

Vereinigtes Königreich

TATA STEEL



Regulations for delivery and collection by truck

Facilities within Distribution Main Land Europe (D MLE)

1. General safety regulations and rules

1.1 Introduction

Within D MLE, workplace safety has the highest priority. To ensure safe workplaces for employees and visitors, these regulations regarding delivery and collection at D MLE facilities were prepared. Violation of these regulations may lead to expelling and future ban from the premises.

1.2 General regulations

- 1.2.1 On the company premises, the general local road traffic regulations shall apply. The speed limit is specified at the vehicle access point to each facility. It must always be observed.
- 1.2.2 Truck drivers must have successfully completed training on load securing.
- 1.2.3 Accessing the company premises under the effect of alcohol and/or other drugs is strictly prohibited.
- 1.2.4 Bringing alcohol and/or other drugs onto company premises and their consumption is prohibited.
- 1.2.5 Accessing the company premises is prohibited for persons under the age of 18. Pet animals must not leave the driver cabin.
- 1.2.6 In all company operations, personal protective equipment must be worn. Safety footwear, protective helmet and hearing protection are the minimum standard.
- 1.2.7 The instructions of loading personnel must always be followed. Drivers must be able to clearly communicate with the company personnel (local language or refer to attachment A).
- 1.2.8 Cranes and industrial trucks may only be operated by company personnel.
- 1.2.9 Reloading of already loaded third-party goods is generally rejected. D MLE does not load its material on third-party goods.
- 1.2.10 Truck drivers must always remain in close vicinity to their vehicles. During loading, truck drivers must always follow the instructions of loading personnel and remain in a safe area.
- 1.2.11 Any unauthorised collection of material/or property of D MLE is regarded as theft and treated accordingly.
- 1.2.12 D MLE reserves the right to inspect the load, the cargo hold and the Truck driver cabin.
- 1.2.13 Prior to loading, drivers are required to familiarise themselves with our safety regulations and to complete the related "Truck Loading" control form.

1.3 Truck driver regulations

- 1.3.1 Trucks must be parked on the company area, the parking brake must be engaged and the vehicle must be locked. Registration is to be carried out at the company shipping department. All additional instructions are provided there.
- 1.3.2 If several trucks have to be loaded or unloaded at the same bay, the order is defined by the D MLE personnel.
- 1.3.3 For parking of trucks on company premises, proceed as follows: Engage the parking brake / Engage the first gear or position "P" / Switch off the engine / Remove the ignition key For loading of narrow and standing bundles, it must be able to tilt the loading platform to the support stake.
- 1.3.4 In the time between registration and call-up, drivers are required to remain in or at their vehicles.

 Drivers who are not present at the respective time lose their place in the queue.
- 1.3.5 Loading platforms must be clean and dry and any potential cleaning must be carried out outside the company premises. Waste must be left inside the vehicles.

1.4 Registration

- 1.4.1 Suppliers, customers or carriers are required to report to the shipping department during the registration time (refer to attachment A) to arrange a specific appointment.
- 1.4.2 Drivers are required to report to the D MLE shipping department on the day of delivery with all documents. Deliveries/collections that have not been registered or scheduled for the specified day shall not be accepted.
 - If the required documents and information are not available, receipt may be rejected.
 - Any waiting times due to incorrect registration or delivery shall not be compensated.

2. Delivery regulations

2.0. Product regulations

The coils to be delivered must not exceed the following criteria: Maximum coil weight: (Refer to attachment A) / Packaging straps: transversely through the eye & longitudinally around the coil / Coils must be tightly wound / Telescopic coils cannot be unloaded.

2.1. Unloading regulations

The following unloading regulations were prepared to enable efficient and safe unloading of trucks. Non-compliance with the following regulations may lead to freights being rejected. Additional freight costs, waiting times, etc. shall be borne by the delivering party and are not compensated by D MLE.

