

LOAD RESTRAINT GUIDELINE



L LRG 0104 Bar in Coil (Approx 2t & 3t coils)

Once printed this document is an **uncontrolled copy**. The live document is stored digitally on the Shipping and Transport Sharepoint site.

Gun Barrel Configuration

Partial	UK	Export
✓ *	✓	✓

Key: ✓ = Covered in this document

✗ = Not permitted

LLRG... = See referenced LLRG

* = Partial load restraint is covered for normal gun barrel loads but not for export or unstable loads.

1. This guideline applies to:

- Bar in coil.

2. Essential requirements

- All restraints must be webbing straps compliant with EN 12195-2, minimum lashing capacity of 2000 daN.
- Edge protection must be applied to webbing straps at all sharp or abrasive edges, including trailer chassis frame and side rails.
- Each coil must be securely banded.
- Sufficient timber chocks must be used to prevent rolling.
- Trailers must be clear of debris, snow and ice.

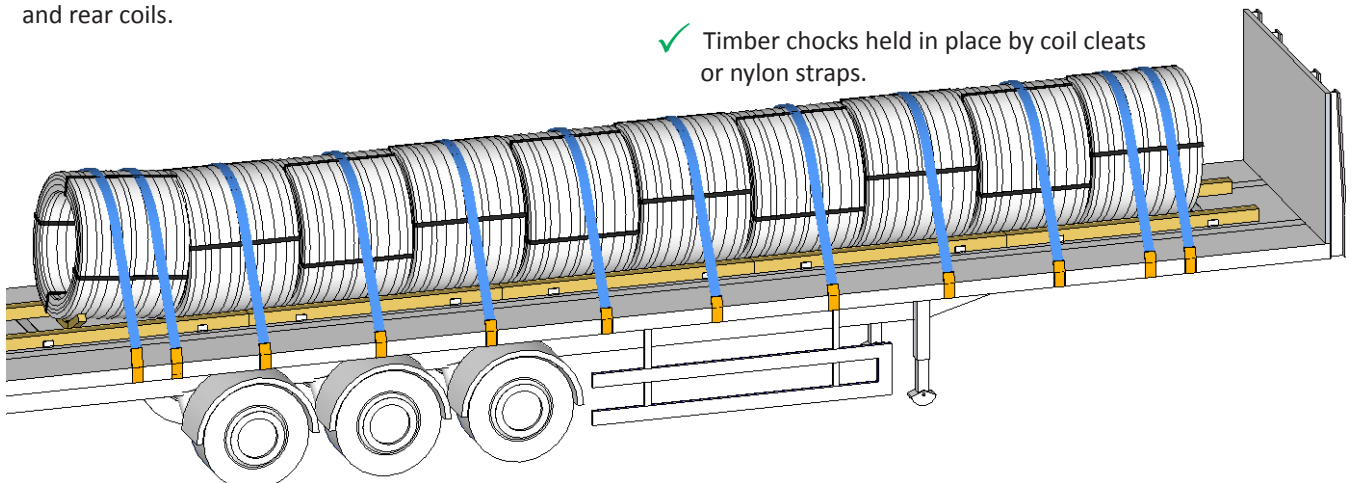


Note: Following a heavy braking event coils may compact together, causing restraints to lose tension. Check and re-tighten restraints as necessary en route.

3. Overview of different strapping arrangements

3.1 Gunbarrel loads - road transport UK only

- ✓ Each coil restrained with an over the top strap.
- ✓ Minimum 2 over the top straps applied to front and rear coils.
- ✓ Coils loaded on timber chocks.
- ✓ Minimum 12 over the top straps applied to the load.
- ✓ Timber chocks held in place by coil cleats or nylon straps.



This Load Restraint Guideline is designed and tested to meet the forces specified in EN 12195-1:2010 and VDI 2700 for road and sea transport.

