Loading example:

<u>1</u> 2181-001-21

single wagon and wagon groups

wagons in block trains or combined transport wagons with long-stroke shock absorbers

## Type of goods

Low weight (max. 250 kg/m³) laminated steel sheet panels bound together into packages wrapped in film. The packages rest on Styrofoam pads, which are also wrapped in plastic film.

Packages wrapped in plastic film up to

- 4 m length of package bound by a minimum of two fastenings
- 8 m length of package bound by a minimum of 4 fastenings

Every additional 2 m bound by one additional fastening.

Breaking strength of the package fastenings in straight pull min. 330 daN.

The package fastenings also bind the plastic film to the package.

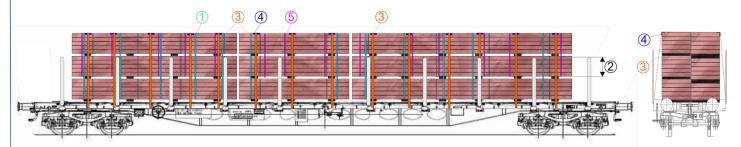
## Wagons

Flat wagon with stanchions or side boards/walls and wooden floor

## Method of loading

Stacks comprising packages resting side by side and one on top of the other, packages of the same dimensions being organised as far as possible side by side and one on top of the other.

① Stacks up to 4 m in length fastened into one unit with a minimum of two fastenings. For every further 2 m or part there of a minimum of one additional fastening.



#### Securing

Stacks secured by side stanchions (also at distances of more than 10 cm) working height of the side stanchions min. 10 cm

Stacks secured

- ≤ 4 m length with a minimum of three indirect fastenings
- ≤ 6 m length with a minimum of five indirect fastenings
- ≤ 8 m length with a minimum of six indirect fastenings

For every further 2 m or part thereof a minimum of one additional indirect fastening.

- 4 Indirect fastenings with tensioning device, end boards, breaking strength in straight pull min. 4000 daN. To protect the very light load against accidental deformation the unit tensioning straps must be **only moderately tensioned**.
- If the circle number ② is not complied with, a binding secured through the stanchions to the layer beneath is required for every indirect fastening. Breaking strength of the fastenings in straight pull min. 330 daN.

#### Additional indications

Distribution of loads: see UIC Loading Guidelines, Volume 2, Information Sheet 0.1 (Note: Due to the low weight of the sheet steel panels it is unlikely that the permissible axle load/wheel load or bogie load will be exceeded),

Loading gauge: see UIC Loading Guidelines, Volume 2, Information Sheet 0.2,

Covering of loads: see UIC Loading Guidelines, Volume 2, Information Sheet 0.3,

Single-use bindings: see UIC Loading Guidelines, Volume 2, Information Sheet 0.6,

Indirect fastening: see UIC Loading Guidelines, Volume 2, Information Sheet 0.7,

Klassifikation: TLP gello (Adressatenkreis)

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# Behaviour of load during buffing impacts as per table 4

Impact testing on 8 October in Michelhausen.

- 1. Shock 7.6 km/h, maximum shock longitudinal movement 5.5 cm
- 2. Shock 9.9 km/h, maximum shock longitudinal movement 8.5 cm Counter-shock 9.0 km/h, maximum shock longitudinal movement 17 cm

# Information on a loading example

Loading example, approval by: all UIC RU **Issuing railway undertaking: RCA** 

Loading 1 2181-001-21 example:

Version 01, 15 January 2021