

# LOAD RESTRAINT GUIDELINE

## Slit coil bore vertical

### 1. This guideline applies to:

- Slit coil bore vertical loaded on timbers or on pallets.
- Product finish: pickled and oiled, galvanised, cold rolled, hot rolled and aluminised.
- Packaging: Bare coils, VCI wrapped, shrink wrapped, plastic wrapped timbers.

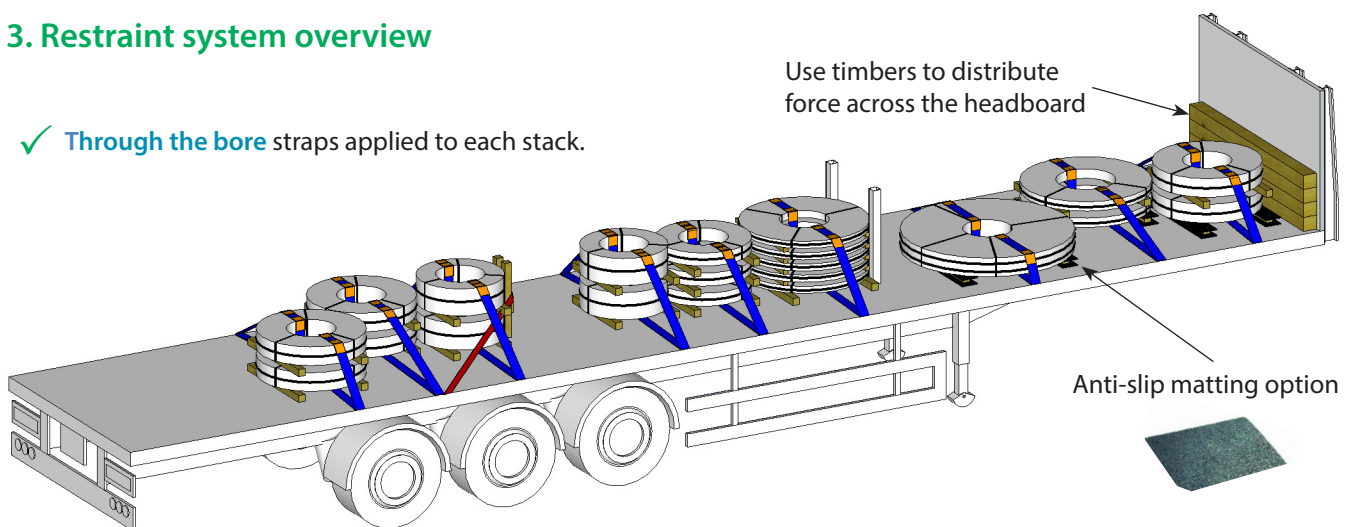
Note: The lowest friction factor determined as per EN 12195-1:2010 Annex B.1.2 is  $\mu=0.39$

### 2. Essential requirements

- All restraints must be webbing straps compliant with EN 12195-2, minimum lashing capacity of 2000 daN.
- Lashing points must have minimum lashing capacity of 2500 daN.
- Edge protection must be used on all sharp edges.
- Load must not exceed the width of the trailer, if necessary coils can be staggered down the trailer length.
- Each slit coil must be securely banded to prevent unwinding.
- Weight limits for individual stacks and groups of coils must be observed.
- Dimensions for individual stacks must be observed.

### 3. Restraint system overview

- ✓ **Through the bore** straps applied to each stack.



- ✓ Anti-slip matting can be used in order to improve friction throughout the load.