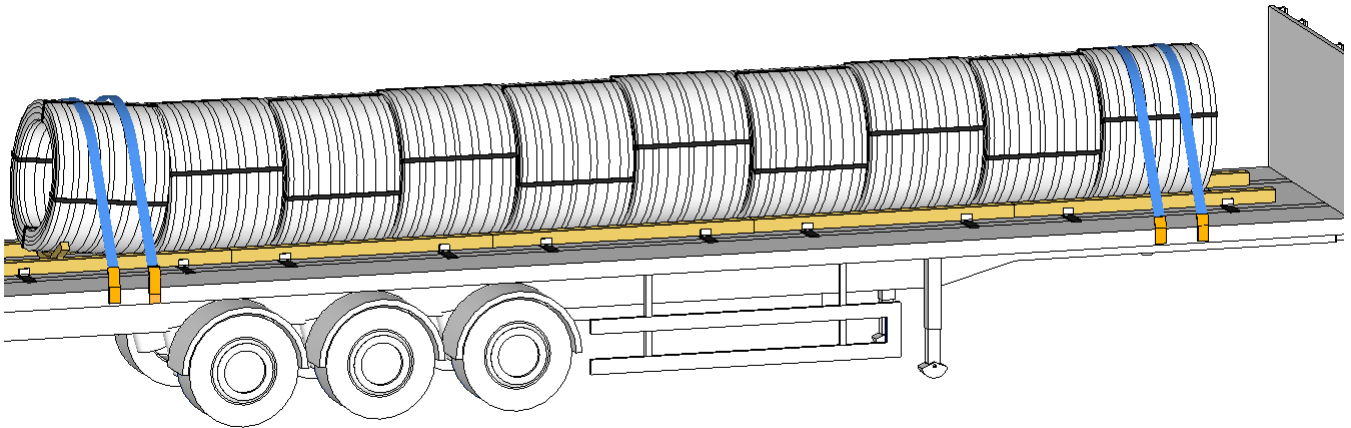
1. This Section of the Document applies to:

- On-site transport of banded bar in coil from the mill despatch bay to the load securing area at the trailer park.
- It covers bar in coils loaded gun-barrel down the centre of flat bed trailers with engineered headboards.

It excludes all off-site transport and on-site transport movements above 20 mph.

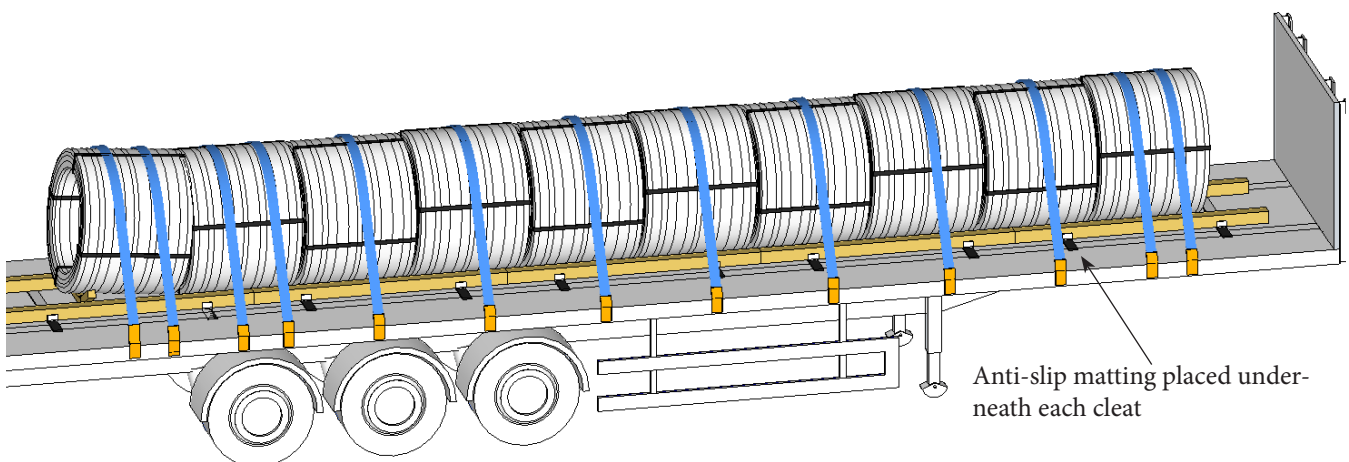
It excludes all transport on curtain-sider vehicles.

