

UIC - Other Freight Car Markings

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Due to the positive response to the articles on the UIC numbering scheme and to answer additional questions that have come up, I have written this follow-on article to explain some of the other standard markings that are found on freight wagons in international service.

Figure 1 depicts the markings and other standard features that may be found near the lower left corner on each side of a typical RIV-compliant freight wagon. Each numbered callout on the diagram corresponds to an explanation that follows. As with the car number, the individual elements may be rearranged to make use of the space available on the wagon side or to allow for their application on plates applied to the side of flat wagons and other 'difficult' rolling stock.

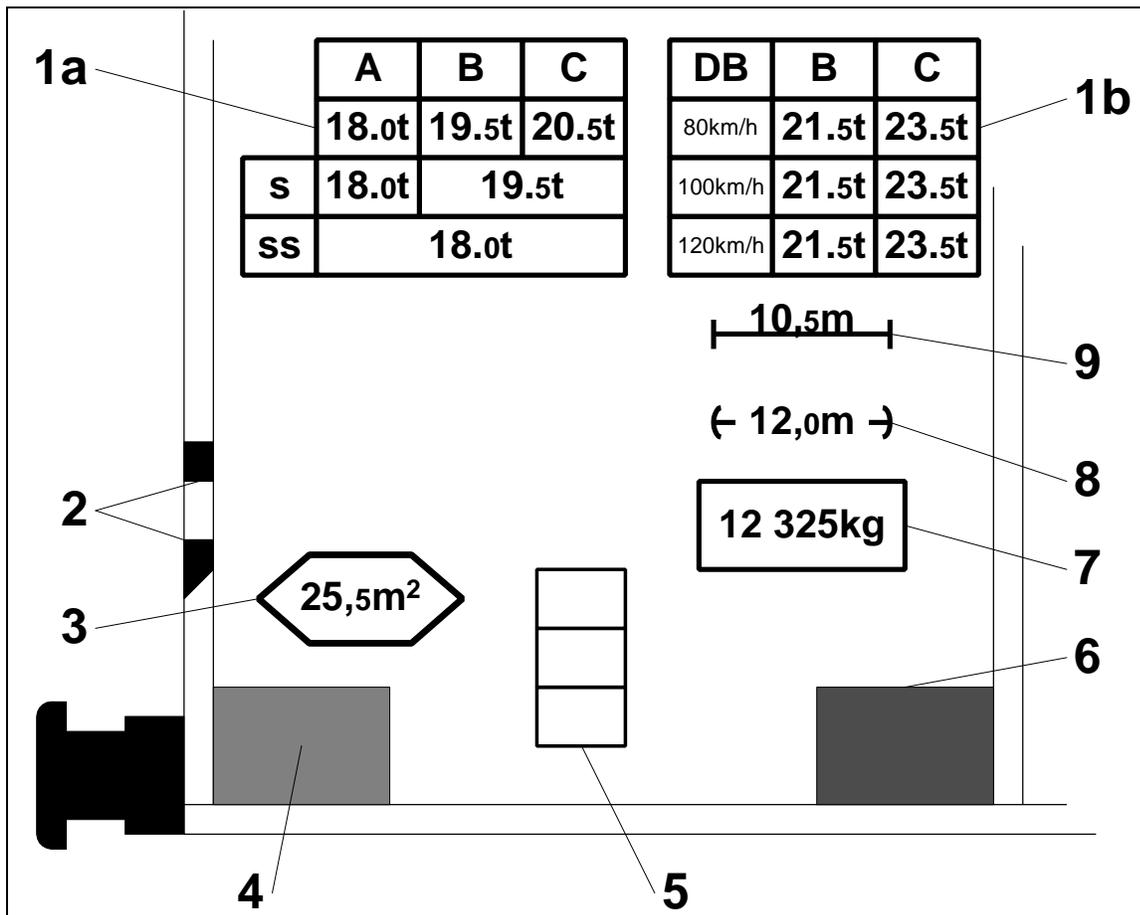


Figure 1

First, an explanation is in order for anyone not familiar with standard European numeric notation. While commas and periods are used as sentence punctuation in the same manner as in English, their roles are reversed in numeric notation. Thus, the period is used to separate the hundreds digit from the thousands digit (and so on) and the comma is used as the decimal point. Therefore, the value we North Americans would write as 2,345.67 becomes 2.345,67.