- 2.1.1 For unloading by crane, there must not be any obstacles for vertical unloading in the truck.
- 2.1.2 For unloading by forklift, there must not be any obstacles for horizontal unloading in the truck.
- 2.1.3 All packages (or panels if loosely packed) must be attached the following information on a label tag: Supplier, order number, weight, quality and dimensions.
- 2.1.4 The material must be transported according to the legally applicable regulations on load securing (VDI 2700 ff., EN 12195) and arrive in an undamaged and dry condition.
- 2.1.5 Only panels / coils with identical quality and dimensions may be packed in the same package.
- 2.1.6 <u>Coils</u>: Coils are generally unloaded using a coil grab. If several coils are loaded on one truck, a minimum clearance of 500 mm is required between the coils.
- 2.1.7 <u>Standing slit coil</u>: Unloaded by C hook (max. bundle weight / max. bundle width / max. coil height refer to attachment A for options per facility).
- 2.1.8 <u>Lying slit coil</u>: Unloading by internal gripper (max. package weight, max. bundle width, inner coil diameter refer to attachment A for options per facility).
- 2.1.9 <u>Lying slit coil</u>: Unloading by forklift (max. package weight, max. bundle width, inner coil diameter refer to attachment A for options per facility).
- 2.1.10 <u>Steel sheets</u>: Unloading by traverse, package grab, chain or forklift truck. Unless otherwise specified, the maximum package weight is (refer to attachment A for options per facility). Unless

packed on pallets, square dunnage bars must be placed and secured under the packages (at least 80 x 80 mm, at material width).

3. Collection regulations

3.1. Loading regulations

- 3.1.1 We would like to point out, that legally applicable secure loading for transport requires provision of suitable vehicles (board panels, stakes, coil frames, coil recesses) as well as securing equipment (sufficient proper lashing straps, edge protection, anti-slip mats, lashing chains) to ensure positive-locking and force-fitting load securing.
- 3.1.2 Standing material is exclusively secured with lashing chains. Carriers are required to carry along sufficient stowage material for load securing.
- 3.1.3 Loading times and unloading times:(Refer to attachment A for options per facility).
- 3.1.4 Sufficient accessible and approved lashing points must be available at the vehicle.
- 3.1.5 Generally, only vehicles with appropriate lashing straps for shipping (at least 2 per package), at least 5 chains for standing slit coils, appropriate edge protection and sufficient anti-slip mats (8 mm min. thickness) for full-surface application of square dunnage bars are to be loaded.
- 3.1.6 If "positive-locking" loading is not possible for construction reasons, the vehicle must carry along sufficient stowage material for loading.
- 3.1.7 Vehicles must have sufficient loading space for the shipping order.
- 3.1.8 The payload to be loaded must not exceed the legal total weight.
- 3.1.9 Please observe our general regulations. VDI guideline 2700 and following pages shall apply. As well as EN 12195 parts 1 to 4, EN 12640 and EN 12642.
- 3.1.10 In the interest of safe road transport, we would like to point out that vehicles with unsuitable and insufficient equipment for securing are not loaded by our loading personnel and any resulting costs shall not be borne by D MLE. The carrier remains liable for safe and damage-free transport.

5.2 Load certification

Drivers are required to certify by signature on the shipping note and the "Truck loading" control form that the load was taken over completely, in proper condition and within the admissible loading weight and that it was loaded according to their instructions for safe operation and transport. Drivers undertake to compare the payload with the admissible total weight of their trucks and to reduce the weight respectively if exceeded.

Tata Steel Distribution Main Land Europe

Dr. Jens Lauber Managing Director



Safety regulations and rules regarding collection by truck at D MLE Service Centres

Introduction

At least safety footwear and protective helmets must always be worn on the company premises. Any additional PPE articles are signposted and to be worn according to company regulations. The instructions of Tata personnel must always be followed.

Violation of these regulations may lead to

expelling and future ban from the premises. The carrier agency will be notified about violations. If vehicles are parked on the company premises, the parking brake must always be engaged, the first gear or position "P" set, the engine switched off and the ignition key removed.

