide a common type approval process nationally for the benefit of RTOs, suppliers, designers and manufacturers.

It is intended to provide a process for evaluating new or modified railway products that are intended to be applied throughout the railway industry supply chain. It also supports a consistent approach for the harmonisation and the management of new and modified railway products. This includes a risk-based evaluation to ensure the product is safe so far as is reasonably practicable for the rail network.

The standard provides information around mutual recognition (Product Information Pack and Product Approval Pack) to reduce the cost and effort of the type approval process but does not cover the Product Selection Process.

Compliance

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

1. Requirements.
2. Recommendations.
3. Permissions.
4. 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 A

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1 Scope and general

1.1 Scope

This Standard specifies the evaluation of new or modified products for use on Australasian railway network infrastructure and defines:

- (a) the assessment criteria;
- (b) the information required;
- (c) the submission format; and
- (d) the approval outcome and supporting information.

This Standard details the process requirements of appropriate type approval assessment and the issuing of the type approval certification.

This Standard is intended to be applied by RTOs to regulate the use of railway products on their network.

This Standard is applied for new or modified products and is not intended to be retrospectively applied.

Rolling Stock, its associated equipment, and the on-track plant are excluded from the scope of this Standard.

Heritage Railways are excluded from this Standard unless there is an interface with a non-Heritage Railway.

This Standard excludes new or modified products in the following applications:

- (e) The product is not covered by RTO specific requirements and is certified to comply with a relevant national or international standard.
- (f) The product in its proposed application does not have the potential to adversely affect railway operations or safety.
- (g) The product is raw material, quarry products or an engineering structure.

The final determination of whether any item requires type approval shall be made by the RTO. The RTOs remain responsible for ensuring that any risks introduced by new products are controlled so far as is reasonably practicable (SFAIRP).

Type approval is a risk-based process that efficiently allows the RTO to accept new or modified products for use on its infrastructure in the RTO's network.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document:

- (a) IEC 62278:2002 Railway applications – Specification and demonstration of reliability, availability, maintainability and safety (RAMS).
- (b) AS/NZS ISO 31000:2018 Risk Management – Guidelines.

NOTE: Documents for informative purposes are listed in a Bibliography at the back of the Standard.