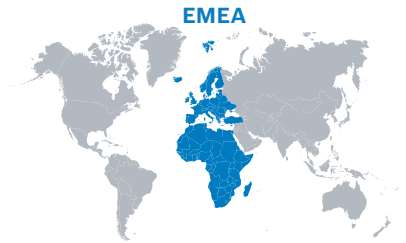
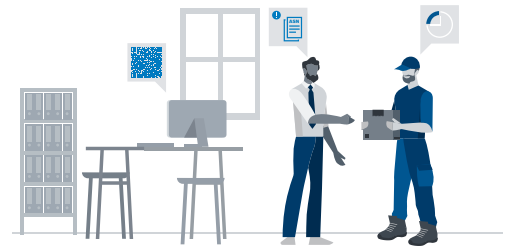


Additional requirements of MA to Supplier Logistics Manual



General Topics: Time windows, documents etc.

- 1.1 Time windows and other relevant location specifics can be found under Logistics Supplier Manual – Warehouse Specifics MA. [QR-Code]
- 1.2 Example of required delivery documents can be found under Logistics Supplier Manual – Delivery Documents MA. [QR-Code]



Receiving Location / Unloading Rules

ASN Topics:

- 2.1 Goods deliveries must be advised electronically prior to arrival or latest with the physical shipment.
- 2.2 Only one delivery note per shipment is permitted.
 - **Karlsruhe:** Only one ASN per truck or container is permitted.



Means of Transportation:

- 2.3 Pallets:
MA standard is rear unloading (ramp). Trucks and Swap Bodies must allow drive-on access for forklift trucks with a gross vehicle weight of up to 5 tons.
- 2.4 Parcels:
For non-pallet deliveries smaller vehicles are permitted.



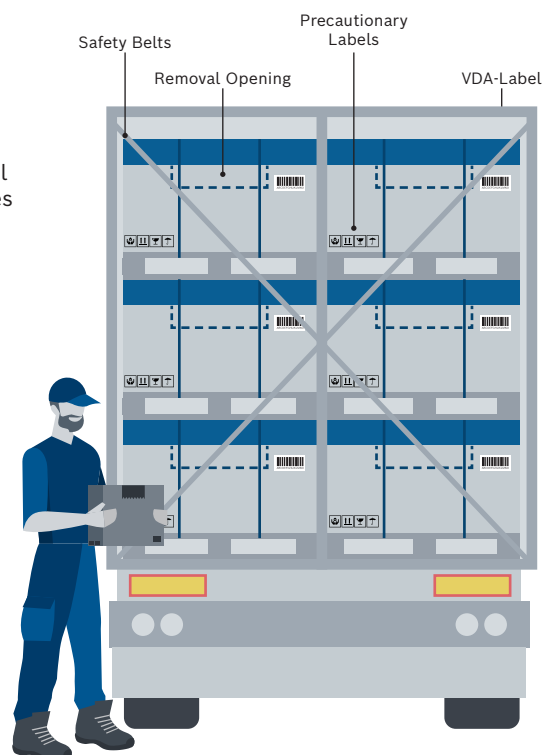
Shipping Space / Loading Rules

Labelling:

- 3.1 Each handling unit must be labeled with a VDA 4902 label. Future gradual change to VDA 4994 (GTL) will be communicated with the suppliers (see SLM chapter 4.3.2).
- 3.2 This must be placed on the side of the cardboard box with the removal opening (top right corner of long side of the cardboard box [sometimes indicated by a frame]).
- 3.3 VDA label must be readable and scannable (printing quality).
- 3.4 VDA label must face to the unloading ramp.
- 3.5 Additionally, precautionary labels need to be placed on the same side as the VDA label resp. removal opening.