General regulations

- 1. Drivers must have successfully completed training on load securing specifically adjusted to the requirements of our products.
- 2. Drivers must be in a roadworthy condition.
- 3. Vehicles must have sufficient loading space for the shipping order.
- 4. Loading spaces must be clean and dry. Waste must not be disposed of on our company premises. For loading of narrow and standing bundles, it must be able to tilt the loading platform to the support stake.
- 5. Before leaving their trucks on company premises, drivers are required to put on personal protective equipment.
- 6. For entering the truck loading platform, the moveable steps provided by Tata must be used.
- 7. Reloading of third-party goods is generally rejected. We do not load our material on third-party goods. Respectively, third-party goods must not be loaded on our material.
- 8. Generally, only vehicles with appropriate lashing straps for shipping (at least 2 per package) and anti-slip mats with a thickness of 8 mm (continuous under each packaging square dunnage bar) are to be loaded.
- 9. For loading, sufficient <u>accessible</u> lashing points must be available at the vehicle.
- 10. For transport of coils or standing split coils, vehicles have to be equipped with a coil recess, support stakes and at least 5 **lashing chains**.
- 10. If "positive-locking" loading of the vehicle is not possible for construction reasons, it must carry along sufficient stowage material for loading.
- 11. The payload to be loaded must not exceed the legal total weight.
- 12. Truck drivers must always remain in close vicinity to their vehicles. Entering storage and production areas <u>is strictly prohibited.</u>

Managing Director D MLI	Director D MI	Dire	ing	าag	1ar	Ν
-------------------------	---------------	------	-----	-----	-----	---

Dr. Jens Lauber

TATA STEEL – Distribution Mainland Europe (D MLE)

TRUCK LOADING CONTROL FORM



Driver instruction : Fill out and sign control form Loading personnel instruction : Countersign control form

Driver name (block letters)			
Company / carrier name (block letters)			
Towing vehicle license number			
Trailer license number			
Towing vehicle empty weight (kg)			
Trailer empty weight (kg)			
Maximum payload (kg)			
Number of available lashing straps (pieces)			
Number of available chains (pieces)			
Number of available anti-slip mats (pieces)			
Loading platform clean?	Yes	No	
Loading platform dry?	Yes	 No	

I have read and understood the safety regulations handed out to me.

With my signature, I confirm that the specifications above are correct and safe loading can be carried out.

Date	
Driver signature	
Loading personnel name (block letters)	
Loading personnel signature	

Comments
Zurrpunkte Mindestens 2000 daN

Confirmation

The driver confirms to the loading personnel that load securing and packaging at the time of leaving the loading point had been in order and according to applicable regulations.

Load securing was ensured by the following measures:

(Please check / fill in accordingly)			
	Special vehicle attachments		
	Coil recess covers		
	Direct support against the side walls of the loading space		
	Attachment of horizontally secured spacers		
	Insertion of stake inserts in driving direction		
	Insertion of stake inserts on the sides		
	Insertion of stake inserts at the rear		
	Square dunnage bars and frames		
	Other:		
	Other:		
	Force-fitting ensured by: Quantity:		
	Lashing straps with edge protection		
	Lashing chains with edge protection		
	Lashing ropes with edge protection		
	Anti-slip maps (8 mm)		
	Other:		
	Other:		
Other comments			
x	The driver was instructed that no unsecured objects like recess boards, wood pallets		
Α	or similar must be present on the loading platform		
	Picture taken?		

Loading times		
Start of loading		o'clock
End of loading		o'clock

Tata D MLE facility	
Date	
Loading personnel name (block letters)	
Loading personnel signature	
Driver name (block letters)	
Driver signature	

TATA STEEL



Technical Information Sheet Anti-slip mats

This technical information sheet is to illustrate the function of anti-slip mats in load securing systems for steel loads during road transport.

1. Anti-slip mat specifications



Friction coefficient: 0.6 min.

