

Logistics guidelines for KOSTAL Kontakt Systeme GmbH



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These logistics guidelines are binding on suppliers to KOSTAL Kontakt Systeme GmbH (hereinafter referred to as "KKS"). If the supplier is unable to deliver in accordance with these stipulations he must inform KKS before making the shipment. In certain circumstances the supplier may request a deviation approval from KKS in order to prevent delivery bottlenecks.

1. Packing

1.1. General

The planning, sourcing and management of packing materials are governed by the stipulations of the KKS packing guidelines under <http://www.kostal.com/kks/en/download.php>.

As a general rule, returnable KKS containers are used for transport within Germany.

In certain cases specific packing can be specified for certain parts and customers, such as, for example:

- standard trade products
- electrical items in ESD-proof containers
- wiring harnesses with protection against tangling
- anti-static wrapping

Goods must be delivered in the packing agreed between supplier and KKS in accordance with the stipulations in the packing guidelines.

Any single deviation from this agreement is permitted only with a deviation approval. In all circumstances the supplier must use appropriate packing and secure the load units in such a way that the goods arrive at their destination in good condition. As a general rule, no polyurethane foam or amines must be used in the packing or its constituents.

1.2. Load and packing units

1.2.1. Sizes

Packing ref.	Length (mm)	Width (mm)	Height (mm)
KKS KLT K 01	600	400	325
KKS KLT K 02	600	400	220
KKS KLT K 30	400	300	220
KKS KLT K 35	400	300	120
KKS KLT K 15	400	300	325
KKS KLT K 40	300	400	225
KKS KLT K 45	300	200	120

For master data material numbers for packing see <http://www.kostal.com/kks/en/download.php>.

1.2.2. Load units

Maximum load height: 1200 mm including Europallet. Any exceptions must be agreed with KKS in writing.

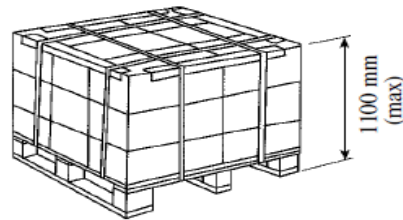
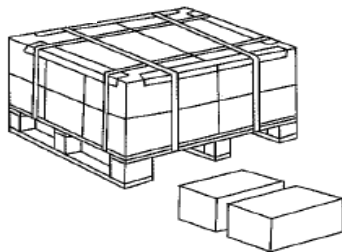
It must be possible to handle the whole load unit with a fork-lift truck.

Fork insertion width: 710 mm

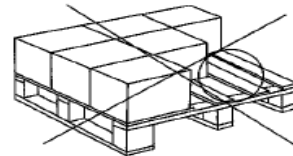
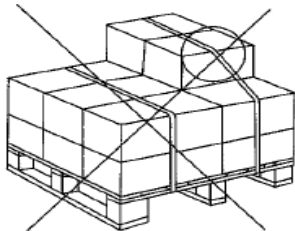
Fork insertion height: 100 mm

KLT = small load carrier

RIGHT



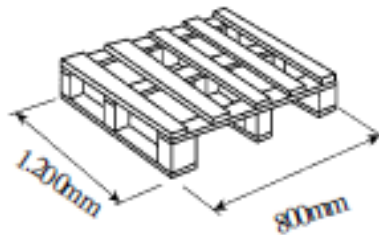
WRONG



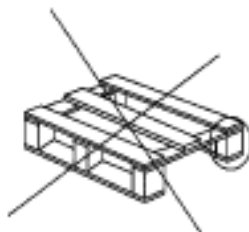
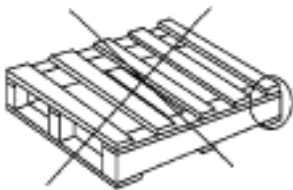
1.3. Pallets / Euro pallets

Pallets must be constructed as shown below. Only exchangeable Europallets must be used as load carriers. Pallets of other designs and/or dimensions must be approved by KKS.