- ✓ 120 mm square base timbers in steel cleats. Cleats on anti-slip rubber.
- ✓ Cross timber under last coil.
- ✓ Front and rear coil strapped down with two over the top straps.



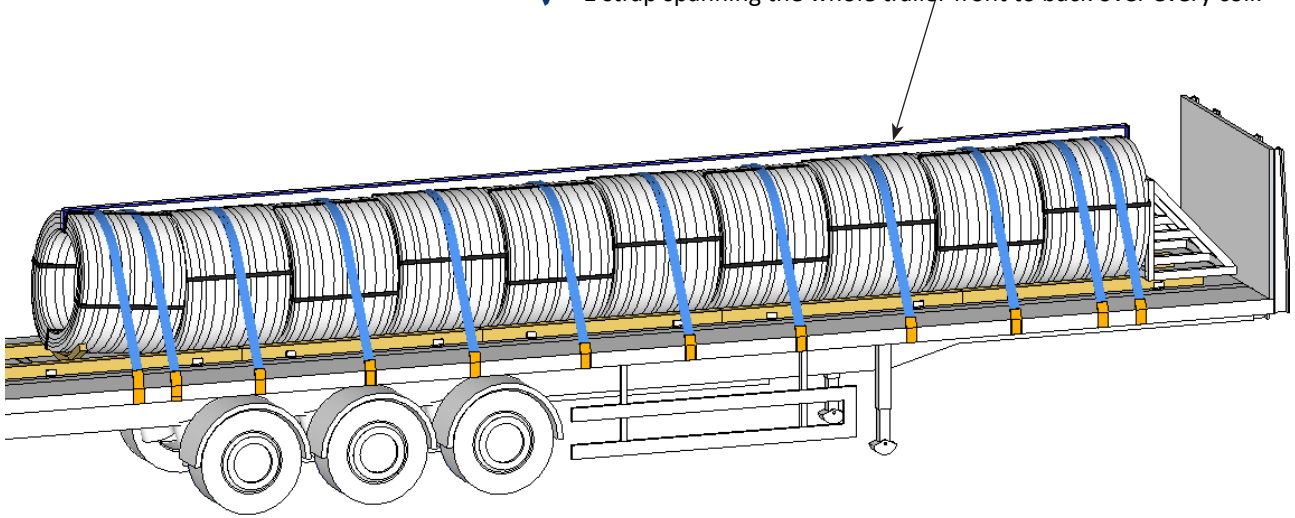
3.3 Gunbarrel - UK Winter

When the Severe Winter Weather Warning is in force anti-slip matting must be placed underneath each cleat.