Recommended material thickness: 8 mm is sufficient for most applications. Thinner mats do not guarantee sufficient insulation of the load from the loading platform.

Mats with a thickness below 8 mm may easily break if used for steel loads. Mats with a thickness over 15 mm may shear off if used for steel loads.

Material: Anti-slip mats typically consist of recycled rubber granulate with a thickness of 1-3 mm connected by polyurethane elastomers.

Colour: Typically black with coloured sprinkles (manufacturer-dependent).

Surface structure: Fine granular structure.

Porous / non-porous: High porosity is preferred.

Operating temperature range: -20 °C to +100 °C.

Tensile strength: 0.6 N/mm² min.

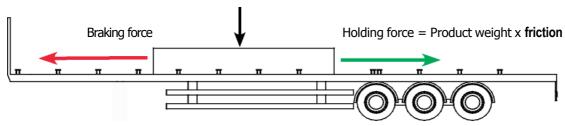
Anti-slip mats are available as loose mats, for example with dimensions of 1000 x 100 mm or as endless strip.

2. How do anti-slip mats work?

Friction is the resistance of an object against slipping. With its value dependent on the product weight and the surface roughness and not the surface area, it is a critical factor for most load securing systems.

Application of anti-slip mats for load holding increases friction between surfaces in contact, e.g. between the surface of a steel product and the loading platform.





High friction generates more efficient and effective load securing systems.

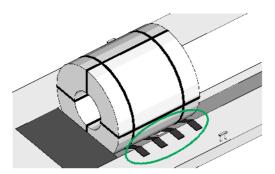
Typical friction coefficients:

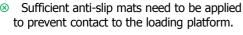
Oiled steel on steel = 0.1 - 0.2 (low). Steel on wood = 0.2 - 0.4 (medium). Steel on anti-slip mat = 0.6 (high).

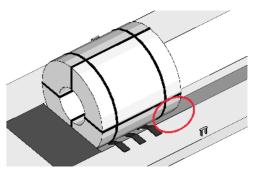
Anti-slip mats

3. Application of anti-slip mats

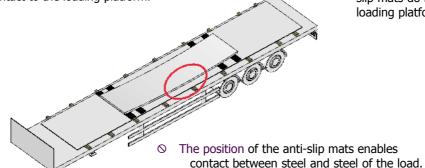
Anti-slip mats can be applied as entire mats or loose strips for efficient prevention of contact between steel and steel or steel and wood as the friction forces would be cancelled out in these cases.





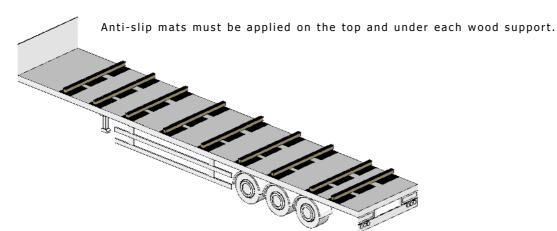


Insufficient or incorrectly positioned antislip mats do not prevent contact with the loading platform.



Notice: It must be ensured that anti-slip mats are visible under the load to control their position.

Anti-slip mats on wood supports



Please note: The application of anti-slip mats requires prevention of pulling or pushing of the load as this may lead to removal or demolishing of the mats compromising load securing. Additionally, this may also lead to material and packaging damage.

Warning!

Anti-slip mats must not be used as replacement for edge protection.

Transport belts or other types of rubber are no acceptable alternatives for the application of anti-slip mats as they do not offer sufficient friction coefficient.

Tata Steel Europe Limited and its subsidiaries shall not be held responsible or assume liability for errors or misleading information in this publication.



Textile lashing straps and ratchets

Textile lashing straps in combination with ratchet tensioning mechanisms are often used to secure Tata Steel products and ensure safe material transport to our customers.

1. Terminology

Lashing force

Maximum admissible tension for lashing.

The lashing force must not be confused with the admissible product weight that can be secured using lashing equipment.

