

Coil banding for safe handling & dispensing

When pipes are packaged into coils, Radius Systems use restraining straps around the pipe to retain the pipe's coil shape. Coils in diameters 75 to 180 mm contain a considerable amount of stored energy, which could potentially cause injury to personnel, if the coils are not handled and dispensed correctly. To allow the safe handling and dispensing of coils, Radius Systems use specialist straps, fitted at different positions around the turns and layers of pipe that form the coils. When the coil is ready to be dispensed, the straps are removed in sequence, ensuring that the energy contained in the coil is released in a controlled and safe manner. (See diagrams below and opposite).

To ensure a safe working environment during the installation of pipe coils, these should only be dispensed from specially designed coil dispensers, supplied by a reputable manufacturer.

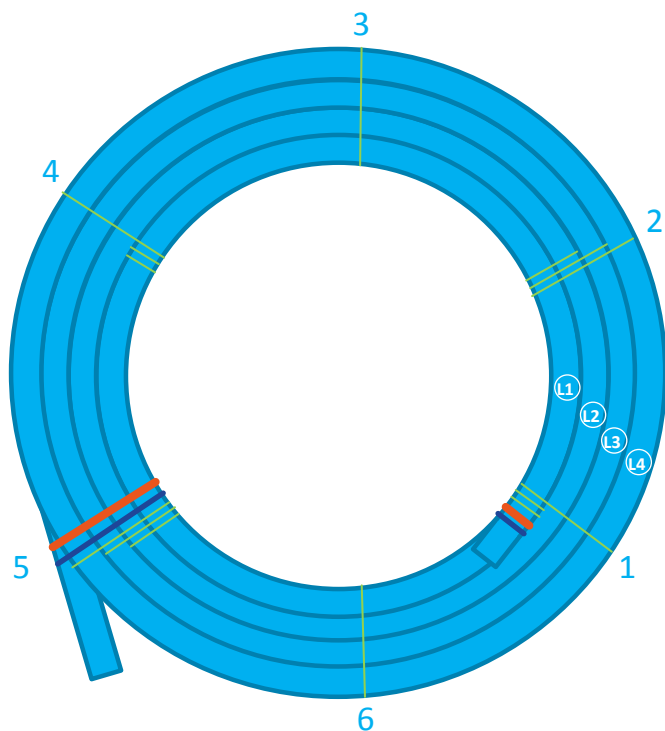
Radius Systems recommend that personnel involved in the handling and dispensing of pipe coils are adequately trained for this operation. Courses in the safe and correct handling and dispensing of pipe coils are available from industry bodies.



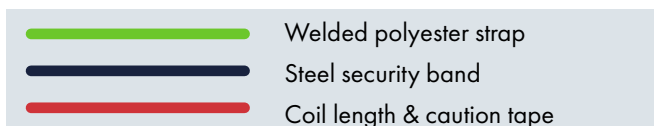
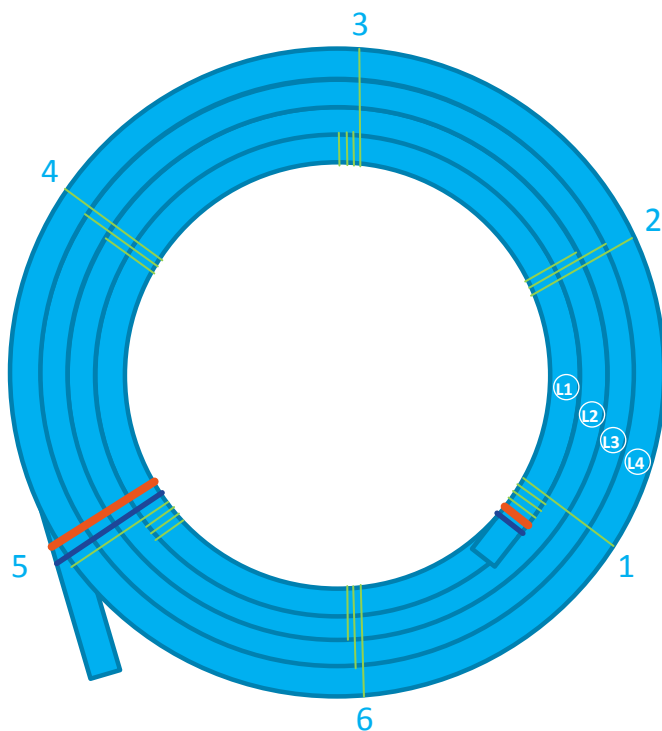
Minimum recommended personal protection equipment (PPE)

- Always wear the minimum PPE or the recommended PPE as identified by the risk assessment.
- Restrict the work area to essential personnel only.
- Always dispense coils from a coil dispenser.
- Take care when cutting the straps to release the pipe.
- Always ensure the tail ends of the coil are released in a restrained and controlled manner.
- Only use a suitable round-nosed cutting tool to cut the strap to prevent the pipe from being damaged.
- Never cut all of the restraining straps at once. Only cut the number of straps to allow the required pipe length to be dispensed.
- Ensure the tail ends of a part used coil are secured before transporting it from the site.
- Do not transport coiled pipes containing water.

● For coils with inner diameter ≤ 1.8 m



● For coils with inner diameter ≥ 2.5 m



Illustrations showing the banding positions on a 4 layer coil

Coil banding

Banding position for coils 50 to 180 mm

Coils will consist of a minimum of 2 layers and the number of layers and turns in a coil will depend on its length and may exceed the ones shown below. If the coil consists of only 2 layers, the banding sequence for the 'Final layer' applies to the coil.

Layer 1 (L1)



• Coil internal diameter ≤ 1.8 m

Steel security band* and length & caution tape are applied around turns T1 & T2 of layer 1 (L1)
Position 1

• Coil internal diameter ≥ 2.5 m

Steel security band* and length & caution tape are applied around turns T1 & T2 of layer 1 (L1)
Position 1



Not applicable

Polyester strap around turns T1 & T2 of L1
Positions 1, 3 & 5



Polyester strap
Around turns T1, T2 & T3 of L1
Positions 1 & 4

Polyester strap around turns T1, T2 & T3 of L1
Positions 1, 3 & 5



Additional turns on L1 follow the same banding sequence as above

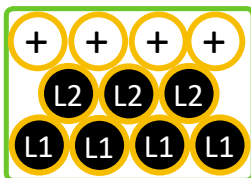
Additional turns on L1 follow the same banding sequence as above

Additional layers



Once layer 2 (L2) is completed
Polyester straps are applied around L1 and L2
Positions 2 & 5

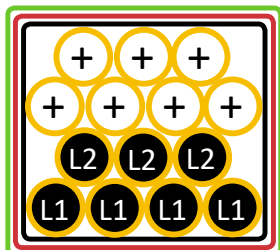
Once layer 2 (L2) is completed
Polyester straps are applied around L1 and L2
Positions 2, 4 & 6



Additional layers follow the same banding sequence as above

Additional layers follow the same banding sequence as above

Final layer



Steel security band* and coil length & caution tape are applied to the coil end.
Polyester straps are applied at all positions.

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* Steel security bands are applied to coils 75 mm and above.
Coil length + caution tape applied to 75mm+