Description

1a **Weight Limit Table:** This table indicates the maximum permissible axle loading in tons at various speeds and for various track conditions. Track conditions are represented by the columns with:

- A = Lightly-laid branch lines
- B = Standard-construction lines
- C = Heavily-laid main lines

Speeds are represented by the rows with:

- ' ' = up to 80 kph
- S = up to 100 kph
- SS = up to 120 kph

Two caveats worth noting:

1. If a wagon is not rated to 'SS' speeds, that row is omitted from the table. Wagons not rated to 'S' speeds will not carry the 'S' or the 'SS' row.
2. The 'standard' axle loading limits by speed are:
 - Up to 80 kph: 20t
 - Up to 100 kph: 18t
 - Up to 120 kph: 16t

Limits found in the Weight Limit Table usually exceed the standard limits. This is allowable due to advances in suspension and braking technology.

1b **Internal Weight Limit Table:** Some wagons may carry an additional table showing different (usually higher) limits when the wagon is in internal service on its home rails. Only those columns where the value is different from the Weight Limit Table are included. In the example, the B and C limits are supplemented; the A limit is unchanged and is therefore not included. The upper left corner of this table displays the railway administration abbreviation (i.e., DB, SBB, FS, etc.).

2 **Type of Air Brake equipment:** Photos suggest that these markings may be disappearing, probably in the face of new freight wagon construction standards. When applied, the markings are at all four corners of the wagon and wrap around the corner posts such that they are visible from the side and end of the wagon.

- Markings are white on dark-colored cars and are usually black on light colored cars, but may be white on a black background or with a black border.
- The illustrations that follow represent the mark as seen straight on from the corner of the wagon; the vertical line represents the line where the side of the wagon joins the end.

a. This wagon has no air brakes of its own, but does have a train line brake pipe:

- It can be coupled between wagons that DO have brakes, and the through-pipe connects the brakes of the other wagons together.
- This type of wagon can have handbrakes with or without the associated brake cabin.

b. This wagon has a 'slow-working', freight-train brake system, and is suitable for interchange.



- c. This wagon has a freight-train brake system that is not fully compliant with other systems although it may be interchanged with some restrictions:
- Includes some wagons built in Poland with an old form of Westinghouse brake.
 - Wagons of this type were taken out of general use towards the end of the 1950's, but might still be found in service use.
- d. This wagon is only fitted with a passenger train brake system, and must NOT be connected to the brake pipe of a freight train.
- e. This wagon has a passenger-freight brake changeover valve (slow-acting for freight-trains, fast-acting for passenger trains), and is usually suitable for interchange.
- f. This wagon has a passenger-freight brake changeover valve, but is NOT suitable for interchange.
- Wagons of this type were taken out of general use towards the end of the 1950's, but might still be found in service use.

- 3 **Loading (floor) area in square meters:** Computed by multiplying the inside length by the inside width.
- 4 **"Chalk Board":** Often superimposed over a matte black background, this area is provided for temporary chalk marks that yard workers and others find useful.
- 5 **Transition Notes:** These three rectangles are often arranged horizontally. I have not been able to find additional information regarding their use; perhaps a knowledgeable reader can shed some light on the subject.
- 6 **Note Holder:** Analogous to a 'tack board' in North American railroad practice, this typically consists of a metal frame surrounding a wire mesh behind which a paper card can be inserted. In its simplest form, the frame is open at the top to allow the card to be slipped behind the mesh, however in some versions the mesh is hinged and engages a latch to keep it shut.
- 7 **Dead Weight:** Analogous to 'tare weight' in North American railroad parlance, this is the empty weight of the wagon expressed in kilograms. (A kilogram is approximately 2.2 US Pounds.)
- 8 **Overall length in meters:** This is the total wagon length measured from buffer face to buffer face. This may also be seen this on DB wagons expressed as **LüP 12,0m** without the line (LüP = Länge über Puffer = length over buffers)
- 9 **Maximum loading length in meters:** This is the 'inside' length of the wagon. Note that with standard closed (box) wagons, the longest item that can be loaded into the wagon is limited by the geometry of the door width and its placement and will be significantly shorter than this figure.

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