

Return Coils and Sheet Packs

Procedure for re-packing return Tata Steel coils and sheet packs in preparation for road transport



Introduction

Should it be required to return material to Tata Steel Europe then this should be prepared in such a way that it is suitable for handling and transportation.

Coils that are to be returned to Tata Steel by Road transport must be transported in a safe manner according to European and Local regulations. Tata Steel has developed securing methods to secure its products and these are also to be used for return loads. Packaging plays a key roll in the securing of a load. Poor packaging can compromise the securing system and damage the restraint equipment used by the haulier.

This document presents the options for packing in returning material and the steps to take to apply this packaging. Coils should be presented to the haulier in a state that is suitable for transportation. If it is not possible to conform to the procedures in this document this should be reported to Tata Steel at the time of the request for collection.

The haulier is under orders to secure the coils as per the current Tata Steel Outbound Road Standards. Should this not be possible due to the coils or their packing being unsuitable for transportation the load may be refused.

Note that in some European countries in addition to the driver both the consigner and loading personnel can be held responsible for the safety of the load.

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1. Packaging Styles

1.1 Packaging Options

1.1.1 Strip Products Coil (to be transported in well trailer)

- Strip product coils should be re-banded for transport. This banding should be made up of two circumferential bands and two bore bands. Coils identified as Spring Back may require more bands – In this case please contact your Tata steel representative.
- Plastic banding with a cumulative strength of 40kN may be used for none Spring back coils but corner protection must be used between the coil and the banding.

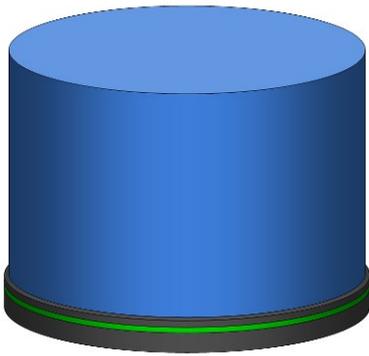
1.1.2 Strip Products Coil on cradle

- Coils under 10 ton and supplied on cradles can be returned on the cradle as long as coil fits tightly between the triangular runners on the cradle.
- The coil should be attached to the cradle with a minimum of two bands.

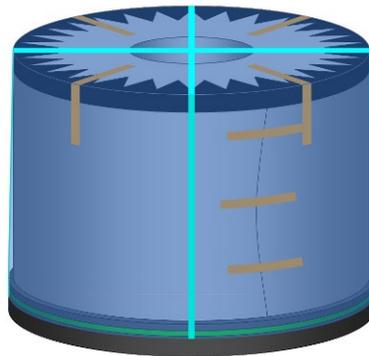
1.1.3 Packaging Bore Vertical Coil (ETTS)

The return packaging/method depends upon the current state of the coil.

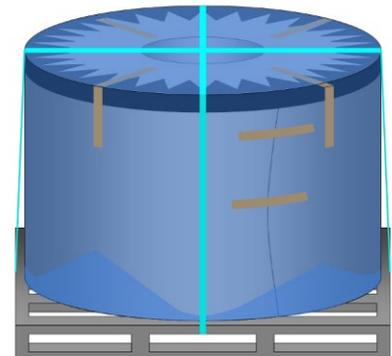
- A Bore Vertical (ETTS) coil that has not been unpacked and not removed from the skid/pallet can be returned in its original packaging.
- A coil which has been unpacked but not removed from the skid/pallet can be returned on the same skid/pallet, but the coil must be secured onto the pallet using two bands which cross at the top of the coil (as seen in Section 3.1)
- A coil that has been removed from the Tata Steel plastic skid cannot be returned on a plastic skid. If the coil is to be returned bore vertical it must be placed on a metal or wooden pallet that has been specially designed for these loads.
- Coils that have a sheet width that is greater than 1.5 times the coil diameter must be returned bore horizontal.



