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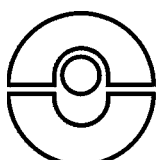
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6th edition, February 2001

Translation

Standard wagons - Ordinary bogie wagons - Characteristics

*Wagons unifiés - Wagons à bogies d'usage courant - Caractéristiques
Einheitsgüterwagen - Drehgestellgüterwagen der Regelbauart - Merkmale*



*Union Internationale des Chemins de fer
Internationaler Eisenbahnverband
International Union of Railways*





Leaflet to be classified in Sections :

IV - Operating

V - Transport stock

Application :

With effect from 1st January 1979 for obligatory provisions (for wagons to be built) except:

- point 1.3 (1.7.91)
- points 1.4 and 1.6 (3rd paragraph) (1.1.96)
- point 1.7 (2nd paragraph) (1.7.93)
- point 3.2.1 (5th and 6th lines) (1.7.89)
- points 4.1, 4.2, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.7, 4.3.8, 4.3.9, 4.3.9.1, 4.3.9.2, 4.4 (1.7.91)
- points 4.1.1, 4.1.2, 4.2.1, 4.2.2.1, 4.2.2.2, 4.2.2.3, 4.2.2.4, 4.3.9.1, 4.3.9.2 (1.7.93)

All members of the International Union of Railways

Record of update :

6th edition, February 2001

5th edition of 1.1.79 retyped in FrameMaker incorporating 10 amendements

The person responsible for this leaflet is named in the UIC Code



Warning

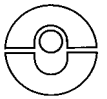
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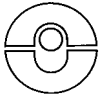
Printed by the International Union of Railways (UIC)
16, rue Jean Rey 75015 Paris - France, February 2001
Dépôt Légal February 2001

ISBN 2-7461-0274-9 (French version)
ISBN 2-7461-0275-7 (German version)
ISBN 2-7461-0276-5 (English version)



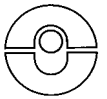
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Summary

Wagons with standard characteristics are easier for customers to use and facilitate railway operations. The wagons of UIC member railways, except those built to meet special needs, are purchased in accordance with the standard characteristics described in this leaflet.



1 - General

- **1.1.** - In order to facilitate the operation of services and the use of wagons by customers, UIC member railways shall undertake to abide by the wagon design standardisation characteristics contained in this leaflet, except in the case of very special requirements.

1.2. - It is recommended that:

- the types of wagons described in this leaflet which are standardised be constructed in accordance with the series of standard drawings managed by ERRI, and
- to improve aerodynamics, the solutions presented in ERRI report B 12/RP 54 be used where economically viable.

A list of standardised and partially standardised wagons as well as all standardised subassemblies and component parts is given in ERRI document DG4.

- **1.3.** - The interchangeable parts listed in *Leaflet 570* shall be used for the construction of wagons.

- **1.4. - Wagons must meet the following operating requirements:**

1.4.1. - Wagons with a 20 tonne axle-load

Wagon strength and running stability must be such that they can be worked at 100 km/h with the maximum load permitted on lines for 20 tonnes per axle (lines in category C). This load is generally distributed over the full length of the wagon;

The braking equipment must allow the wagons to be worked under S running conditions with a 20 tonne axle-load.

NB : Type 1 and 2 covered wagons are the subject of additional provisions (see point 2.4.1 below).

The following wagons defined by this leaflet are suitable for an axle-load of 20 tonnes:

- covered wagons, types 1 and 2,
- open high-sided wagons, type 1,
- flat wagons, types 1 and 2.

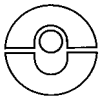
1.4.2. - Wagons with a 22,5 tonne axle-load

Wagon strength and stability must be such that they can be worked at 100 km/h with the maximum load permitted on lines for 22,5 tonnes per axle (lines in category D). This load is generally distributed over the full length of the wagon.

The braking equipment must allow the wagons to be worked under S running conditions with a 22,5 tonne axle-load.

The following wagons defined by this leaflet are suitable for an axle-load of 22,5 tonnes:

- open high-sided wagons, type 2,



- flat wagons, types 1 and 2.

○ **1.5.** - Wagons shall be built:

- with or without crossing facility,
- with or without screw brake,

in accordance with the conditions laid down in *Leaflet 535-3*.

○ **1.6.** - The maximum wagon tare shown in this leaflet is that of wagons fitted with air brakes and:

- in the case of wagons with superstructure, with a crossing gangway complying with the provisions of *Leaflet 535-2* and a screw brake which can be operated from this gangway;
- in the case of wagons without superstructure, with crossing steps complying with the provisions of *Leaflet 535-2* and a screw brake which can be operated from the ground.

The minimum tare (not specified in this leaflet) results from the application of the provisions of *Leaflet 530-2*, irrespective of whether the wagon is fitted with a crossing gangway and screw brake or not.

○ **1.7.** - The length of the underframe (between the buffer fixing planes) laid down in this leaflet refers to wagons without crossing gangway.

In all cases, the length of the underframe must have a positive tolerance (in compliance with the national standard in question) after manufacture.

○ **1.8.** - The uniformly distributed loads shown in this leaflet must be placed symmetrically in relation to the longitudinal and transverse centre-lines of the wagon and take up at least 2,000 m of the floor width.

Loads resting on two supports must be placed symmetrically in relation to the longitudinal and transverse centre-lines of the wagon and the supports must take up at least 2,000 m of the width and 2,000 m of the length of the floor.

NB : For open high-sided wagon (Eas-Eaos-Eanos) and flat wagons (Rns/Rens/Rmmns/Remmns) this width should be 1,200 m.

○ **1.9.** - Permanent additional loading gear may only be fitted in the wagons with the approval of the UIC, which shall determine whether or not the presence of such gear alters the standard characteristics of the wagon. The application to the UIC shall be accompanied by:

1. a detailed description;
2. presentation of a prototype.

○ **1.10.** - It must be possible to lift the wagons by either end when loaded, the lifting device being placed under the headstock at right angles with the side buffers.

○ **1.11.** - Wagons must be fitted with two 2-axle bogies; the wheelbase of each bogie must be 1,800 m.