RISSB Bites Road Rail Vehicles



Road rail vehicles (RRV) are vehicles fitted with retractable rail guidance wheels that are capable of running on both road and rail. RRV, also called "High-rail vehicles", are often standard road vehicles that have a pair of flanged rail wheels on the front and rear. Generally, the vehicle accesses the rail via a level crossing, lowers the rail wheels onto the rails which will guide the vehicle without the need to steer, and is propelled by the road wheels that are in contact with the rails. High-rail equipment is fitted to inspection, personnel carrying vehicles and some track construction and maintenance machines.



Road rail vehicles can be classified into 3 main types, depending on their braking and traction arrangement, as follows:



Type 1 - Self Powered Rail Wheels

Braking and traction is provided exclusively through the rail wheels.



Type 2 - Friction Drive Braking and traction is provided indirectly from the road wheels to the rail wheels.



Type 3 -Direct Drive Braking and traction is provided with at least one pair of road wheels remaining in direct contact with the rail when in rail mode.

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It is possible that some road rail vehicles may fall into two or more classification types. Typically, the difference in classification type may be between travel and work modes.

Registration, accreditation, compliance and risk management of RRV designs, construction, inspection, maintenance and modifications will need to be undertaken and comply with federal, national, state or territory legislation and regulations. RRV's have been placed on ONRSR's national priority list and are classified as rolling stock under Rail Safety National Law (RSNL).

Information regarding requirements for the design, manufacture and modification of road rail vehicles can also be accessed via RISSB's Australian Standards: AS 7501- Rolling Stock Compliance, and AS 7502 – Road Rail Vehicles.

Information relating to reducing risk associated with the operation of RRV is available in RISSB Guideline – Operating Road Rail Vehicles.



About RISSB

We develop and maintain the Australasian Rail Industry Standards, Rules, Codes of Practice and Guidelines. Our vision is to be the trusted leader in the rail safety co regulatory environment, providing products and services that enhance safety and efficiency.

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Learn More

If you want to know more, visit the RISSB website, or email info@rissb.com.au

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