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Translation

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Passenger coaches - General requirements for running gear with dual gauge wheelsets for railways with 1 435 mm and 1 520 mm gauges

Voitures - Exigences générales applicables aux essieux à écartement variable pour les réseaux à écartement de 1 435 mm et de 1 520 mm

Reisezugwagen - Allgemeine Anforderungen für Laufwerke mit Spurwechselradsätzen für die Eisenbahnen der Spurweiten 1 435 mm und 1 520 mm



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Summary

General regulations

These technical requirements apply to passenger coaches being built and those that are being modernised by fitting a specific type of bogie. Passenger coaches which have bogies with dual gauge wheelsets are designed to run on the services between railways with gauges of 1 435 mm and 1 520 mm without a change of bogie and must meet the requirements of the *UIC/OSJD Leaflets*.

Approval of passenger coaches which have bogies with dual gauge wheelsets is regulated by bilateral or multilateral agreements between the railways.

1 - General requirements on bogies

1.1 - Bogies for passenger coaches with dual gauge wheelsets (with the system of automatic changing of the distance between the wheels of each wheelset on the railways with a gauge of 1 435/ 1 520 mm) shall be so designed that the passenger coaches can run at a speed of 200 km/h while meeting all the safety and running stability requirements.

○ **1.2 -** The bogies of passenger coaches with dual gauge wheelsets shall not exceed the kinematic loading gauge specified in *505-1, Appendix A and C* (see Bibliography - page 12).

○ **1.3 -** The strength conditions for the bogie frames, their assemblies and components must meet the requirements of *UIC Leaflet 515-4* and *OSJD-Leaflet 520* (see Bibliography - page 12).

○ **1.4 -** The axle bearing bushes shall be protected against high electric currents. In order that current does not flow through the axlebox bushes of one wheelset of each bogie, the axle box bushes shall be insulated and at least one axlebox bush shall be shorted by a protective contact. The other axlebox bearing bushes shall be fitted with a protective resistance as specified in *UIC Leaflet 533* (see Bibliography - page 12).

○ **1.5 -** Requirements for the bogie frame connections to the underframe with the dual gauge wheelsets.

1.5.1 - It is recommended that the strength of frame connection pieces of bogies with dual gauge wheelsets meet the strength conditions specified in *UIC Leaflet 515-4* and *OSJD-Leaflet 520*. Otherwise the strength of the components shall be demonstrated by suitable strength tests.

1.5.2 - The wheelset connection pieces of bogies fitted with dual gauge wheelsets shall enable the wheelset to be lifted together with the bogie without either the staff or the bogie being in danger.

1.6 - The noise level produced by the operation of bogies fitted with dual gauge wheelsets shall not exceed the noise level specified in the restrictions of the national legal regulations and international agreements.

○ **1.7 -** The bogies for passenger coaches with dual gauge wheelsets which are used on 1 520 mm gauge railways shall be suitable for the temperatures of the regions in which they operate.

○ **1.8 -** The total weight of a passenger coach on bogies with dual gauge wheelsets shall not exceed the specified axle load.

○ **1.9 -** Bogies with dual gauge wheelsets shall be marked as specified in Appendix B - page 10.

2 - Use of rolled solid wheels

Bogies with dual gauge wheelsets can be fitted with rolled/forged solid wheels with a rolling circle diameter of 920 - 840 mm.