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These packing guidelines contain the stipulations laid down by KOSTAL Kontakt Systeme GmbH – hereinafter referred to as KKS - for the planning, sourcing and management of packing materials for bought-in items.

In arranging the delivery of bought-in parts the supplier must act in accordance with these guidelines in carrying out the planning of packing and the sourcing of packing materials. The KKS project purchasing and logistics / packing planning departments are the contact points for the supplier.

The KKS logistics guidelines must be taken into account when planning the packing materials - these can be downloaded under [http://www.kostal.com/kks/de/download.php](http://www.kostal.com/kks/de/download.php). The logistics links between the supplier and the KKS organisation can involve the employment of companies and logistics service providers nominated by KKS. These companies will handle certain tasks described in these guidelines regarding the circulation of returnable packing materials.

1. Planning the packing

1.1. Packing materials

KKS differentiate between two types of packing materials:

- Non-returnable packing - one-way pallets, cartons, trays, bags, etc.
- Returnable packing - Europallets, plastic reels, small load carriers, trays, covers, etc.

Returnable packing can be KKS packing and also the customer's own packing materials. A decision is made in the course of planning the packing whether disposable or returnable packing is to be used.

1.2. Essential documentation

The basis for planning packing is provided by the project-specific and general attachments to these packing guidelines - see section 5 "Attachments".

1.3. Planning the packing

The supplier is responsible for planning the packing of bought-in items. A plan for packing each type of material must be generated, based on the essential documentation - see section 1.2 "Essential documentation". Planning the packing provides the supplier with a calculation basis for his quotation. Technical approval / release by KKS of the packing planning is not issued until the contract has been awarded - see section 1.4 "Approval / release of packing materials". Logos, names or other indications to the supplier are not permitted. The KKS supplier number can be used as reference for identification.
1.3.1. Structure of the packing planning

The packing planning to be carried out by the supplier is made up as follows:

<table>
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<th>Documentation</th>
<th>Explanation</th>
<th>Basis</th>
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<tbody>
<tr>
<td>Packing structure</td>
<td>Data sheet covering the structure of the packing</td>
<td>Specifies the structure of the packing (internal and external packing)</td>
<td>KKS package numbering; KKS logistics guidelines; Packing check-list; Drawing of the bought-in item</td>
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<tr>
<td>Planning quantities</td>
<td>Data sheet covering the planning of materials in circulation</td>
<td>Calculates the amount of packing materials in circulation</td>
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<td>Technical execution</td>
<td>Technical drawing</td>
<td>Technical structure of the packing</td>
<td>Packing check-list; Drawing of the bought-in item</td>
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The packing structure determines the make-up of the packing and, therefore, the master data for packing to be used for deliveries to KKS. As a general principle this packing must be used for every delivery to KKS. It must be planned on the basis of the technical stipulations covering packing units - these are set out in the packing check-list.

The packing structure which has been defined is used as the basis for planning the quantities of packing materials required (quantity planning). Quantity planning is carried out by reference to the quantities of bought-in items required - these are set out in delivery schedules, as well as in the peak figures specified in annual quantities quoted in KKS purchasing enquiry documents.

In addition, the supplier's quantity planning must take account of quantities of packing materials in circulation for future production locations in the KOSTAL Group, as well as natural wastage of returnable packing in circulation.

The figures for quantities of packing materials determined in this way must be used by the supplier in conjunction with the planned demand for the bought-in items and broken down into purchase batches so that sufficient packing is available for the supplier to make shipments to KKS at the stipulated delivery times.

As part of the quantity planning the supplier must also specify a reasonable quantity of empty packing materials and calculate the space required to store these.
1.3.2. Planning disposable (one-way) packing

The amount of packing materials required for disposable (one-way) packing covers the supplier's in-house needs and also the quantities required for shipments to KKS. The supplier is responsible for sourcing disposable packing and he also bears the costs.

If returnable packing has been agreed and the supplier is responsible for breaking this agreement by delivering goods to KKS in disposable packing, the goods will be accepted by KKS (or a company authorized by KKS) and taken from their disposable packing (the external packing), to be re-packed in returnable packing. The costs incurred in each re-packing operation for a small load carrier (KLT) will be invoiced to the supplier.

1.3.3. Planning returnable packing

The supplier is responsible for planning returnable packing based on qualitative and logistics aspects. The qualitative aspects agreed with the KKS departments involved, coordinated by the project purchasing department, and are recorded in the packing check-list.

The peripheral logistics conditions are described in the KKS logistics guidelines and are fixed via the packing structure planning. In deciding on disposable or returnable packing consideration must be given to the economic effects of transport in returning packing materials, the work involved in re-packing and the process costs in returning empty packing to the KKS goods receiving department.

