

1. Principle and General Requirements

These shipping and packaging instructions are valid for all suppliers of Arthur Langenhan GmbH & Co. KG, Sassmicker Hammer 16, 57462 Olpe (Germany) mentioned as LASO in the following. The development of the packaging should consider the aspects logistics, quality assurance, environmental compatibility and economy. The transport and non-returnable packaging has to be designed in a way to guarantee an adequate protection against damaging of goods during transport. All the packaging material used has to meet the legal requirements valid in Germany and the European Union (EU) as well as to show the regulated symbols and material numbers. Independent of the kind of packaging it is necessary always to meet the following requirements:

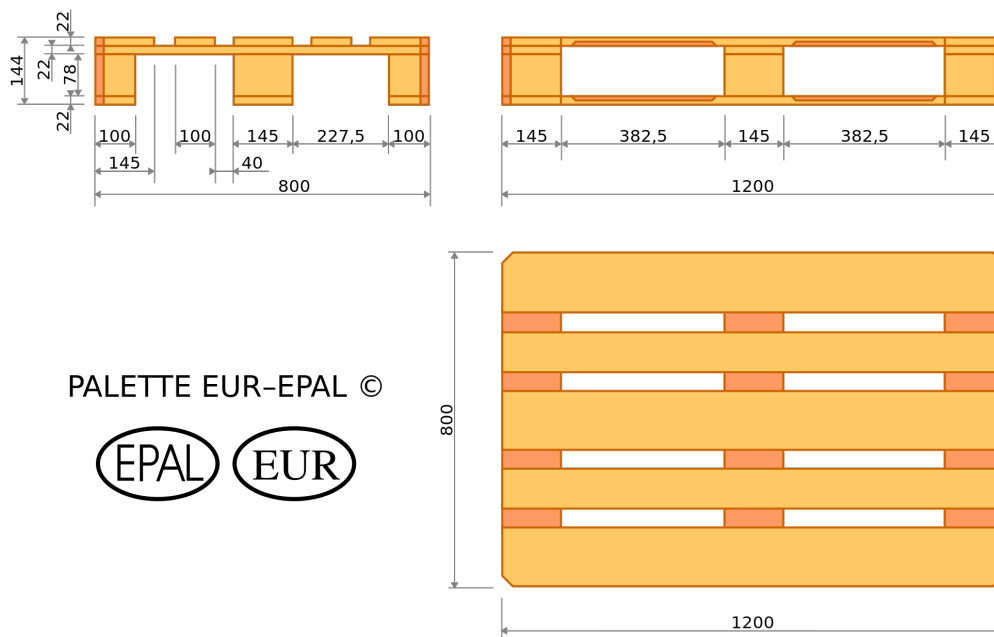
- receipt of goods free of damage
- receipt of goods in clean and proper packaging
- creation of economic loading units
- stackability of transport units of at least two high
- stability regarding constitution, form and volume
- problem-free possibility of unloading with forklift

2. Permitted Packaging Material

- plastic material made of PE (polyethylene), PP (polypropylene) or PET (polyethylene terephthalate)
- shrinking film or stretch film made of PE
- plastic bags and sacks made of PE
- paper and corrugated cardboard (without bad substances)
- wood (Please observe the valid disease and phyto-hygienic regulations of the IPPC (International Plant Protection Convention) you can find on the following website: <https://www.ippc.int/countries>. In case of the use of wooden material (with the exception of plywood) it is necessary to send a certificate of treatment against pest infestation along with the other shipping documents
- plywood (this must be mentioned in the invoice)
- filling material (made of paper, corrugated paper or polyethylene air bubble bags, recyclable packaging chips or loose-fill material)
- plastic strips (made of PP or PET)

3.1 Types of packaging allowed in the logistics chain

- reusable packaging:
 - EURO pallet (DIN 15146), dimension 800 x 1200 x 144 mm (length x width x height)
 - EURO lattice box, dimension 1240 x 835 x 970 mm (length x width x height)
 - EURO pallet with pallet frame (only allowed after special agreement)
 - metal case
 - exchangeable plastic cases (only allowed for suppliers within the European Union if agreed)



