

TECHNICAL ADVICE DOCUMENT

Wide coil in well using Hampshire frame

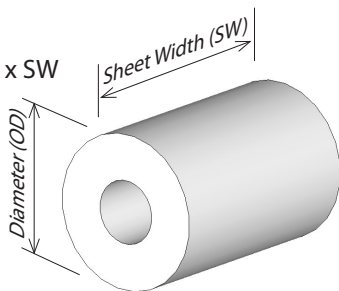
1. This Technical Advice Document applies to:

600 mm minimum sheet width
 2000 mm maximum diameter
 Sheet width > diameter/2.5

- **Wide** coils, loaded bore horizontal in a well trailer.
- Coils are classed as **stable** or **topple sensitive** based on the ratio of outside diameter (OD) to sheet width (SW).
- **Hot rolled coils** (not pickled and oiled) up to **30 tonnes**.
- **Low friction coils** up to **25 tonnes**.

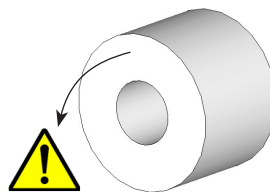
Stable

OD < 1.4 x SW



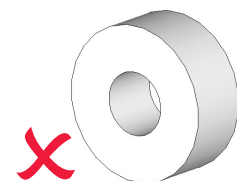
Topple sensitive

OD > 1.4 x SW



Narrow coil

OD > 2.5 x SW



Note:
 Narrow coils
 are **not** covered
 by this Load
 Restraint
 Guideline.

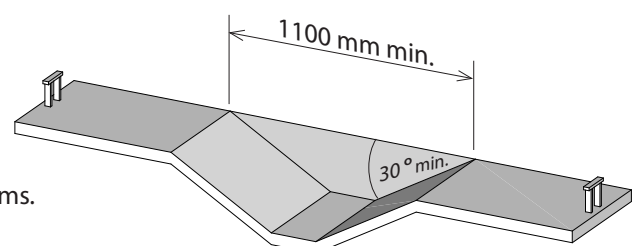
- The following coils are classed as **low friction**:
 - Coils that have been wrapped in plastic film or paper.
 - Coils that have been pickled and oiled, galvanised, painted or coated.
 - Cold rolled coils.

2. Equipment requirements

- **Frame webbing straps** must have a minimum **lashing capacity of 5000 daN** (breaking strength of 10,000 daN).
- **Over-the-top strap** must have a minimum lashing capacity of 2000 daN.
- All webbing straps must be compliant with EN 12195-2.
- All lashing points used for **frame webbing strap** must have a **minimum working load limit of 3500 daN**.
- Edge protection must be used on all unprotected sharp corners.
- Well posts must be in good condition and have a minimum moment capacity of 14.6 kNm. The following section sizes in S355 steel are acceptable: 80 x 80 x 5; 90 x 90 x 4; 100 x 60 x 5; 100 x 100 x 3.6; 110 x 60 x 4; 120 x 60 x 3.2.
Note: Rectangular posts must be used in the strongest orientation to prevent bending.

3. Pre-loading considerations

- ✓ Well width must be a minimum of 1100 mm.
- ✓ Well angle must be a minimum of 30 degrees.
- ✓ Coil well must be dry and clear of debris and other loose items.
- ✓ Coil must be clear of well base by a minimum of 20 mm.

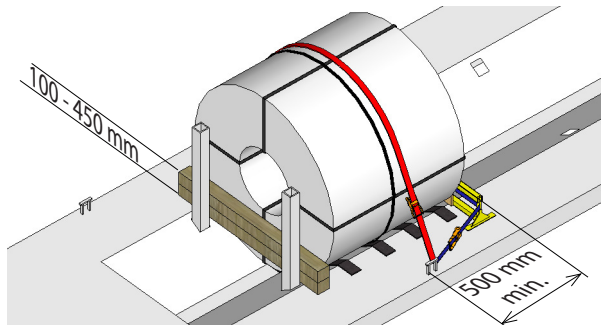


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4. Restraint system options

4.1 General restraint system



- ✓ Maximum gap of 20 mm between coil face and blocking.
- ✓ 1 strap over-the-top.
- ✓ Frame strap to be anchored a minimum of 500 mm from front and rear faces of coil.

Anti-slip matting shown for coils originating in mainland Europe.

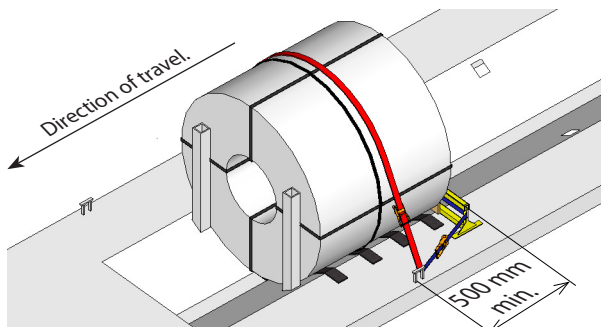
- ✓ Stable coils
- ✓ Topple sensitive

Table 1:
Minimum blocking height (mm)

Coil Outside Diameter	Minimum blocking height
1400	100
1500	150
1600	190
1700	230
1800	270
1900	300
2000	340
Max height	450

- ✓ Timber dunnage stacked between the coil and well posts - minimum recommended timber size 100 x 100 mm (nom).
- ✓ Steel well posts may be used as blocking with anti-slip matting between the horizontal faces of the steel posts.
- ✓ The **minimum** blocking height to prevent the coil from toppling is shown in Table 1. The **maximum** blocking height is 450 mm to prevent the posts from bending.
- ✓ Well boards may also be used in the upright position as a form of blocking between the vertical well posts and coil providing they do not exceed 450 mm - see TIS-0006.
- ✓ Dunnage must extend beyond outer edges of the trailer well and well posts.

4.2 Option for stable coils, and for topple sensitive coils up to 10 tonnes

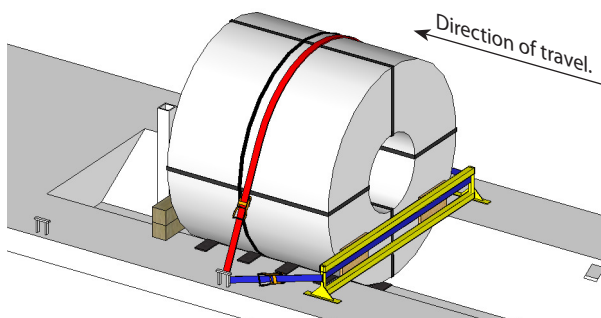


For topple-sensitive coils above 10 tonnes use Section 4.1. Weight limits for stable coils are as stated in Section 1.

- ✓ Stable coils
- ! Topple sensitive
10 tonnes max
- ✓ Place coil directly against well posts. Maximum gap of 20 mm.
- ✓ Coil diameter must extend beyond the outer edges of the well post.
- ✓ 1 strap over-the-top.
- ✓ Frame strap must be anchored a minimum of 500 mm from front and rear faces of coil.

Anti-slip matting shown for coils originating in mainland Europe.

5. Rearward blocking



- ! Frame strap must have minimum lashing capacity (LC) of 5000daN. Lashing capacity is half of breaking strength.
- ! Lashing points must have minimum working load limit of 3500 daN.

If the minimum criteria for the frame strap or lashing points are not met follow rearward restraint method from LRG-0008.

Anti-slip matting shown for coils originating in mainland Europe.

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