



Packaging Information – Strapping

1. Introduction:

The development of a Transport Strapping Policy establishes minimum requirements regarding the number of trucker's straps used by all transportation providers to secure Performance Pipe products and recommend locations for strap placement. The policy also contains conditions regarding the tightening of straps after a carrier leaves a Performance Pipe facility. Performance Pipe arranged carriers and customer arranged carriers must agree to adhere to this policy. Distributors are responsible to notify each and all of their respective carriers of this policy and to make sure that those carriers understand, agree to, and comply with, this policy. Communication of this policy should begin immediately and continue indefinitely.

2. Inspection:

Plant personnel will inspect the strapping on loaded product prior to any shipment leaving a Performance Pipe facility to insure the strapping policy is being followed. Provisions within this policy shall be incorporated into the various inspection checklists used at each plant.

A list of strap vendors (truck stops, garages) in the vicinity of each plant should be kept at each plant and provided to drivers not possessing the minimum number of straps. Performance Pipe core carriers may choose to leave a box of straps at frequented plants.

Truck straps shall be a minimum of 3" wide synthetic web design. Two (2) – 2" wide straps are acceptable or one for (1) 3" or (1) 4" wide strap when enough 3" or 4" straps are not available. However a single 2" strap is acceptable for connecting vertical coils to each other at the midsection or in conjunction with (1) 3" or 4" strap for coil silos on the front and back of the truck. Each strap shall be free of tears, nicks or excessive wear. No metal components of the synthetic web truck strap may come in contact with pipe product. **The use of chain, cable or wire rope to secure pipe products to the truck is strictly prohibited, except that chains can be used to secure metal reeled product.**

3. Bundle and Bulk Pack Loading: Securing to Flatbed Trailer:

- a. The strapping policy is summarized in the strapping table.
- b. As a minimum requirement, carriers shall provide: (a) six (6) straps to secure loads consisting of one (1) layer; (b) eight (8) straps to secure loads consisting of two (2), three (3), or four (4) layers; and (c) eleven (11) straps to secure loads consisting of five (5) or more layers.
- c. A minimum of five (5) straps shall secure the load over the top layer on all bundle or bulk pack loads.
- d. Belly straps are generally placed near the middle layers of the load. The plant loading personnel and carrier shall use their judgment to determine acceptable locations of the belly straps for the given load configuration. However, full loads of greater than 18" IPS product must have a minimum of two (2) straps on each layer excluding the top layer.
- e. An effort must be made to place straps either equidistant between bottom boards or directly over bottom boards. In addition, where possible, strap ratchets should alternate between trailer sides on equipment that facilitates this procedure. A half-twist is recommended in each strap on both sides of the load to counter the effects of wind resistance that could loosen straps during transport.



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- f. Belly straps must be tightened very firmly before and after tightening top straps. Top straps must be tightly secured. Drivers must inspect and tighten straps within 50 miles of origin and again every 150 miles or every three hours, whichever comes first, during each stop, especially after sitting overnight, and whenever ambient conditions change due to rain, sleet, snow, high wind, elevation change, or anything else that results in a temperature change.

4. Strip Loading: Securing to Flatbed Trailer:

- a. The strapping policy is summarized in the strapping table.
- b. As a minimum requirement, carriers shall provide: (a) five (5) straps to secure loads consisting of one (1) layer; (b) seven (7) straps to secure loads consisting of two (2) layers; (c) nine (9) straps to secure three (3) layers and; eleven (11) straps to secure loads consisting of four (4) or more layers.
- c. A minimum of five (5) straps shall secure the load over the top layer on all bundle or bulk pack loads
- d. Belly straps are generally placed near the ends of the load. The plant loading personnel and carrier shall use their judgment to determine acceptable locations of the belly straps for the given load configuration.
- e. Strap ratchets should alternate between trailer sides on equipment that facilitates this procedure. A half-twist in each strap is recommended on both sides of the load. This will prevent wind resistance from loosening straps during transport.
- f. Belly straps must be tightened very firmly before and after tightening top straps. Top straps must be tightly secured. Drivers must inspect and tighten straps within 50 miles of origin, during each stop, especially after sitting overnight and whenever ambient conditions change due to rain, sleet, snow, high wind, elevation change, or anything else that results in a temperature change.

5. Coil Loading: Securing to Flatbed Trailer:

- a. The strapping policy is summarized in the strapping table – A.10 Pckg Exhibit 2
- b. For pallets 50” or smaller place one strap over 2 skids.
- c. For pallets 67” or larger there are two strapping options given. One is to put two straps on each side of the skid placed down the ID of the silo and down the outside of the OD. The other is to place one strap over each skid, except for the front and rear skids, which require two straps. Each silo between the front and rear skids may have one strap placed on the silo.
- d. Vertical coils may be placed on cradles or directly on the bed of truck using the strapping options given on page 2 of A.10 Exhibit 2 of the Packaging Manual.

6. Mixed Loading – Building Safe Loads and Securing to Flatbed Trailers:

- a. The strapping policy is summarized in the strapping table. (See A.10 Pckg EX2)
- b. Mixed loads can consist of any combination of bundles, bulk pack, strip load, and coil packaging. Reference should be made to the applicable sub-sections contained herein.