Loading:

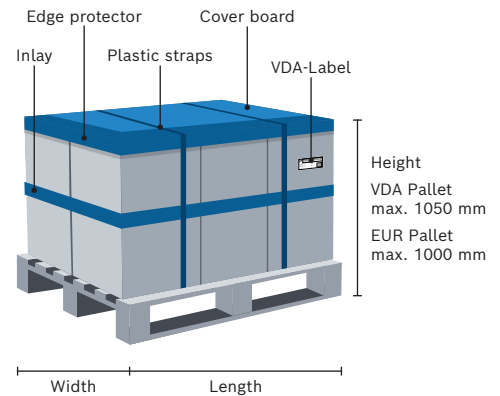
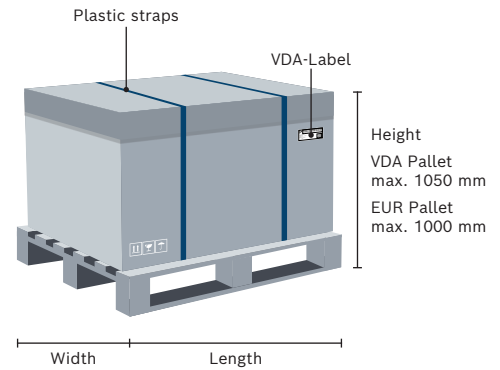
- 3.6 Supplier / loading party must use suitable devices to avoid movement and damage of the cargo in the container/trailer during transport and at the time of opening (avoid injuries and damage of material).
- 3.7 The following pallets are MA standard:
VDA pallets – 1140 mm x 790 mm
 - **EMEA:** Concerning land transportation in EMEA in general the following pallets are allowed: Euro pallets – 1200 mm x 800 mm. For deliveries to the warehouse of Karlsruhe this Euro Pool Pallet is mandatory. The pallet must be either part of the EPAL Pooling-System or part of the UIC Systems.
- 3.8 Supplier / loader must secure maximum utilization of the shipping space.
- 3.9 The pallets need to be in perfect condition.





Packaging Design Criteria

- 4.1 General requirements:
- Packaging must be according to Bosch Bill of Material (BOM).
 - Transport devices with the same content need to be stackable up to a height of 3 meters, e.g., 3 stack loading for Megatrailers.
- 4.2 Type A (Cardboard Box):
- Cardboard boxes are the preferred packaging.
 - Max. 2 plastic straps for delivery with cardboard box.
 - Straps must be strained to fix cardboard box on pallet.
 - Height adjustments by cutting of the cardboard box is not allowed!
 - **Karlsruhe:** Cardboard boxes must be nailed/stapled to the pallet.
- 4.3 Type B (Single Cartons):
- Single cartons will only be permitted if damage of goods can be excluded.
 - Max. 4 plastic straps for delivery of single carton pallets.
 - Straps must be strained to secure all cartons on the pallet.
 - Edge protection must be:
 - made of cardboard
 - long enough to cover both straps on each side.
 - Cover board and stable inlays are mandatory.
- 4.4 **NOT allowed:**
- Loose or overhanging (protruding) labels/straps.
 - Covering of VDA label by straps and edge protection.
 - **Karlsruhe:** Stretch wrap is not allowed (only for batteries).



Additional Packaging Rules

- 5.1 Barcode:
- Each carton box (inside cardboard box) must be labeled with a readable barcode or similar according to Bosch BOM (Bill of Material).
 - Barcode should face to the opening side of the carton.
- 5.2 Empty spaces inside cardboard box:
- Use of empty product packaging is not allowed.
 - Neutral boxes must be clearly indicated as “empty”.
- 5.3 Incorrect quantities in master pack:
If the quantity inside a master pack (BOM) is not correct, a red label showing the actual quantities must be attached next to the content label (handwritten permitted).
- 5.4 Sorting of goods:
- Sort goods by different article numbers and production dates:
 - to avoid damages (by heavy goods on top)
 - to reduce sorting efforts in receiving warehouse
 - Don't split goods with same article number and production date (within one month) into multiple handling units.