Coil still in original packing

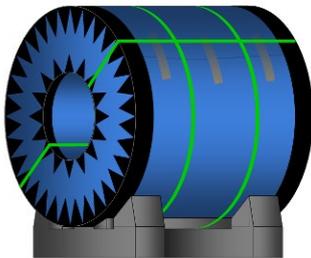


Coil on plastic skid but with original packing removed.

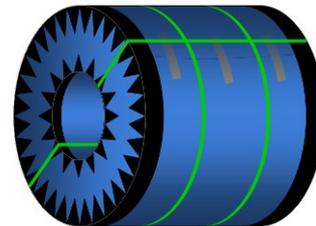


Bore vertical on special steel or wooden pallets.

1.1.4 Packaging Coil Bore horizontal



Bore horizontal on coil cradle.

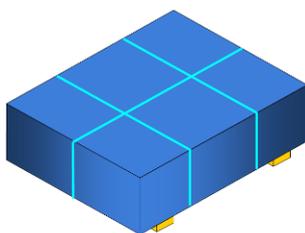


Bore horizontal in coil well trailer

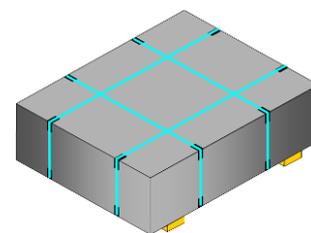
1.1.5 Packaging Coil Sheet packs

The return packaging depends upon the current state of the Sheet Pack.

- Sheet packs that have their original steel packaging can be returned in the same manner that they were received.
- Sheet packs that are no longer in the steel packaging must have at least two bands in each direction to make the pack into a unit load.



Sheet packs with steel packing



Sheet packs without steel packing

1.2 Packing materials

If available paper or plastic sheeting should be used to protect the coil during the return process.

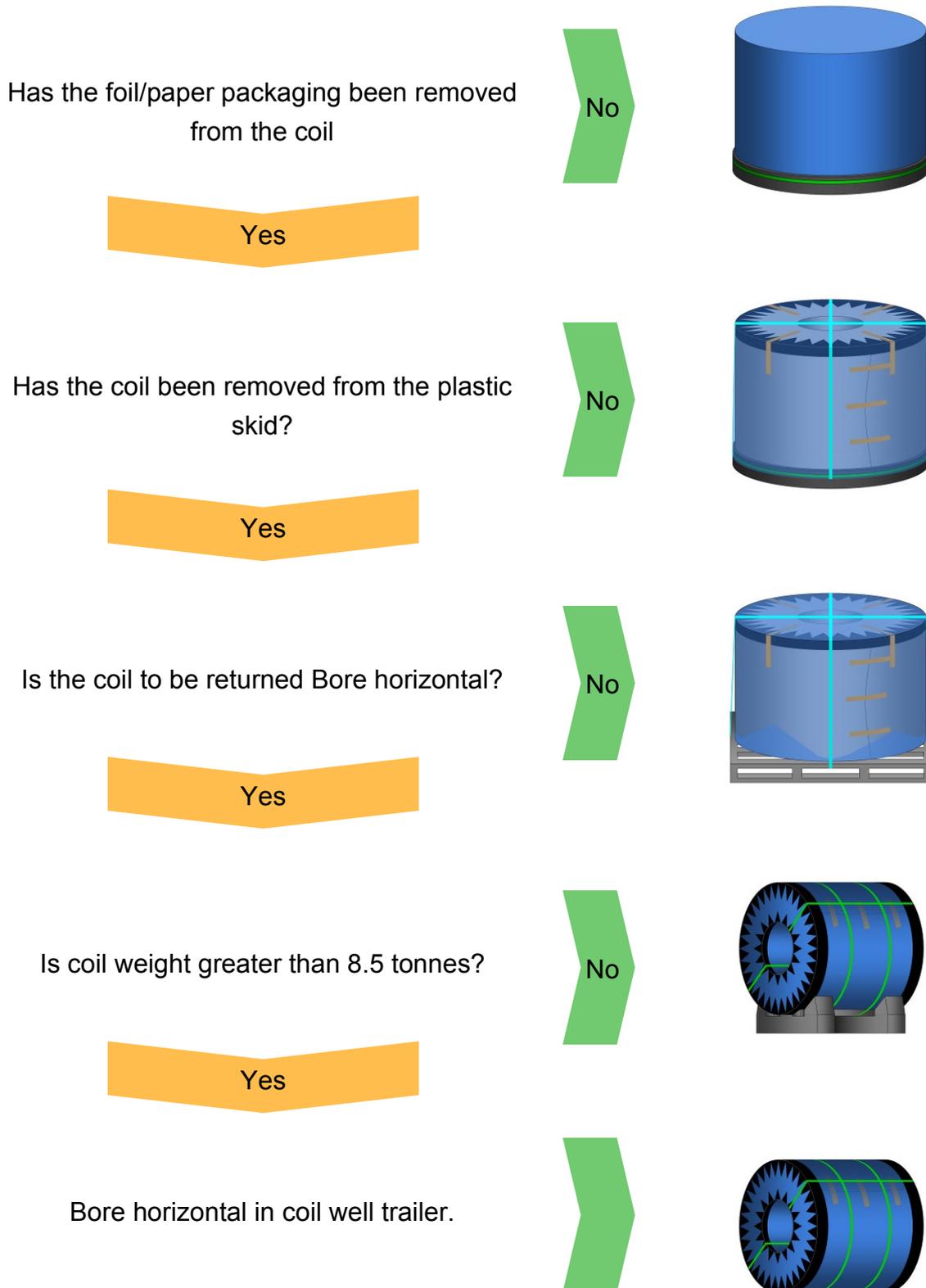
Wooden or steel pallets used to transport the ETTS coils must incorporate a raised boss which fits inside the bore of the coil and also be strong enough to support the weight of the coil.

