

## BEST PRACTICE TO TRANSPORT

### Purpose:

Maersk is committed to ensuring the overall safety of maritime transportation. Therefore, we have created this easy reference document as a step-by-step guide to book certain commodities, which is intended to support the safety of our crew at sea and shoreside, as well as safety of cargo, environment, vessels, and facilities. This Best Practice gives you the needed guidance on correct stuffing.

### Commodity:

**Steel Pipes > 2.0 mt / pipe or bundle**

**Steel Bars > 2.0 mt / bar or bundle**

### Maersk.com commodity description:

*Steel & other metal Coils, Sheets, Pipes, Bars, Tube articles with per unit weight more than 2 tons*

### Booking via other channels

*002317 Steel & other metal Coils, Sheets, Pipes, Bars, Tube articles with per unit weight more than 2 tons*

### Description and Definition:

Pipes and bars can be stuffed as singles, in customized racks, bundled or in transverse resting cradles. We accept all methods if the basic principles of safe stuffing are complied with.

### Synonyms:

Tubes, Beams, Flange, HSS profiles, CHS, SHS, RHS

### Risk:

Main risk is pipes or bars not properly secured inside the unit, and subsequently exit the door-end or end-wall by projection as a result of acceleration forces. Damage to cross-members due to exceeding point-load can also occur if not stuffed correctly.

Condensation and damage to cargo is also an associated risk.

### Stuffing Q&A:

1. *What Transportation Unit can be used?*

We accept this cargo in 20", 40", 45" standard and HC units, and Flatracks.

2. *What Transportation Unit cannot be used?*

Non-operating reefers and Refrigerated units.

3. *How are pipes safely secured for ocean voyage?*

Cargo shall be stuffed in accordance with CTU code. This includes securing for tipping, and sliding and/or rolling in longitudinal and transverse direction. Forces towards side- and end-wall shall be distributed evenly throughout the full length/width. This means:

- a) Stuffed tight towards end-wall and door-end. If gap is exceeding 10,0 cm a bulkhead to arrest the forces is mandatory.
- b) Prevented from tipping/rolling and sliding sideways either by use of customized racks, constructed bracing arrangement or stuffed tight towards sidewalls.  
Additionally, point load per running mtr cannot be exceeded.

4. *How to calculate allowable point load?*

This is calculated by using unit payload divided by internal length.

Example of 15,0 tn bundled pipes in 40" standard dry: Payload / internal length = 28870kg/12,03mtr = 2.399 kg/mtr.

Calculation of length: Bundle weight / allowable point load = 15.000kg/2.399 kg/mtr = 6,25mtr

Weight must be distributed on minimum 6,25mtr of floor.

If transverse resting-wood/bedding/cradles are being used, they must be the full width of the unit, distributing the weight on the siderails.

5. *Is diagonal stuffing accepted?*

YES. If stuffing is tight towards end-wall and door-end.

6. *Can dunnage bags be used for securing?*

Maersk have decided NOT to accept dunnage bags due to the variety of application and quality of dunnage bags.

An exemption of this restriction might be applied for.

**Mandatory Documentation:**

After booking, customers will receive a request for documentation that shows the following:

- Items' weight and dimensions.
- Stuffing methodology.
- Preventative means of longitudinal and transverse movements.
- Pipe/bar total weight is distributed sufficiently to avoid exceeding point load.

**Links to Additional Information & Industry Standards:**

[Code of Practice for Packing of Cargo Transport Units \(CTU Code\)](#)

[Informative Material Related to the IMO/ILO/UNECE Code Of Practice For Packing Of Cargo Transport Units \(CTU Code\)](#)

[CINS / TT Club Transport of Coiled Materials in Containers](#)

**Last revision date: 23-02-2024**

**Revision History**

Version	Date	Changes	UID
1	21-04-2023	Transfer to new template. Simplified text.	ONB003
2	23-02-2024	Changes to unit type. Adding HC.	ONB003