*This Load Restraint Guideline has been designed and tested to meet the forces for road and sea transport as stated in EN 12195-1:2010 and VDI 2700.*

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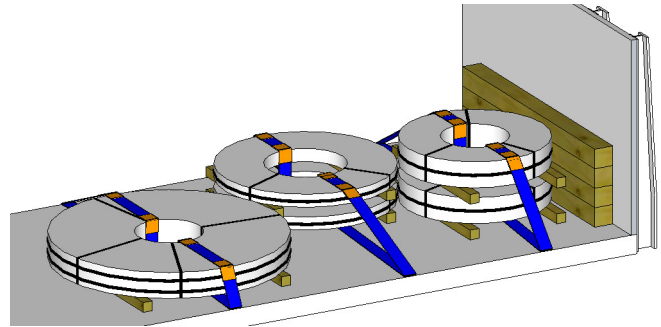
### 4. Blocking options

**Note:**

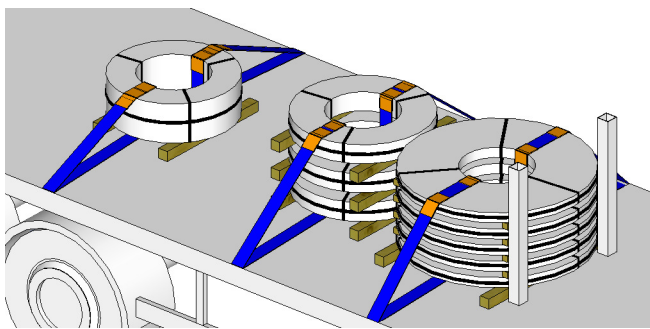
Maximum weight of each stack (or 2 stacks combined if loaded side by side) when coils are blocked against forward movement is 6 tonnes.

#### 4.1 Blocked against the headboard

Headboard capacity	Maximum weight loaded against the headboard
XL standard	Full payload
10 tonnes	24 tonnes
5 tonnes (L standard)	12 tonnes



#### 4.2 Blocked against the stanchions



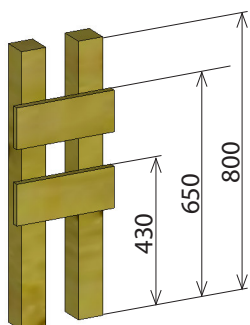
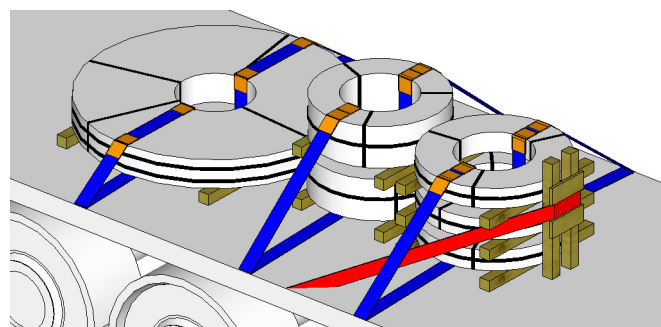
Maximum stack height	Maximum weight per pair of posts
500 mm	12 tonnes
600 mm	11 tonnes
700 mm	10 tonnes
800 mm	9 tonnes
900 mm	8 tonnes

✓ Posts used for blocking must be in good condition.

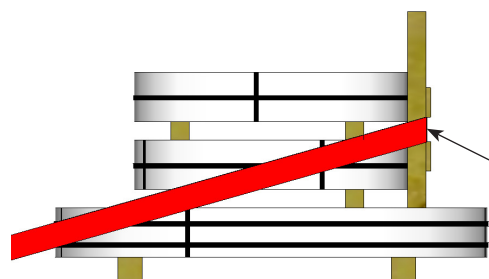
✓ Minimum size in S355 steel 80 x 80 x 4.

#### 4.3 Restraint with direct lashing

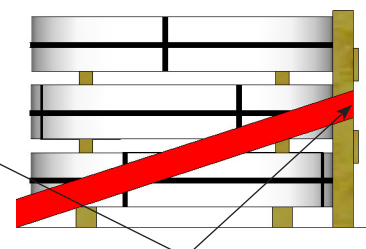
- ✓ Maximum **10 tonnes** per direct strap.
- ✓ Wooden frames or blocks must cover full height of the stack and prevent strap from sliding down.
- ✓ Use edge protection or additional wooden frame to prevent contact between straps and sharp edges.