Wooden bore vertical pallets or plastic bore horizontal cradles can be requested from Tata Steel to use when returning a coil.

The edge protection is essential to protect the securing equipment during transportation. The banding to be applied to the coils both vertical and horizontal hold this edge protection in place in case of emergency stops/avoidance manoeuvres.

1.3 Which packaging method for coils

The following table helps in choosing the correct packaging for the coil to be returned to Tata Steel:



2. Packing processes

2.1 Coil Bore Vertical

2.1.1 In original packing

Coils that are still in their original packaging and have not been removed from the Tata Steel Plastic Skid or Special Wooden Pallet can be returned without further alterations.

2.1.2 On a Tata Steel plastic skid

In order to return a coil on a Plastic skid the following requirements **MUST** be met.

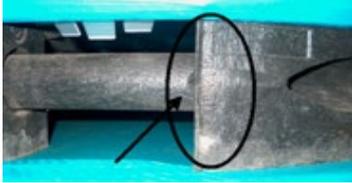
- 1) Appropriate skid type (size) for the actual measured coil diameter.
- 2) Correct connection between pin and hole.
- 3) Contact between the coil and both halves of the plastic skid.

The coil diameter determines the skid type. The skid used in relation to the coil diameter differs depending on the source of the coil. It should be checked that the combination of coil diameter / pallet type matches one of these two lists in the table below. The measured coil diameter must be used to determine if the coil is mounted on the correct plastic skid.

Skid type	Coil diameter IJmuiden	Coil diameter Trostre
A	941 mm - 1016 mm	940 mm - 1016 mm
B	1017 mm - 1130 mm	1017 mm - 1139 mm
C	1131 mm - 1270 mm	1140 mm - 1279 mm
D	1271 mm - 1420 mm	1280 mm - 1429 mm
E	1421 mm - 1592 mm	1430 mm - 1579 mm
F	1593 mm - 1700 mm	1580 mm - 1761 mm

Pin-hole connection is good when the pin is in the hole and the sloping side of the pin is not visible between the two halves of the pallet.

