



Continental Packaging Directive

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1 Purpose and Area of Application

This directive outlines the general requirements for transport packaging and goods labeling to be used by their suppliers of SMA Solar Technology AG - hereinafter referred to as SMA. It is valid for deliveries to all SMA locations in Germany. These requirements have to be observed during the development, design and planning of transport packaging.

The supplier is responsible for transport packaging that is suitable for transport and handling and that guarantees damage-free delivery of the goods to be delivered up to the location of use. Incoming deliveries will be checked by SMA for conformity with SMA requirements upon goods receipt. Any material-number-specific instructions agreed with the supplier (SMA packaging data sheet) must be mandatorily observed in all cases.

The supplier is obliged to inform SMA immediately of any hindrances in the execution of this directive. The delivery obligation of the supplier remains fundamentally unchanged by this.

In exceptional cases, deviations from the SMA requirements for transport packaging and goods labeling or the material-number-specific instructions are to be agreed with SMA in good time before the delivery.

2 Transport Packaging and Load Carriers

Transport packaging is packaging that facilitates the transportation of goods and protects the goods. At the same time it should incur the lowest possible costs. Important aspects are the handling of the packaging as well as of the packaged goods and its disposal if applicable. In addition, it should be suitable for return shipments and the protection of resources (meaningful proportion of packaging to goods).

2.1 SMA Reusable Packaging and Loading Carriers

The reusable packaging and loading carriers used by SMA are listed in the packaging catalog at <http://www.sma-supplier.de/en/downloads.html>.

2.2 Supplier Transport Packaging and Loading Carriers

The use of supplier transport packaging and loading carriers is to be agreed in individual cases with SMA.

2.3 Single-Use Packaging

Single-use packaging is only to be used in exceptional cases and requires prior agreement from SMA.

2.4 Designation of ESD Transport Packaging

It is necessary for electrostatic sensitive assemblies and packaging found in an EPA (electric production area) to be stored and transported in ESD-labeled (electrostatic discharge) protective packaging.

The designation is to be made up of ESD symbols in accordance with DIN EN 61340-5-1.



2.5 Damaged Loading Carriers

The supplier is obliged to check the correct, undamaged and exchangeable state of the loading aid before delivery of the goods. SMA checks the correct, undamaged and exchangeable state of the loading aid upon delivery in Goods Receipt.

If the supplier has introduced damaged loading carriers into circulation, SMA has the right to invoice the supplier with the repair costs or replacement costs.

Furthermore, SMA reserves the right to invoice the supplier with the proven necessary re-packaging costs and repair costs.

The delivery condition of Euro pallets and lattice box pallets must conform to the generally recognized quality and exchange criteria designated for this purpose.

(Available at www.gpal.de, for example)

The following states, for example, are not permitted for plastic large-load carriers:

- Side panels are warped, not closeable
- Corner edges are chipped, cracked
- One or more blocks are missing or broken, splintered etc.
- Base frame is twisted
- Broken side panels, pallets and covers protrude into the interior
- The container stands incorrectly, can not be stacked safely

Small-load carriers are to be classified as defective if stabilizing and supporting elements are damaged or the functionality of the small-load carrier and the protection of the products is endangered.

Slightly damaged but still exchangeable loading carriers will be marked with a light gray adhesive dot by SMA. The administration fee will in this case only be invoiced once for the duration of the approved further use.

3 Loading Units

Transport packaging and loading carriers are combined into loading units/transport units.

3.1 Combining and Securing Loading Units

The following requirements apply for combining and securing loading units:

- Stability in terms of state, shape and volume
- Incomplete layers are not permissible
- The base dimensions (1,200 x 800 mm) of the loading units may not be exceeded by the goods, packaged goods and loading unit protection¹
- Should be able to be handled with floor-bound transportation vehicle (can be accessed from all four sides)
- Loading unit protection has to be limited to a minimum use of packaging

3.2 Dimensions and Weights

The dimensions of the transport packaging and loading carriers can be found in the packaging catalog at <http://www.sma-supplier.de/en/downloads.html>. The loading units must not exceed a maximum height of 1000 mm (including pallet and cover).²

The following maximum weights apply:

- Small-load carrier: maximal 12 kg³
- Large-load carrier: in accordance with the maximum loading capacity of the corresponding transport packaging

¹Exceptions: After prior consultation with SMA, the packaged goods may protrude if, for example, required by the product geometry.

² Exceptions: After prior consultation with SMA, heights > 1 000 mm are permissible.

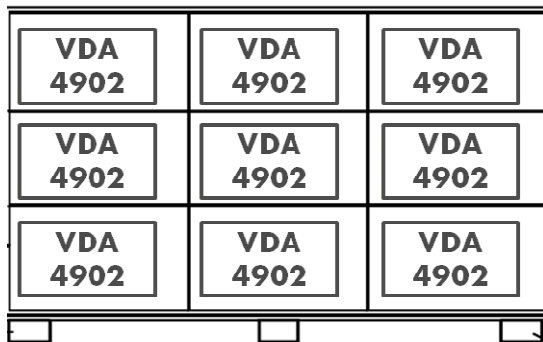
³ Exceptions: After prior consultation with SMA, weights > 12 kg are permissible.

