



Loading and safety requirements for the Siegen site

Change marking

- Fundamental revision
- Editorial change
- Replaces ""

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Loading and safety requirements for the Siegen site

1 General

The regulations described in this document are binding requirements for all carriers, freight forwarders and their drivers who carry out transport, loading or unloading activities on the premises of Mannesmann Line Pipe GmbH in Siegen.

Compliance is a prerequisite for driving on and carrying out loading and unloading operations on the company premises. Violations can lead to the immediate withdrawal of the access authorization as well as liability consequences.

The instructions of the operating staff must be followed without restriction at all times.

2 Charging reference and dates

Loading is carried out exclusively upon presentation of a valid charging reference and only if there is a pre-booked charging date with a fixed time window.

No loading will be carried out without a valid charging date with a time window.

● ATTENTION – RESERVATION OF LOADING

If the agreed loading date is not met, the shipper reserves the right **to refuse loading**.

All costs arising from this, in particular **waiting times, demurrage fees or empty runs**, are **borne by the carrier or freight forwarder**.

3 Driver staff

The drivers employed must have a **valid driving licence** and a **valid driver qualification certificate (code 95)** in accordance with the **Professional Driver Qualification Act (BKrFQG)**. The provisions of **Regulation (EC) No. 561/2006** and all other relevant legal provisions must be complied with.

The drivers must be sufficiently instructed and be able to understand **the German or English language** in safety-relevant situations.

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4 Occupational safety (PPE)

Wearing personal protective equipment is mandatory on the entire factory premises.

Minimum requirement:

- Safety helmet
- Safety shoes S3 with toe protection
- Cut-resistant gloves
- High-visibility clothing in accordance with construction site regulations



Depending on the area of application, additionally:

- Hearing protection
- Safety Glasses



Drivers without full personal protective equipment will not be allowed access to the company premises.

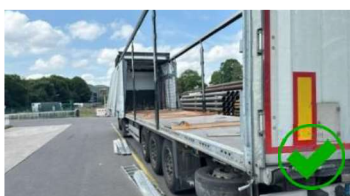
5 Vehicle Requirements

5.1 Permitted Vehicles / Requirements

The vehicles used must meet the following requirements:

- Structure according to **DIN EN 12642 (Code XL or Code L)**
- **Clean, dry and free loading area** (no residues of oil, dirt or foreign material)
- **No pre-loaded third-party goods**
- Bulkhead **at least at the level of the load**
- Bulkhead freely accessible over the **entire width and height**
- **Smooth bulkhead surface** for form-fitting loading

The end wall **must be usable for load securing** and is used as **part of the tested and certified loading unit in accordance with the TÜV-Süd certificate** .





Loading and safety requirements for the Siegen site

5.2 Prohibited Vehicles / Exclusions

The following vehicle types and equipment are not permitted for loading:

- **Gooseneck semi-trailer**
- **Low-bed semi-trailers**
- Vehicles with limited or non-form-fitting bulkhead
- Vehicles which, due to their design, do not allow safe and form-fitting loading



Vehicles that do not meet this requirement cannot be loaded.

5.3 Bulkhead height

The required height of the end wall can be determined according to the following formula:

1. Determine the number of pipe layers and total pipe height

The number of pipe layers results from the total number of pipes to be transported and the number of pipes per layer according to pipe diameter.

$$\text{Number of pipe layers} = \frac{\text{Number of pipes per transport}}{\text{Number of pipes per layer}}$$

Tube diameter (mm)	Number of pipes per layer
97	22
108	20
114	18
117	18
139	17
143	16
159	13
168	13
219	10
244	9
273	8
323	7
355	6
406	5



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2. Number and height of intermediate layers including support beams

Between the pipe layers, intermediate layers with a height of 6 cm must be provided.

Intermediate layer height = ((Number of pipe layers – 1) x 6 cm)

3. Calculation of the load height

The total height of the load results from the height of the pipe layers plus the height between the layers.

Load height = (number of pipe layers x pipe diameter) + intermediate layer height

→ Important notes

The bulkhead height must at least correspond to the calculated load height.

● ATTENTION – TECHNICAL NOTE

In addition to the volume, the load weight can also limit the maximum permissible load height.

5.4 Pipe length < 10m

Loading only possible with form-fitting loading!

✓ Loading is possible if:

- an **open semi-trailer** (e.g. plateau or round trailer) is used

OR

- the roof cover of the **tarpaulin trailer can be opened completely from front to back** or an open

OR


- the Freight Forwarder **shall provide appropriate measures** at its own expense:
 - Sufficient pallets to fully fill the loading height
 - Head lashing in connection with wooden crate or restraint tarpaulin

⊘ Loading is not possible if

- the roof cover cannot be fully opened
- no positive fit to the end wall can be established
- Necessary aids are missing
- the vehicle design prevents safe loading

→ Important notes

- Pallets or aids are **not provided by the shipper**
- Additional measures can reduce the usable cargo space
- **All costs and risks are borne by the freight forwarder/carrier**

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6 Form-fit loading in the direction of travel

Loading is carried out in accordance with the **valid TÜV-SÜD-Load Securing Certificate No. Z20211106-1**.