Sloping side visible
Not OK



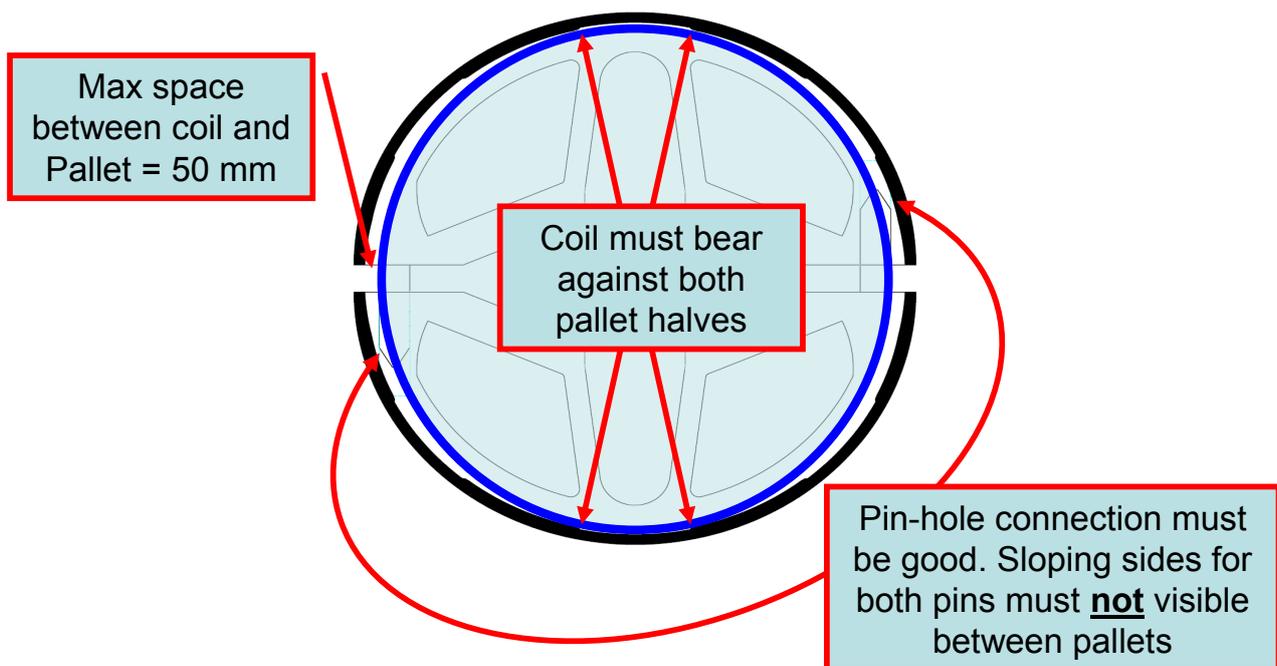
Sloping side not visible
OK



The pin/hole connection can not be used to indicate if a correct size of skid has been applied.

Coil must touch both halves of the pallet

- Both halves of the pallet must touch the side wall of the coil.
- The space between the coil and the pallet at the pin-hole connection should never be more than 50mm. When you see a gap bigger than 50mm, it can be that a wrong pallet size has been used, or the pallet is improperly applied.

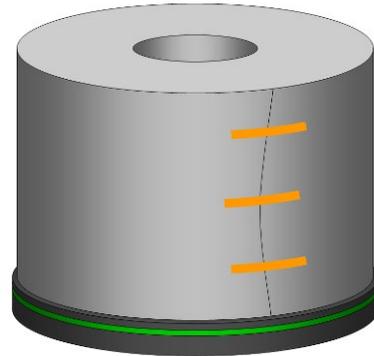


Additional comments by NORM: Parallelism.

- In principle both pallet halves should be parallel to each other, that is to say, the space at the pin-hole connection between the pallet halves must be equal on both sides. A degree of none parallelism is acceptable if the above criteria are met. However, applying the pallet halves becomes more critical at the end of the diameter range; the sloping side of the pin-hole connection must never be visible.