Example of H frame.  
Dimensions may differ.



✓ When different diameter coils are mixed in the stack **minimum** of 1/3 of total stack weight must be blocked by H frame.



✓ Direct lashing must be applied around the centre of stack of coils.

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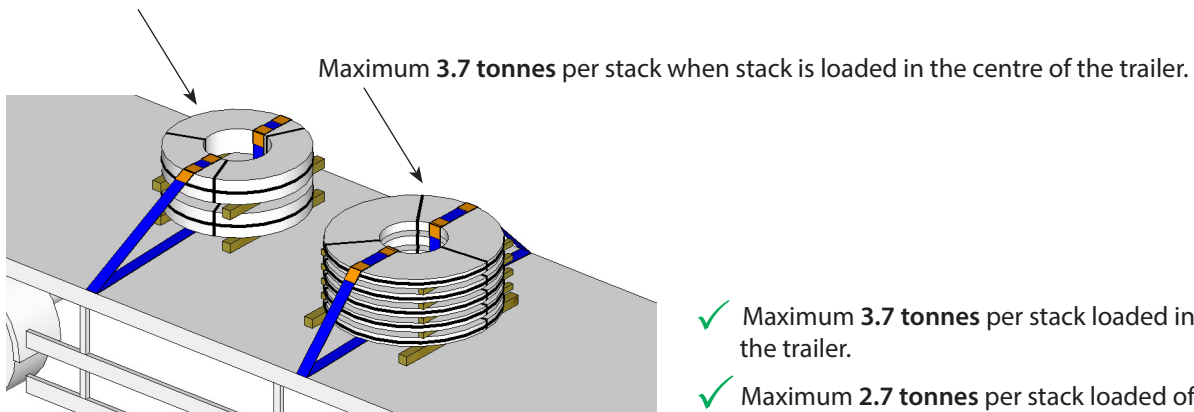
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### 5. No blocking option



When coils are not blocked weight limit per stack must be reduced.

Maximum 2.7 tonnes per stack when stack is loaded off-centre.

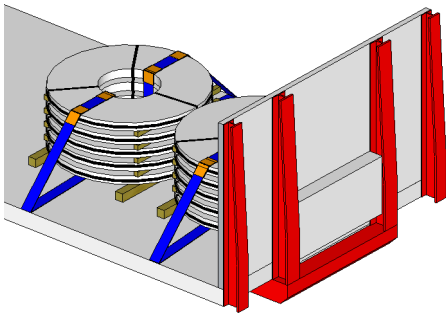


- ✓ Maximum 3.7 tonnes per stack loaded in the centre of the trailer.
- ✓ Maximum 2.7 tonnes per stack loaded off-centre.

**Note:**

Maximum combined weight of 2 stacks loaded side by side is 3.7 tonnes.

### 6. Headboard requirements



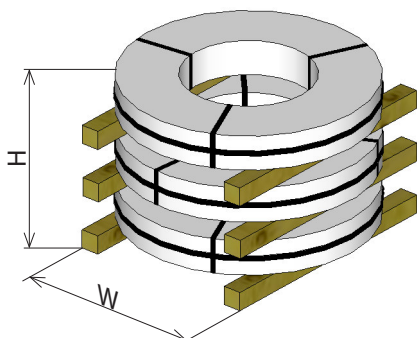
When trailer headboards are used as part of the load restraint system they must be capable of providing adequate blocking force. For more information refer to Technical Information Sheet TIS-0010 Trailer Headboards.

Trailers with headboards rated to EN 12642 code XL will provide up to 13.5 tonnes of blocking force and will therefore, be suitable for blocking a full load of Slit coil bore vertical.

Typical plaque on a trailer manufactured to EN 12642 code XL.

Fahrzeugaufbau entspricht	<b>EN 12642-XL</b>
Voertuigopbouw voldoet aan norm	
Vehicle body in compliance with	2008
LAG TRAILERS N.V.	