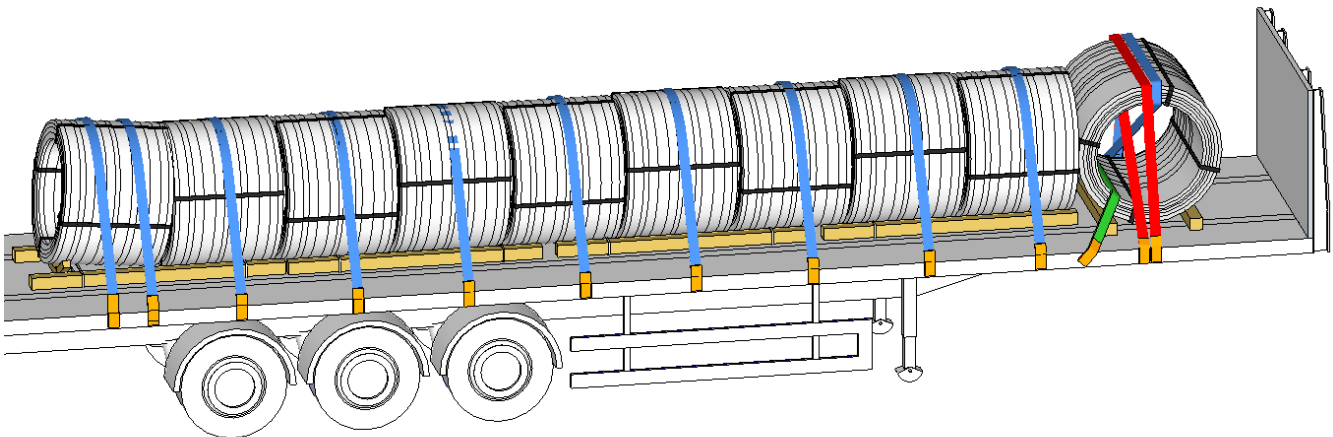


3.4 Gunbarrel UK Unstable (Heat-Treated Coils)

- ✓ Loaded against headboard or A-frame.
- ✓ Coils placed on timber chocks minimum 100 x 100 square section
- ✓ Front and rear coil restrained with 2 over-the-top straps.
- ✓ 1 strap spanning the whole trailer front to back over every coil.



3.5 Gunbarrel - Export (EU) and intermodal



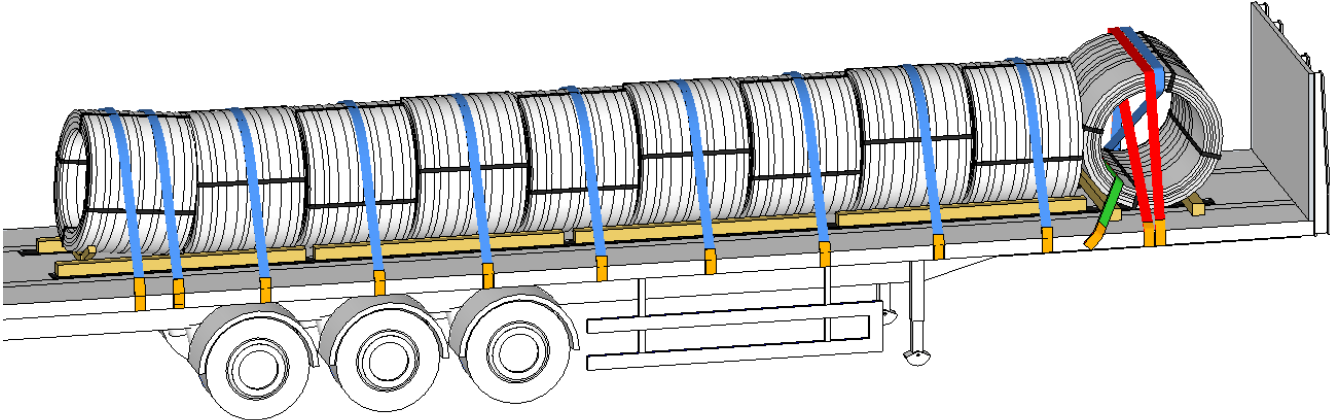
- ✓ Coils placed on timber chocks. *
- ✓ Timber chocks held in place by coil cleats or nylon straps.
- ✓ Direct lashings applied to front coil.
- ✓ Each coil restrained with an over the top strap.
- ✓ Opposing loop straps applied to front coil.
- ✓ 2 over the top straps applied to the rear coil.



Note:

**For export loads apply anti-slip matting under timber chocks.*

3.6 Gunbarrel - Export (EU) and Intermodal Winter

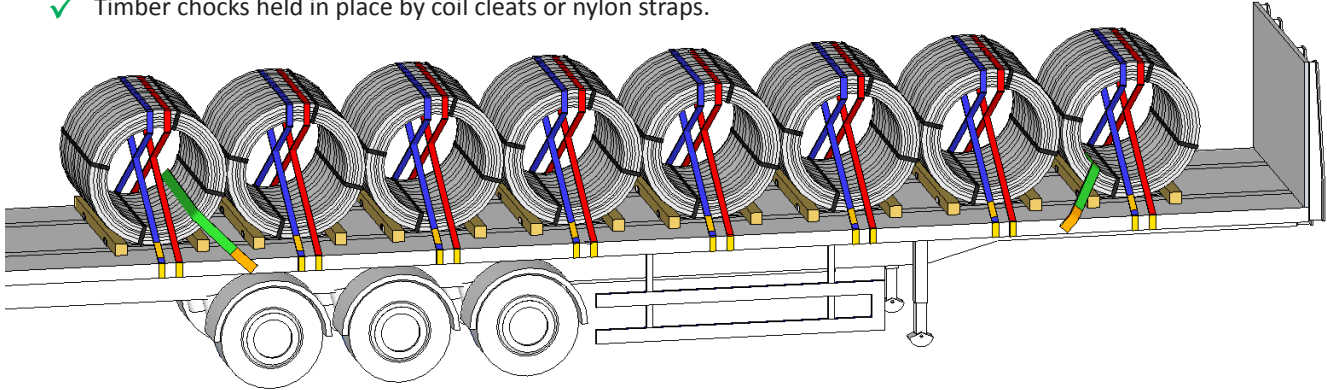


When the Severe Winter Weather Warning is in force anti-slip matting must be placed underneath each timber.

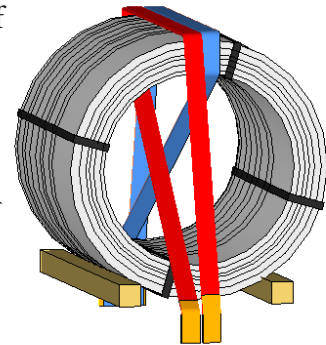
Eye to the Side Configuration

4.1 Eye to the Side loads - road transport UK only

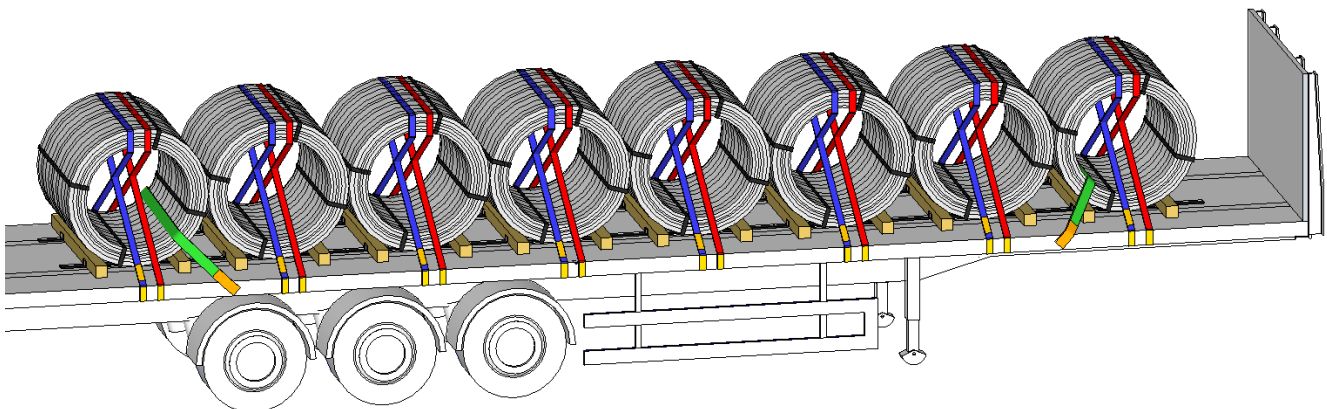
- ✓ 2 belly-wraps on each coil, ratcheted on opposing sides (one on the left and one on the right of the trailer)
- ✓ Direct lashings applied to front and rear coil.
- ✓ Coils loaded on timber chocks
- ✓ Timber chocks held in place by coil cleats or nylon straps.