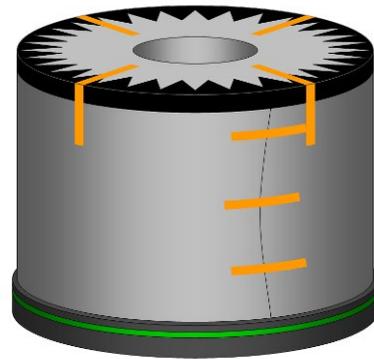
Coils that have not been removed from the plastic skid are to be packed as procedure below.

1. Secure the end flap of the coil by tape to prevent the coil unwinding.

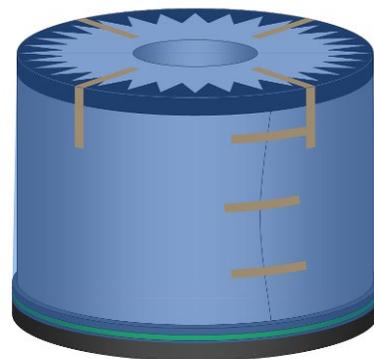


2. Always apply a full ring of corner protection onto the upper edge of the coil.

Secure the edge protector directly onto the coil using pieces of tape.

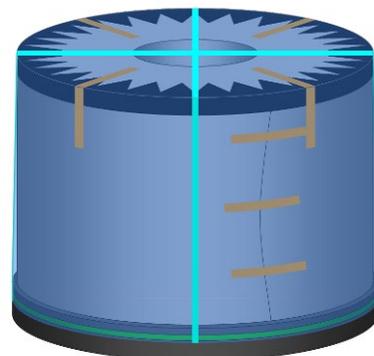


3. If possible wrap the coil in either paper or foil to protect the coil during transport. The old packing material may be used for this.



4. Secure the coil onto the pallet using two banding crossing at the top of the coil.

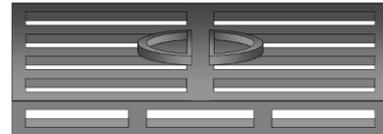
The coil is now ready for transportation.



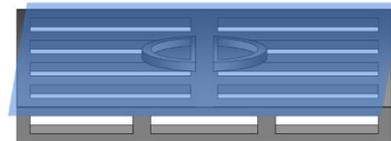
2.1.3 On a steel or wooden pallet

The following shows the steps that should be taken to ensure that a ETTS coil can be returned in a safe manner whilst protecting coil against damage.

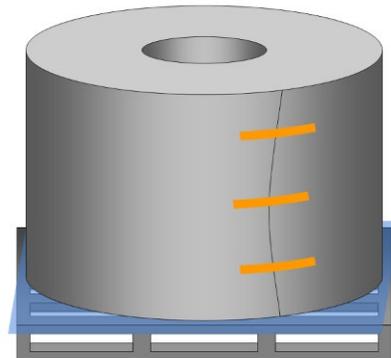
1. A pallet is to be used that has a boss which fits within the bore of the coil. The pallet must be suitable for the weight of the coil to be returned. Steel and hardwood pallets are suitable for this.



2. If possible place a layer of paper or foil over the pallet to protect the coil from moisture and dirt from below.

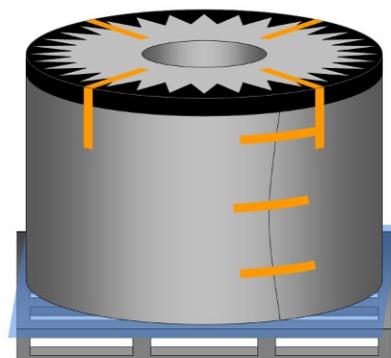


3. Place the coil on the pallet ensuring that the boss is located fully in the coil bore. The end flap of the coil should be secured by tape to prevent the coil unwinding .



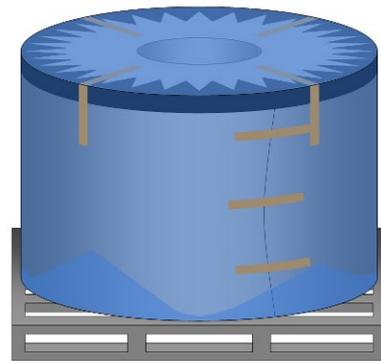
4. Always apply a full ring of corner protection onto the upper edge of the coil.