### 7. Stack dimensions requirements



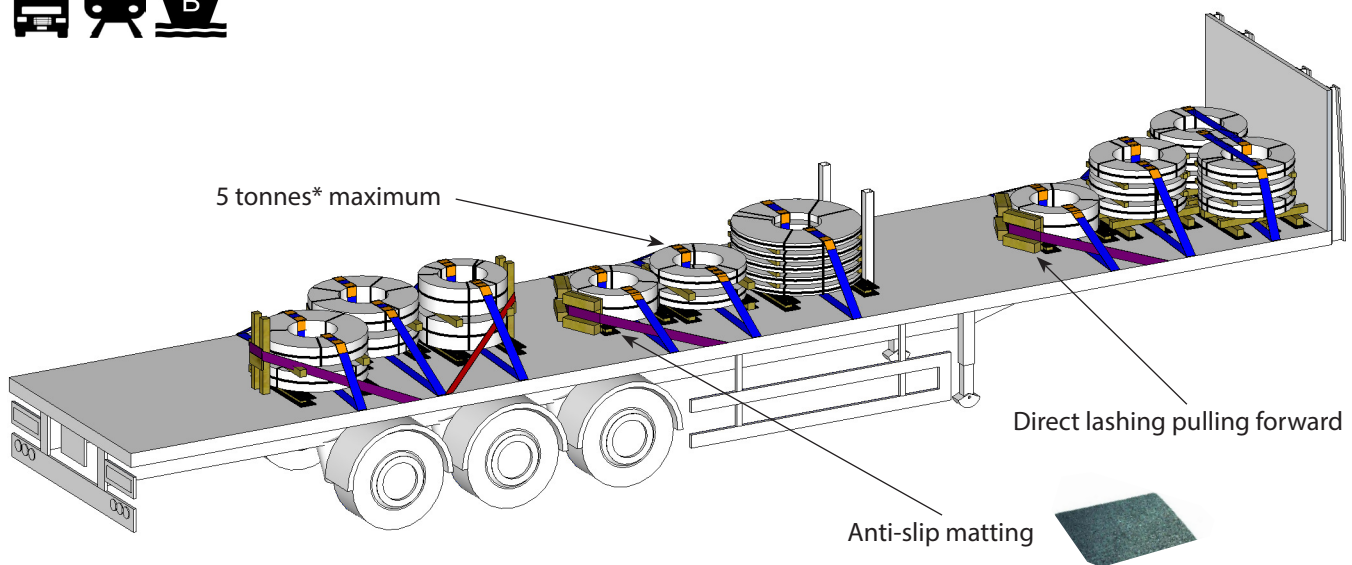
- ✓ Total height (H) must be less than 900 mm.
- ✓ Total height (H) must be less than timber span (W).

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### 8. Export loads

- ✓ Anti slip-matting positioned on both sides of base timbers.
- ✓ Anti slip-matting positioned between pallets and trailer deck.
- ✓ Anti slip-matting applied throughout the stack unless coils are securely banded to the pallet or to each other when loaded on timbers.
- ✓ Weight limit for single stack (or 2 stacks combined if loaded side by side) secured **through the bore** is 5 tonnes.
- ✓ Each group of coils secured against rearward movement by **direct lashing** pulling forward.

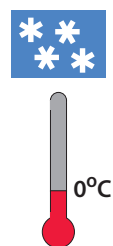


\* Anti-slip matting must be applied throughout the stack or coils must be securely banded to each other.

### 9. Winter weather UK and export loads

During severe winter weather advisory periods when the air temperature is below 0°C and there is a risk of frost, ice or snow the following restraint system must be used for all loads:

- ✓ Anti slip-matting positioned on both sides of base timbers.
- ✓ Anti slip-matting positioned between pallets and trailer deck.
- ✓ Anti slip-matting applied throughout the stack unless coils are securely banded to the pallet or to each other when loaded on timbers.



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