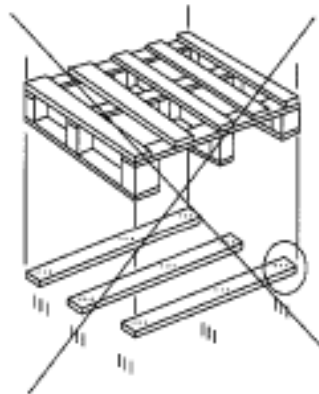
RIGHT



WRONG



Half-size pallet



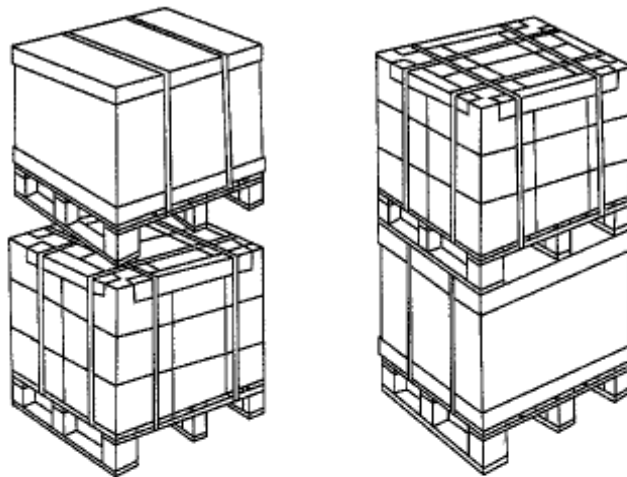
**Pallet with base supports:
3 extra boards fixed from
below, as shown**

1.4. Cartons used as shipment units

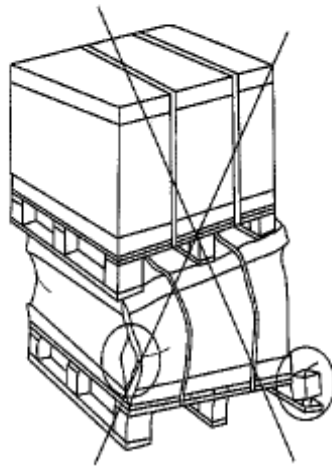
Cartons can be used for deliveries only with explicit, written approval. Individual packages must not weigh more than **15 kg**.

Incomplete layers of cartons and load units which cannot be stacked are not permitted. The same applies to cartons arranged as a pyramid.

RIGHT



WRONG



1.5. Sealing

Products supplied in bulk must be filled in plastic bags and sealed. Other products must be sealed by a cardboard cover and held in place as necessary with empty packaging.

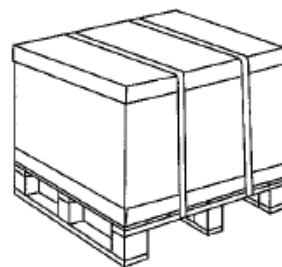
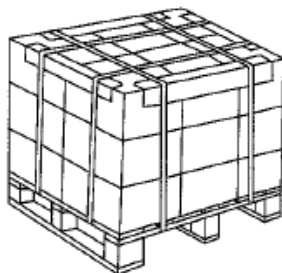
Cartons must be sealed with adhesive tape. The cartons must be retained on the load carrier by banding with plastic straps. Load units made up of cartons on a pallet must be strapped in two directions. In no circumstances must the plastic straps cut into the cartons.

Where necessary to secure the loading, corner reinforcements must be used vertically and horizontally. (The need for a cover to enclose and protect cartons is determined as part of the planning of packing in accordance with the stipulations of the KKS packing guidelines).

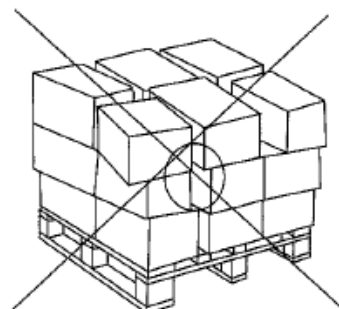
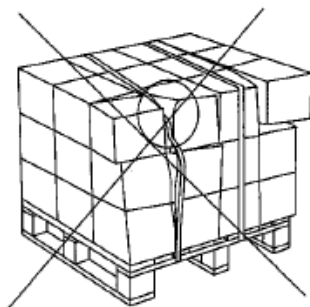
Stretch foil and steel straps must not be used!