Secure the edge protector directly onto the coil pieces of tape.



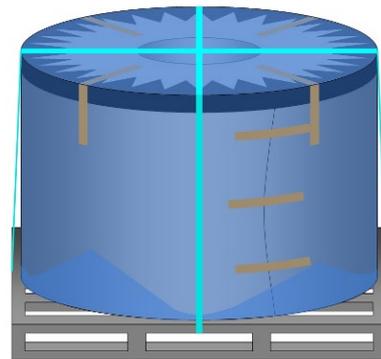
5. If possible wrap the coil in either paper or foil to protect the coil during transport.

The lower sheet of packing should be inside the upper sheet.



6. Secure the coil onto the pallet using two bands crossing at the top of the coil.

The coil is now ready for transportation.



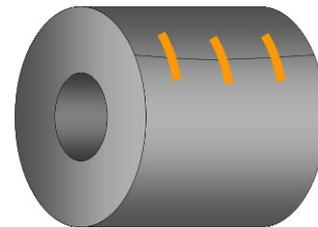
2.2 Bore Horizontal

2.2.1 Bore horizontal on a plastic or wooden cradle

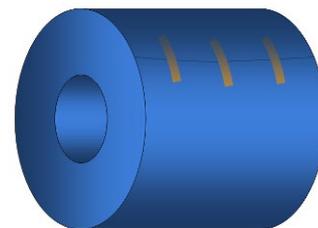
Bore horizontal coils to be returned on a cradle are to be packed as in the steps below: This method can be used for coils up to 8.5 tonnes.

Hands and arms should not be placed in the bore of the coil during these steps as part use and handling of a coil could lead to shape instability.

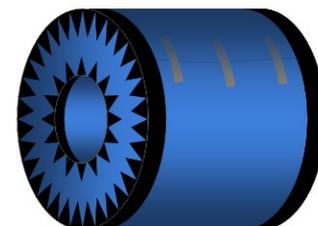
1. The end flap of the coil should be secured by tape to prevent the coil unwinding.



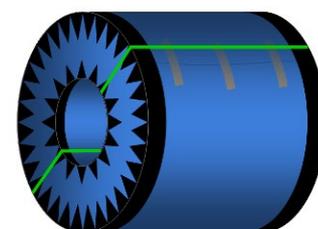
2. If possible wrap the coil with foil or paper to protect the coil against moisture and or dirt.



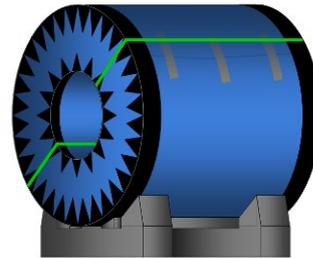
3. Apply edge protection on the bore and the outside edge of the coil.
Should it not be possible to apply a full protection ring to the outside of the coil then a half ring applied to the upper half is sufficient.



4. Apply bore bands to hold the edge protection in place and to prevent telescoping of the coil.

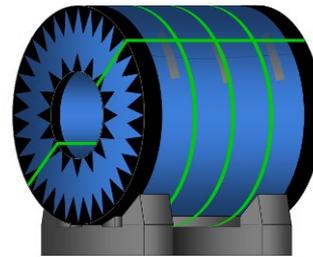


5. Place the coil on the cradle to be used for transportation.



6. Apply three bands around the coil and the cradle, so fixing the coil to the cradle.

The coil is now ready for transportation.

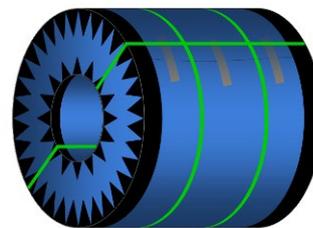


2.2.2 Bore Horizontal in a coil well trailer.

Should the coil be returned using a coil well trailer then the coils should be packed following steps 1- 4 of the 'Bore horizontal on a plastic or wooden cradle' method (section 2.2.1) finishing with the steps below. Packaging edge protection not necessary for some products

Apply two circumferential bands.

