



## **Instructions for loading and unloading vehicle transport wagons**

### **1. General**

- The wagons have to be loaded, unloaded and secured according to the current Loading Regulations and information sheet of the Railway companies.
- The loading gauge regulations of the respective countries (the smallest loading gauge of the route shall apply) and/or the relevant contractually agreed provisions have to be observed.
- The safety regulations of the different manufacturers regarding the loading of new vehicles onto wagons have to be complied with.
- In case of vehicles featuring a reduced ground clearance or other equipment restricting the loadability, it is absolutely necessary to observe the special regulations published by the manufacturers for such models in order to ensure a damage-free transport.

### **2. Treatment of wagons**

#### **2.1. General instructions**

- Wagons backed against the ramp for loading and unloading purposes must be secured by means of a wheel stopper.
- It is forbidden to access the upper deck when the contact line is active.
- The decks must be kept clean and free of materials (wire, glass, stones, etc.) causing damage.

## 2.2. Loading and unloading of wagons

- Prior to loading and unloading, it has to be checked whether the upper deck has to be raised and secured in order to avoid any damage to the roof during the loading and unloading process.
- Prior to loading and unloading, it is indispensable to hinge down the loading ramps and to remove the wheel stoppers from the road way.
- Mobile access ramps or rails have to be fixed to the designated couplings at the wagon.
- Prior to manually lowering or lifting the upper deck, the crank handles and their bearing bushes have to be inspected for material defects (safety at work). In case of any defects another crank handle on the wagon or the bearing bush opposite the defective bearing bush has to be used for lowering and lifting the upper deck.
- When using auxiliary equipment for lifting and lowering the upper deck, only devices (e.g. pneumatic or electric rotary drill) with a maximum initial speed of 150 rpm and a maximum output power of 1,100 Watt (1.1 kW) may be used (risk of destroying safety components of the lifting and lowering device).

### ◆ Exceptions

Auxiliary equipment is applicable for covered wagon type Hccrrs 328 **only for emergency operation**. For details see the operating manual.  
Auxiliary equipment **is not applicable** for wagon type Hcceerrr 330.

- It is strictly forbidden to access either of the decks when lifting or lowering the upper deck.
- When lifting or lowering the upper deck, operators are obliged to closely observe the movement and to **immediately** switch off the auxiliary equipment, as soon as the top or bottom end position of the deck has been reached.
- Prior the loading and unloading, the upper deck has to be lowered to the designated depositing device (e.g. forelocks, bogies).
- Loading and unloading has to be carried out at a moderate speed. This applies, in particular, when driving on the ramps and wagons.

- It is to ensure that following loading instruction are carried out:
  - ◆ the moveable traverse plates between the two wagon units (on the upper and lower deck) have to run contact free during transport to maintain a clearance of min.100 mm between the moveable traverse plate and tyres.
  - ◆ It is strictly forbidden to place tyres on the moveable traverse plates!
- Upon completion of the loading and unloading process, the following instructions have to be observed:

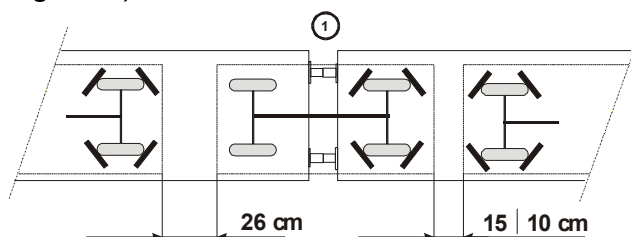
- ◆ The loading ramps have to be lifted up.

**Note:** However, please refer to deviating instructions for transport with lowered loading ramps in closed trains (according to information sheet of DB Cargo Deutschland AG)

- ◆ The upper deck has to be lowered to and secured at the respective transport position (the loading gauge has to be observed!!!).
- ◆ The following has to be checked:
  - The ropes of the lifting and lowering device by complete lowered of the upper deck for the designated depositing are relieved.
  - The crank handles of the rope winch have been inserted or secured in the respective mounting bracket.
  - Unnecessary wheel stoppers have been positioned and secured on or beside the wheel stopper rail in such a way that they cannot slide into the clearance zones in the centre and at the end of the wagons.
  - Existing display devices (indicator of upper deck locking, etc.) are no longer visible or have been folded.

### 3. Securing of vehicles

- The following minimum distances have to be kept from fixed/integral wagon parts (e.g. from the end doors of covered wagons) and between vehicles loaded one behind the other.
  - ◆ 150 mm between vehicles transported on single wagons and on sets of wagons appropriate for usual shunting movements.
  - ◆ 100 mm between vehicles transported in combined trains with shunting and humping restrictions.
  - ◆ 260 mm between vehicles placed above or next to permanent coupling of the wagon (wagon centre of type 328, 330, 553, 556, 557 and 560) near the unsecured axle (see figure 1).



- Vehicles placed above the permanent coupling may be secured with four stoppers at one axle only.
- Each vehicle must always be secured by a pair of operative stoppers at each of two of its wheels, if possible of one axle.

#### Exceptions:

- ◆ Vehicles transported in closed trains for which fly-shunting and humping is not allowed may be secured by means of a single-wheel stopper (one stopper each in front of and behind a wheel, e.g. on the driver's side).
- ◆ According to the current information sheets of the DB Cargo Deutschland AG, vehicles transported on single wagons and on sets of wagons appropriate for normal shunting movements may be transported with single-wheel stopper securing within Germany and in certain foreign railway networks.
- ◆ Both exceptional cases, however, vehicles placed within the inclined area of the lower deck have to be secured by means of four stoppers at one axle.

- ◆ The following minimum distances must be kept to during transports with single-wheel stopper securing.
  - 150 mm from fixed/integral wagon parts (e.g. to the end doors of covered wagons) and between vehicles loaded one behind the other.
  - 260 mm between vehicles placed above or next to the permanent coupling of the wagon (wagon centre of models 328, 330, 553, 556, 557 and 560) near the unsecured axle (see page 4, figure 1).
- The roof clearance (from the vehicle roof up to the lower edge of the upper deck) must be at least 80 mm after lowering of the upper deck.
- Each vehicle has to be secured by pulling the parking brake and engaging the first gear (in case of vehicles with automatic transmission, by selecting position P).
- In case of out-of-gauge load, vehicles on the upper deck have to be grounded (according to special agreements, e.g. Switzerland, Austria).
- When leaving the vehicle, it has to be checked whether all power consumers and windscreen wipers have been switched off and whether doors, windows, bonnets and, if applicable, roofs have been closed properly. Antennas of the vehicles have to be retracted or dismantled and must be put into the deposits foreseen by the manufacturer or at least positioned backwards as flat as possible.
- The vehicles have to be locked according to the guidelines of their manufacturer. Keys must not be left in the ignition lock.

**For any questions regarding these instructions, please contact Team Quality Assurance:**

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