The loading units must **be loaded in a form-fitting manner in the direction of travel against the front wall of the transport vehicle**.

The **bulkhead is a necessary safety element** and is used to **absorb the forces acting in the direction of travel (0.8 g)**. It must comply with the requirements of **DIN EN 12642 Code XL**.

➔ Important notes

Free spaces between the load and the bulkhead are not permitted.

If a form-fitting load against the end wall is not possible due to the design or load, **additional, certificate-compliant replacement measures** (e.g. artificial end wall by means of head slings, retention tarpaulins) must be implemented.

● ATTENTION – RESERVATION OF LOADING

Vehicles in which the bulkhead **cannot be used to secure the load** are **not loaded**.

7 Load securing

Load securing is carried out in accordance with:

- **Section 412 of the German Commercial Code (HGB)**
- **VDI 2700 et seq.**
- **DIN EN 12195 2**
- **VDI 2700 Part 3.1**
- **TÜV SÜD Certificate No. Z20211106 1**

For load securing, at least the following must be provided:

- **11 lashing straps, 50 mm, polyester**
- **Long-lever ratchets** with
- **STF = 500 daN**
- **LC = 2,500 daN**
- **Lashing straps in accordance with DIN EN 12195 2 / VDI 2700 Part 3.1**



Loading and safety requirements for the Siegen site

✔ Responsibilities (mandatory)

Participant	Responsibility
Shipper / Shipper	Safe loading of cargo
Carrier	Reliable loading and securing of the load
Driver	Inspection of load securing before departure and confirmation of correctness

⚠ Testing and implementation

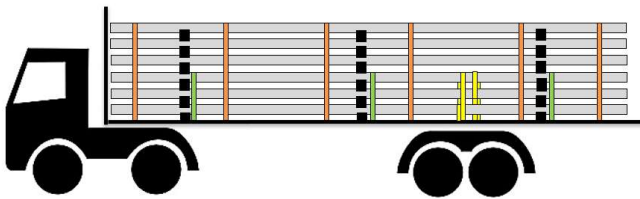
- The load securing equipment is **checked by the operating personnel** before loading.
- **Lashing straps that are ready for storage or damaged lashing straps are sorted out and not used.**
- If the number of permissible means of securing is not sufficient or if the vehicle is unsuitable, **no loading will be carried out.**

➔ Important notes

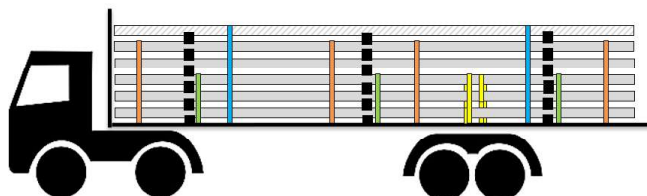
Required lashing straps can be purchased from the doorman **against advance payment** (cash, EC and credit card).

✦ Liability and consequences

- Delays, downtimes or non-loading due to missing or unsuitable securing equipment shall be **borne by the carrier.**
- In particular, §§ 30, 31 StVZO and § 415 HGB **are decisive.**



Final binding	= 6 straps
Intermediate binding	= 3 straps
Abdominal binding	= 2 straps
Total	= 11 straps



Additional binding	= 2 straps
Final binding	= 4 straps
Intermediate binding	= 3 straps
Abdominal binding	= 2 straps
Total	= 11 straps



Loading and safety requirements for the Siegen site

8 Documents

The driver must carry all documents required for transport and loading in **full and validly**, in particular:

- **Charging reference**
- **Freight documents**
- **Any necessary permits**

● **ATTENTION – RESERVATION OF LOADING**

Without complete and valid documentation, loading may **be refused**.

9 Liability and liability

Compliance with the specifications set out in this leaflet is **a binding part of the respective transport order**.

The information sheets published on the shipper's homepage are also **part of the contractual agreement** and are valid in their current version:

<https://www.mannesmann.com/de/downloadcenter/zertifikate-zulassungen.html>

● **ATTENTION – RESERVATION OF LOADING**

In the event of violations of these requirements, the shipper expressly reserves the right to refuse loading.

All costs arising from this, in particular due to delays, downtimes or non-loading, shall be borne in full by the carrier or freight forwarder.

10 Final Provision

This document is intended to ensure a **safe, orderly and smooth loading process**.

The shipper reserves the right **to amend or supplement this leaflet at any time**. The current version is authoritative in each case.