4 Goods Labeling

Each loading unit has to be labeled clearly with two goods tags. A loading unit can consist of several packaging units. The designation must clearly describe the contents of the loading and packaging units in accordance with the applicable directive. Designations or labels from previous shipments are to be removed.

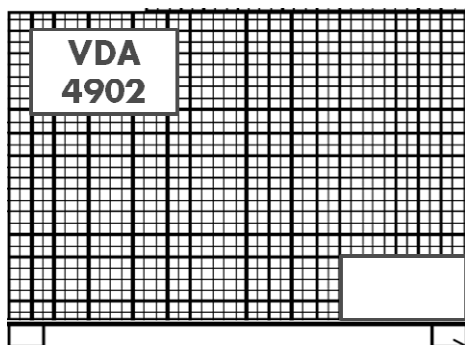
Homogeneous loading units (transport units):

- The loading unit/transport unit (e.g., large-load carrier) must be designated with two VDA labels 4902 in the card pockets provided (one each on the front and long side, in the top left corner of the loading unit/transport unit, i.e., two tags per loading unit).



In addition to the VDA label 4902 positioned on the long side as shown, another VDA label 4902 is to be attached to the front side of the loading unit.

- In addition to the designation of the loading unit/transport unit, there must also be a clear designation of the packaging units (e.g., small-load carrier) with the VDA label 4902 on the side, if applicable in the card pocket provided.



Mixed Loading Units (Transport Units):

Mixed pallet deliveries have to be approved by SMA and must be limited to a minimum.

In exceptional cases the goods tags can be attached using adhesive dots (four dots, one in each corner). The loading units must not be labeled otherwise or fully covered in adhesive material. Designations, adhesive dots and labels from previous shipments must be removed.

Single-Use Packaging:

When using single-use packaging (cases) one VDA label 4902 is to be attached to the front in the upper left corner of the loading unit (see figure under "Homogeneous loading units").

The individual packaging units (cases) must be labelled with at least the following information:

- SMA article number
- Material description
- Package unit quantity

5 Specification of the Transport Packaging

Transport packaging is determined and specified by SMA. If required, the supplier shall perform transportation/packaging test runs in coordination with SMA, in order to facilitate acceptance and appraisal of the transport packaging, so as to determine, for example, quality, handling, or ecological aspects.

When determining the packaging, the SMA requirements regarding transport packaging and goods labeling have to be observed. In the event of changed parts, changes to the delivery process, filling quantity or transport packaging, the supplier is to inform the responsible contact person at SMA unsolicited or to secure the appropriate approval.

If needed, material-number-specific instructions will be created (SMA packaging data sheet). The packaging data sheet will be completed by SMA and countersigned by the supplier.

6 Merchandise Planning and Administration of Transport Packaging and Loading Carriers

6.1 Merchandise Planning

When using reusable packaging, the requirement must be issued to SMA at least five business days before delivery. The supplier is to issue the reusable packaging requirement at the latest on the Thursday of the week prior to the week of delivery. The demand for reusable packaging depends on the current released

quantities plus a buffer stock (finished parts) at the supplier agreed upon with SMA. In the event of a drastic change in demand for reusable packaging, SMA must be informed immediately.

6.2 Account Management

SMA records goods receipts and goods issues for all reusable packaging and loading carriers (SMA reusable packaging, covers, intermediate layers, lattice box pallets, Euro pallets, etc.) ⁴The supplier is also obliged to immediately record goods receipts and goods issues for reusable packaging and loading carriers based on customer and article (SMA article number of the reusable packaging).

Reusable packaging will be preferentially exchanged on a 1:1 basis upon delivery at SMA.

The supplier is to carry out an annual stocktaking free of charge for reusable packaging upon instruction by SMA. Accounts are settled annually via the stocktaking. Costs for the account settlement will be allocated according to cause.

The supplier will receive from SMA the balance of the reusable packaging- and the loading carriers accounts on the last business day of each month. Differences regarding the type and quantity of reusable packaging and loading carriers are to be claimed for up to 14 days after the account balance information, otherwise the balance is taken as acknowledged. The appropriate delivery note/pallet certificate serves as proof of movement (incoming/outgoing) of reusable packaging and loading carriers.

6.3 Work in Process of SMA Reusable Packaging

Any SMA reusable packaging and loading carriers provided serve exclusively to secure SMA's own immediate supply chain cycle and may not be used for the supplier's own cycles (internal transportation, batch size manufacturing, extended workbenches, external subcontracting, consolidation through freight-forwarders, etc.). Exceptions to this must be approved by SMA. The calculation for the demand for reusable transport packaging (revolving stock) is carried out by SMA.

The maintenance and repair of SMA reusable packaging is the sole responsibility of SMA. The costs incurred will be allocated according to cause.

7 Miscellaneous

SMA will always provide the supplier with reusable packaging in a clean- and good working condition.

⁴ Supplier transport packaging and loading carriers are excluded from the account management.

The supplier ensures that deliveries are only made in clean, dry, undamaged and functional reusable packaging. Should the cleanliness of the reusable packaging not meet the quality requirements of the transported materials, the supplier must take additional cleaning measures. The costs for this will be allocated according to cause.