(As an exception, steel straps can be used for transporting tools and strip materials)

RIGHT



WRONG



1.6. Small load carriers

1.6.1. VDA KLT and KKS KLT delivery units

(KLT = small load carrier)

Layers must be filled to cover the complete surface of the pallet. If this is not possible, the spaces in the layers must be filled with empty packaging. All KLTs must be recorded in the delivery note. Load units must be stacked in groups.

Each KLT must have a label to VDA 4902, positioned so that it can be read from the leading side of the load unit.

The maximum stacking height is shown in section 1.2.2.

Bundles delivered as mixed pallets must be labelled to VDA 4902. KKS expects goods to be delivered as far as possible on separate pallets. Dividing the same products over more than two mixed pallets is not permitted.

1.6.2. Goods on coils / reels

Goods on coils / reels must be supplied on plastic reels. Cardboard reels and plastic reels using polyurethane and/or amines are not permitted.

Reels which do not stand firm in a load unit must also be fixed by the supplier so that they are commissioned in the correct sequence.

1.7. Identifying goods and advice notes

1.7.1. Identifying goods

The following specification describes the KKS standard for producing bar-code labels and attaching them to packing. This is essential in order to guarantee productivity and the monitoring of materials by efficient data logging to cover the following processes: receiving goods, placing them in stores and taking them from stores, stock levels, consumption in production, periodic stock-takes and other stock control operations.

Each package and each container (whether used as internal or external packing) must be identified with a label indicating the contents. Each pallet or shipping unit must also be provided with an "M" label identifying the contents of the bundle. The identification of goods for all packing units must be to **VDA 4902 Version 4**.

Applying the identification labels

Materials on coils / reels

Bar-code labels must be applied to a flat surface so that the label is not damaged and the information is clearly legible. Labels on coils/reels should be positioned so that they can be easily seen by the operating when uncoiling.

Containers and shipping units

The label must be applied to the front of the packing. When placing cartons on pallets the label must be visible from outside at all times.

In the case of reusable packing, labels must be applied so that they can be removed without leaving residues. The supplier will bear all the cleaning costs involved in the event of non-compliance with this stipulation.

1.7.2. Advice notes

Deliveries of goods must generally be advised by the supplier in accordance with the EDI guidelines. If the supplier cannot handle the EDI process, he must use the KKS WebEDI platform. Further information is provided in the general commercial conditions covering EDI and WebEDI processes with KKS. All guidelines and commercial conditions in this regard are available on the KKS Internet website.

The sequence of the listing in the advice note covering the packing structure is the same as the physical make-up of the layers on the large and small load carriers (the uppermost layer is given the first packing / HU numbers in the advice note, etc).

1.8. Tracking batches

The supplier must take the following measures to ensure that batches can be tracked at all times:

- Each different batch must be shown as a separate item in the delivery note. There must be no change of batch within the entry item.
- The batch must be advised in each delivery advice.
- Labelling of packing numbers must comply with KKS standard 1.7.1.
- Traceability of batches at the supplier's premises must be ensured by a system-based list of the allocation of batch numbers to packing numbers.
- The traceability period is defined in the traceability contract for each project and must be agreed with the purchasing department at the relevant plant in the KKS Group.
- The batch specification must appear only once within the specified traceability period.

1.9. Packing agreements

1.9.1. The general rule

The planning, sourcing and management of packing materials are governed by the stipulations of the KKS packing guidelines.

There is a one-to-one relationship between the supplier and the individual KKS location. The returnable packing used in this loop must not be used for shipments to other KKS locations. Empty packing belonging to KKS Luedenscheid must be returned to KKS Luedenscheid and must not be used for deliveries to KKS subsidiaries. When empty packing is returned to KKS by the supplier, containers must be cleaned and stacked upside down on pallets for the return shipment to KKS.

The supplier must ensure that sufficient packing is available at all times. If a bottleneck affecting returnable packing occurs, the supplier must report this without delay to the empty packing administration department at the relevant KKS plant. Shipments in non-standard packing can be made only with a deviation approval issued by KKS.

If the supplier does not use the specified packing and he is to blame for this, KKS reserves the right to invoice the supplier for any associated handling and re-packing costs. The individual KKS plant is responsible for specifying and approving/releasing delivery packing for production materials

As a general principle packing must be identified only with VDA goods labels. Other labels are not permitted.