For design of holding systems and determining the number of lashing straps required, the lashing force and not the breaking force must be taken into consideration.

Breaking force

Maximum force the lashing strap withstands if it is tested completely with ratchet and connected components.

The breaking force of the lashing strap arrangement is twice the lashing force.

2-ton lashing straps are referred to with LC 2000daN.

2. Identification by blue label

Lashing force
Standard hand force*

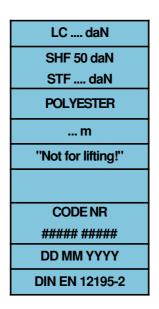
Standard tension force

Material

Length

Name of manufacturer or supplier Manufacturer Traceability Year of manufacture

Standard



- Preferred option.
- Polyester (PES) web strap.
- Resistant against mineral acids.
- Susceptible to alkalis.

Green label

- Polyamide (PA) web strap.
- Practically immune against bases.
- Susceptible to mineral acids.

Brown label

- Not suitable for steel products.
- Polypropylene (PP) web strap.
- High resistance against mineral acids and bases.
- Low lashing forces

Tata Steel points out that material breaks or cuts above 10 % damage of connections (seams), deformation due to heat, missing or unreadable labels, damage due to aggressive chemicals (according to DIN EN 12195-2 "Web lashing made from man-made fibres") are discard criteria. Also for ratchets: Breaks, cracks, increased corrosion and deformation of the slot shaft are discard criteria.

3. Lashing strap types

- Lashing straps and ratchets with the following lashing forces are suitable for use with Tata Steel products:
 - LC 2000daN, LC 2500daN and LC 4000daN (50 mm wide) LC 5000daN (75 mm wide)
- Short-lever ratchets reach a pretension of 200-450 daN.
- Long-lever ratchets reach a pretension of 300-600 daN.

^{*} An applied force of 50 kg (daN) at the handle will typically lead to 350 kg (daN) of tension in lashing.

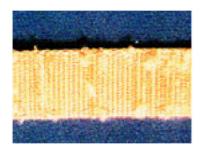
Textile lashing straps and ratchets

4. Inspections

Check the nameplate of the strap to ensure that it was manufactured according to EN 12195-2 and that the admissible traction complies with the intended approach of load securing. Check the strap for wear as specified below. The following points are indications of damage:

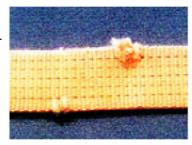
Lashing straps: Tears, cuts, notches and breaks in load-bearing fibres and seams as well as deformation due to heat.

For catches and tensioning elements: Deformation, tears, considerable indication of wear, indication of corrosion. Accidental contact with chemical products.



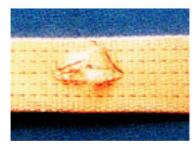


Cuts / abrasion points over the entire width. Result of insufficient edge protection.





Ragged edge. More than 10 % damage in width is not admissible.





Damaged core.



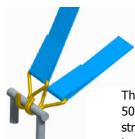


Do not use knotted straps. Knots may reduce the load bearing capacity by half.

5. Types of deficiency

• Clean transverse cuts over the strap are an indication of insufficient edge protection. Sufficient edge protection is required for all sharp edges with a radius below 3 mm. - Edge protection is recommended for all rough surfaces to increase the service life of lashing straps.

6. Lashing points



The lashing force is reduced by 50 % if both ends of the lashing strap are attached to the same lashing point.



Do not attach any catches to the catches of other lashing straps.

Warning!

Do not replace chains by lashing straps. Do not replace lashing straps by chains.

Lashing straps and chains offer significantly different lashing forces and expansion characteristics. Depending on the type, lashing straps expand by up to 10% while chains expand by 1-2% only.

Tata Steel Europe Limited and its subsidiaries shall not be held responsible or assume liability for errors or misleading information in this publication.