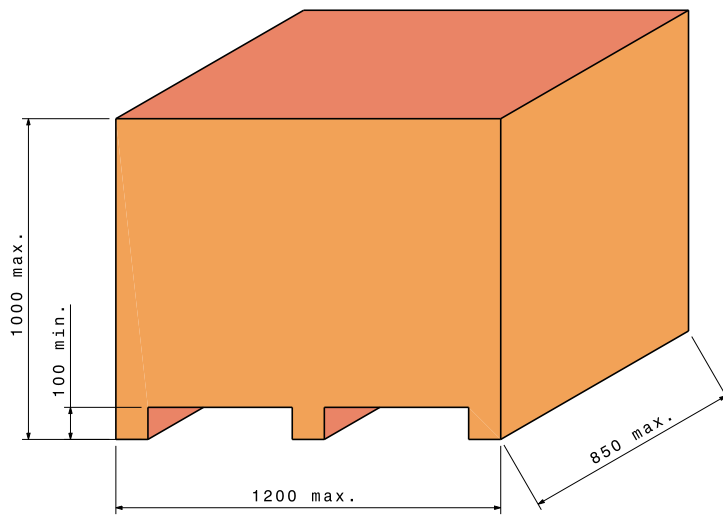
- non-returnable packaging:
 - non-returnable pallets (DIN 15146), dimension 800 x 1200 x 144 mm (length x width x height)
 - If agreed we also accept the following sizes: 800 x 600 x 144 mm and 800 x 400 x 144 mm
 - transport boxes made of enforced corrugated cardboard
 - wooden cases
 - cardboard boxes
 - industrial cartons

All the non-returnable packaging has to be marked clearly and visibly with the standardized graphical symbols and short marks. The marking must not affect the recyclability.

3.2 Allowed Packaging Dimensions (outer dimensions):

- maximum width: 1200 mm
- maximum depth: 850 mm
- maximum height: 1000 mm

Important: The supplier has to observe the minimum height of pallet feet which is 100 mm.



3.3 Allowed Weights

- industrial cartons: maximum 20 kg (within a transport box or case)
- lattice box: maximum 1.000 kg
- EURO or non-returnable pallet 800 x 1200 mm: maximum 1.000 kg

3.4 Packing Instruction of industrial cartons or single cartons

Industrial cartons with defined packing units inside are the preferred inner packages. Inside the industrial cartons the packing units must be protected against damage by the use of adequate filling material like air bubble bags or corrugated cardboard and carton plates for each layer. The use of single cartons for each unit should be avoided and must be agreed with the purchasing department before shipment.

3.5 Labelling of industrial cartons or cartons within a transport unit

The labels must be placed at one outside, but not on upper or lower surface of the cartons and contain the following data:

- LASO part number
- quantity

3.6. Delivery Condition

All kind of packaging used for the despatch or transport to LASO basically must be in a perfect and undamaged condition. Reusable packaging arriving in damaged condition will not be exchanged by LASO.

4. General Corrosion Protection

All the parts which are sensitive against corrosion as well as all machined and grinded surfaces, especially machined castings and forgings need a special preventive protection. The supplier has to observe these requirements indicated in the LASO drawing and/or purchase order. Besides the corrosion protection of material, all the goods supplied have to be corrosion-protected by the use of adequate packaging during transport and storage. This protection can be achieved by the use of covers, coverages or corrosion inhibiting film like VCI film, VCI bags or VCI anti-corrosion paper. Supplied goods without the necessary corrosion protection are considered as incorrect and will be claimed.

5. Shipping Documents

In case of mixed consignments consisting of several load units the recipient must be able to recognize in what package the corresponding part number is located. Therefore, packing lists must contain at least the following data:

- total number of packing units
- total gross and net weight
- total volume
- gross and net weight per packing unit
- LASO part number(s) and description
- LASO part number(s) and quantity per packing unit and number
- LASO purchase order number

6. Violation of LASO Packing Instructions

In case of non-observance or violation of our packing instructions we reserve the right to reject the acceptance of consignment or in case of conditional acceptance to debit the additional cost to the supplier. Examples for such a violation are :

- necessary unpacking of goods caused by non-observance of outer dimensions of transport units
- additional cost for disposal, after-treatment due to bad corrosion protection, examination of wooden packing by local authorities due to non-observance of IPPC requirements, etc.
- damaged transport packing or loading equipment like pallets , transport boxes or cases.
- cost for reworking of damaged goods within a packing unit due to the use of insufficient packing and filling material

7. Exceptional Rule:

In case that specific requirements for packaging afford to deviate from the packing instructions described before the supplier has to contact the LASO purchasing department and ask for a release in writing before the shipment of goods.