1.9.2. Non-standard packing

The following rules apply to packing specifically agreed with the supplier:

Disposable (non-returnable) packing

Disposable packing is provided by the supplier unless other arrangements are made. The supplier must obtain the standard KKS cartons and reels from the supplier nominated by KKS.

Returnable packing (the supplier's property)

If the supplier arranges his own returnable packing, this must always be agreed with KKS. KKS undertake to handle the returnable packing in a proper manner and to return it to the supplier ex-works. Any loss in value from natural wear is borne by the supplier.

All other matters are covered in the KKS packing guidelines.

1.10. Delivery

As a general rule deliveries must be made in containers holding only one type of product.

If small order quantities are not enough to form a complete load unit, containers holding products with different material numbers can be put together to form a mixed container. A condition for this is that the individual packages must be placed together in separate layers for each material number and advised separately. The collective load unit must also be declared as a mixed container (see also section 1.6.1).

1.11. Delivery to the Timberg plant

The following points apply specially for deliveries to the Timberg location.

As a general rule and in accordance with the packing regulations, returnable KKS containers, KKS cartons or KKS reels must be used for transport within Germany. The packing materials standard applicable to KKS can be seen under <http://www.kostal.com/kks/en/download.php>.

1.11.1. Deliveries of semi-finished products and finished goods

The dimensions of a load unit are: L 1200 mm x W 800 mm x H max. 1200 mm.
The max. weight per Euro pallet is: 500 kg.

Euro pallets in impeccable condition must be used for deliveries within Europe. Because of automatic 100% dimension checks in high-bay stores the dimensions stated above for load units must always be maintained. The minimum fill for a pallet is one complete layer of packages. If this is not possible the space must be filled with empty packaging.

The following max. stacking heights are permitted:

KKS K35 and K45:	6 layers
KKS K02, K30 and K40:	5 layers
KKS K01 and K15:	3 layers

1.11.2. Deliveries of raw materials (metal strip and granulate)

These goods are held in a pallet store.

Max. load unit dimensions: L 1200 mm x W 1000 mm x H 1600 mm.
Max. weight per pallet: 1250 kg.

Only class CP1 to CP5 pallets must be used.

2. Delivery / transport

Deliveries to KKS must be to DDP (Incoterms 2010) at each of the receiving points in Germany specified by KKS.

2.1. Goods receiving times

The goods receiving department is open Monday to Friday between 06.00 hrs and 15.00 hrs. Normal deliveries must be made within these times. The objective is to agree fixed delivery times with the supplier.

2.2. Delivery day

The day for delivery is the week-day stated in the order or delivery schedule, or the day agreed with the relevant KKS scheduler. The delivery time window agreed with the KKS goods receiving department applies.

2.3. Invoiced costs

Transport costs incurred because of a deficiency caused by the supplier (special journeys because of late deliveries; returned shipments because of early or over-delivery) are invoiced to the supplier. In addition, costs incurred by KKS because of non-compliance with delivery stipulations (extra work because of the absence of KKS material numbers, no issue level stated, etc.) will be invoiced to the supplier.

2.4. Transport damage

The supplier must ensure that the goods reach their destination in good condition. Goods arriving damaged will be returned to the supplier at the supplier's expense. KKS points out that undamaged goods in the same shipment may also be refused.

2.5. Shipping papers

The supplier must send an EDI-compatible delivery note with the goods in accordance with VDA 4912. Alternatively the supplier can use delivery notes and shipping orders in accordance with the relevant VDA recommendations (VDA 4922, Version 2; DIN4991).

Each shipping order must be accompanied by a set of delivery notes and all other necessary paperwork (customs documents such as EUR1, T1, etc.). The shipping order must list all the delivery notes included in the shipment. A separate delivery note must be used for each material number and issue level. It is not permitted to make a shipment of several material numbers/issue levels with one delivery note.

In addition, different batches must not be collected together on one delivery note. Essential information to be shown in shipping papers include the KKS order number, the KKS material number and issue level, gross and net weights, delivery quantities, the number of packages, the packing material number, the number of packing materials used and the delivery note number.

2.6. Transport equipment

Deliveries must be made using vehicles which can unload at a ramp. Unloading is always carried out at ramps.