TATA STEEL



Technical Information Sheet Lashing chains and chain tensioners

1. Terminology

The lashing force of usable lashing chains is the maximum force that may be introduced into a lashing chain in straight tension. It is also referred to as "lashing capacity" and abbreviated with LC. The values are specified in kN (1 kN = 100 daN) and for straight tension. If strapping is applied (e.g. head lashing), the specified value may be doubled.

In contrast to lashing straps, **the elongation** of lashing chains is not standardised. According to manufacturer specifications, it is approx. 1.1 % to 1.6 % on reaching of the lashing force (LC) (source: RUD). **The breaking force** of lashing chains must be at least twice the lashing force value (LC). This means twice the safety.

2. Lashing chain labelling

The DIN EN 12195-3 requires manufacturers of lashing chains to apply lasting metal tags with readable labelling. Unfortunately, lashing chains without label tags are repeatedly used in practice. Due to this, the technical characteristics of used lashing chains can no longer be determined by the user.



Example for lashing chain labelling

RUD graphic

Tensioning elements must at least specify the name or the mark of the manufacturer or the supplier.

DIN EN 12195-3 specifies that only labelled lashing chains may be used. If the label tag is unreadable or missing, the chain may no longer be used.

Technical Information Sheet Lashing chains and chain tensioners

According to DIN EN 12195-3, label tags must specify the following information:

Lashing force LC in kN (LC = Lashing Capacity) Force of the lashing equipment The maximum force that may be applied at lashing chain in straight tension. (kN = KiloNewton) 1 kN = 100 daN, this corresponds to approx. 100 kg. Standard tension force STF in daN - tensioner force. The remaining force after the lever of the tensioner is let go.

The standard tension force refers to the standard hand force of 50 daN.

Additionally, the following information is required on the label tag:

- Name or mark of the manufacturer or supplier
- Traceability code of the manufacturer
- Number and part of this European Directive, EN 12195-3
- Notice: "Do not use for lifting"
- Type of lashing

3. Information for use

DIN EN 12195-3 and VDI guideline 2700 sheet 3.1 specify the following information for use always to be observed when handling lashing chains.

- Only use undamaged lashing chains.
- Do not exceed the lashing capacity (LC) of lashing chains.
 Do not knot lashing chains and do not connect them to bolts or screws.
- Do not use lashing chains as attachment for lifting of loads.
 Lashing chains must have a clearly readable label tag.
- Protect lashing chains with edge protection against damage from sharp edges.

4. Quality class and dimensions

In general, only chains with minimum quality class 8 may be used as lashing chains. Example:

A 7 mm chain with quality class 8 features an LC of 3000 kg and weighs approx. 1.1 kg per metre of chain.

A 8 mm chain with quality class 8 features an LC of 4000 kg and weighs approx. 1.4 kg per metre of chain.

A 10 mm chain with quality class 8 features an LC of 6300 kg and weighs approx. 2.2 kg per metre of chain.



1= Round steel chain, 2= Spindle tensioner, 3= Lashing catch, 4= Shortening element

Tata Steel Europe Limited and its subsidiaries shall not be held responsible or assume liability for errors or misleading information in this publication.



Dunnage bars / packaging bars

1. General requirements

- ✓ Only use square dunnage bars made of soft wood without bark.
- \checkmark The most common dimensions are 80x80 mm and 100x100 mm.
- ✓ If possible, only use square dunnage bars with sharp edges.
- ✓ Connect the dunnage bars and the load as possible.





2. Double / rectangular dunnage bars





If it cannot be excluded that double stacked and rectangular dunnage bars tilt in case of heavy braking, which may lead to untightening of load securing equipment.

In general, form-fitting load securing must always be ensured. In this case, dunnage bars with the dimensions 80x60 mm may also be used.

3. Damaged dunnage bars

Broken or worn dunnage bars must be replaced.





and / or





To prevent rolling, do not use dunnage bars with damaged or crushed corners.

Tata Steel Europe Limited and its subsidiaries shall not be held responsible or assume liability for errors or misleading information in this publication.