Opposing loops can also be used in place of belly-wraps

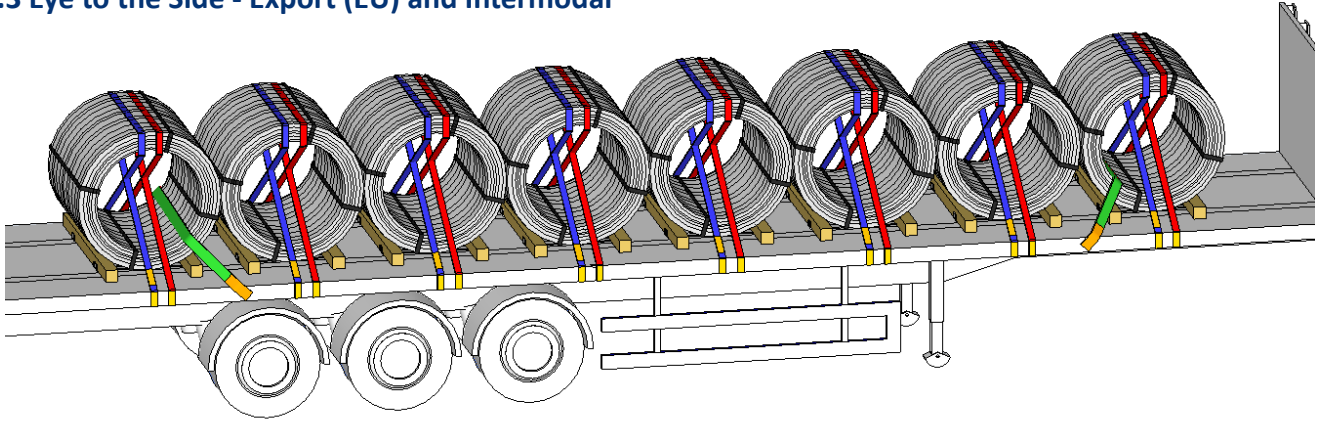


4.2 Eye to the Side - UK Winter



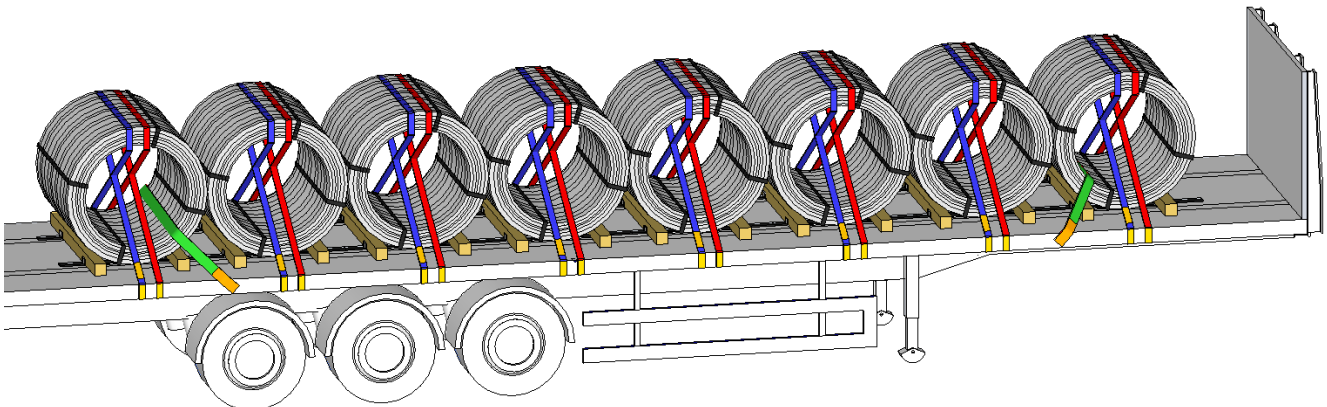
When the Severe Winter Weather Warning is in force anti-slip matting must be placed underneath each cleat.

4.3 Eye to the Side - Export (EU) and Intermodal



- ✓ Direct lashings applied to front and rear coils.
- ✓ Coils loaded on timber chocks.
- ✓ 2 belly-wraps applied to each coil. Opposing loops are also permissible.
- ✓ Timber chocks held in place by coil cleats or nylon straps.

4.4 Eye to the Side - Export Winter



When the Severe Winter Weather Warning is in force anti-slip matting must be placed underneath each cleat.