The coil is now ready to be transported in a coil well trailer.

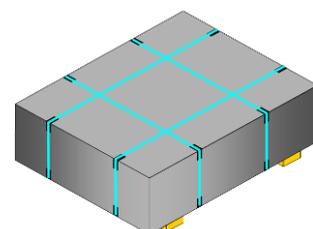


2.3 Sheet packs

Sheet packs that cannot be returned in their original packaging should be returned on suitably sized pallets rated for the weight of the sheets.

Apply two bands in both directions binding the sheets to the pallet.

Edge protection under the bands should be used as required.



3. Load securing

The document 'Road Standards Restraint Guidelines' describes how Tata Steel products described in this document should be secured in preparation for road transport.

These guidelines can be found at the following address: -

<http://www.tatasteel.nl/veiligheid/en/Regulations/Transport-and-logistics/road-standards.html>

<http://www.tatasteel.nl/veiligheid/en/Regulations/Transport-and-logistics/road-standards.html>

4. Checklist

To be use by driver and loading personnel to ensure that product is suitable for transportation in a safe manner. Should it be found that the product does not meet the criteria below the load may be refused.

General

Is the material presented in one of the packaging styles as shown in this document?

Is the edge protection applied as in this document?

Bore vertical

If using the original Tata Plastic skid: -

Has the correct sizes skid been applied for the measured diameter of the coil

Are the pin chamfers fully located into the hole on the other half of the skid, i.e. not visible between skid halves?

Do both halves of the skid touch the coil with a maximum of 50 mm between the coil and the ends of the skid.

Is the circumferential band in place holding the two halves of the skid together?

For bore vertical coils is the edge protection taped onto the coil (not onto loose packing material)?

Is the coil secured onto the skid/pallet using two crossing bands?

Bore Horizontal on cradels

Is the pallet rated to accept the weight of the coil?

Is the coil secured onto the coil using bands?

Sheet packs

Are the required number of bands applied to the sheet pack?

Are the sheet bonded onto the pallet using the banding applied?

5. Document Control

5.1.1 Responsibility

Carriers are responsible for providing safe and damage-free transport. This document describes the minimum requirements. It does not relieve carriers from responsibility for taking additional measures as he may deem necessary. Carriers retain full liability.

5.1.2 Application

These standards apply for all road transports departing in Europe under responsibility of or ordered by Tata Steel Strip Products and Tata Steel Packaging

These standards also apply for all road transports outside continental Europe when agreed so with the service provider.

5.1.3 Standards

The load restraint methods and guidelines described in this document are designed to be compliant with the forces as specified in EN12195-1: 2010 and VDI 2700.

5.1.4 Publication method

The Quality and Transport Safety Department (QTS) of Tata Steel Supply Chain Europe, Outbound is charged with the publication of the Outbound Road Standards.

QTS will maintain a record of the publication of the controlled copies so that amendments can be made in all relevant departments.

The current version of the Outbound Road Standards will be available on a Tata Steel internet site anytime on the URL: <http://www.tatasteel.nl/veiligheid/en>.

Under Regulations > Transport en logistics > Road Standards.

5.1.5 Validity

This document remains valid up to and including the 31st October 2021, but can be amended when necessary.

5.1.6 Archive

Records of the Road Standards will be archived for at least 3 years.

Authorisations will be archived until they are replaced by a new authorisation about the same piece of the Road Standards.

5.1.7 Authorisation

QTS will consult and inform all relevant departments and the forwarder when intending an alteration.

QTS will present every amendment to the QTS Manager for authorisation.

5.1.8 Overview of changes

Terminated

- No sections terminated.

Changed

- Banding strength included for plastics strapping on none Spring Back Strip Products coils (1.1.1)
- Safety information added (2.1.1)
- Tata Steel Trostre data added to skid selection matrix (2.1.2).
- Text regarding application of edge protection amended (“Always” added) (2.1.2)
- Text regarding application of edge protection amended (“Always” added) (2.1.3)

New

- No new sections added.