Given these peripheral conditions the following guidelines apply when planning returnable packing:

1. The use of returnable packing should be checked by a single-case decision regarding the above peripheral conditions when applied to the supplier's shipping points outside Germany.

2. The use of returnable packing is recommended for the supplier's shipping points within Germany.

3. Where deliveries are made to a single KOSTAL plant from more than one of the supplier's shipping points, the supplier should not use returnable packing. If the supplier can guarantee that only one shipping point is responsible for a 1:1 exchange and for managing empty packing, returnable packing can be used - see also section 3.1 "Loaned materials account".

1.4. Approval / release of packing materials

The following illustration provides an overview of the stages in obtaining approval/release of packing materials, based on the project-specific production launch curve - see section 5 "Attachments". The relevant approvals must be obtained from KKS by the time in the project when first production samples are submitted.
In this connection the supplier must submit at the correct time the packing planning, sample and initial sample packing for each bought-in item. The timings are agreed between the supplier and KKS:

<table>
<thead>
<tr>
<th>Project timing point - KKS</th>
<th>Project timing point - supplier</th>
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<tbody>
<tr>
<td>Establishment release</td>
<td>Presentation of packing planning based on project-specific appendix documents</td>
</tr>
<tr>
<td>(supplier authorization)</td>
<td>ca. 12 weeks</td>
</tr>
<tr>
<td>Presentation of a sample of the packing, with a sample bought-in item</td>
<td>Presentation of an initial sample of the packing from the production tool</td>
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<tr>
<td>First production samples (release of PPAP documents for the bought-in items)</td>
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KKS approves / releases the sample packing on the basis of the packing check-list and the packing requirements relating specifically to the bought-in item in question. After the packing from the production tool has been finally released, all shipments must be made in the specified packing. Any earlier use of this packing is permitted only with a deviation approval (AWG) from KKS.

The supplier must request this AWG from the KKS scheduling department for bought-in items. The KKS goods receiving quality assurance department may issue an AWG for the packing which is limited to a certain time or quantity. The KKS scheduling department for bought-in items will inform the supplier when the AWG is issued.

2. **Sourcing returnable packing**

When sourcing returnable packing the supplier must ensure that, to provide clear identification, the features stated in the packing data sheets are clearly marked as lettering on the packing. The supplier must request the necessary information from the KKS logistics department following release of the packing planning - see section 1.4 "approval/ release of packing materials".

2.1. **Setting up packing tools**

The supplier is responsible for setting up a new packing tool. Following release by KKS project purchasing KKS will pay the initial cost of setting up the tool. Setting up the packing tool is carried out in accordance with the KOSTAL tool loan contract.

2.2. **Sourcing disposable (non-returnable) packing**

The supplier is responsible for sourcing the disposable (non-returnable) packing for the whole of the packing circulation system. The packing and the supplier have to be released by KKS.
2.3. **Sourcing returnable packing**

The supplier is 100% responsible for ensuring that appropriate quantities of internal packing are available for the launch of production as well as for full production.

With regard to the external packing the supplier and KKS jointly source the quantities required for the packing circulation system, based on the proportions determined in the quantity planning. The supplier must obtain his proportion of the packing materials required from a packing manufacturer nominated by KKS and agreed between KKS and the supplier. KKS will receive a copy of the delivery note as evidence that the materials have been sourced and delivered. KKS will book the quantity as a stock entry at the supplier's premises.

2.4. **Proportional ownership**

The proportional ownership is determined by the proportion of the materials sourced by KKS and the supplier. At the end of the project a stock check will be carried out as described in section 4 "End of production of bought-in items". The quantities owned by each of the parties are calculated on the basis of the running total for quantities delivered - this is recorded by the goods receiving department.

3. **Managing returnable packing**

3.1. **Loaned materials account**

3.1.1. **Setting up new loaned materials accounts**

All quantities of returnable packing in circulation required for the transport of goods between the supplier and KKS are managed and recorded in loaned materials accounts. In this a separate loaned materials account is set up and managed for each type of returnable packing. The loaned materials accounts for a supplier operate on a 1:1 relationship between the individual KOSTAL location (or a company authorized by KKS) and the supplier.

Loaned materials accounts are set up by KKS (or a company authorized by KKS) after the production packing has been released. These accounts record movements (incoming and outgoing). The supplier must also operate appropriate loaned materials accounts covering returnable packing so that any losses in circulation (see section 3.1.5 "Losses") can be detected and balanced out without delay.

These loaned materials accounts must enable movements of materials to be logged. Based on the KOSTAL EDI guidelines (http://www.kostal.com/kks/de/download.php) the supplier must ensure that when the delivery note is issued electronically, a booking is made simultaneously to record the movement of the packing material.

3.1.2. **Adjusting existing loaned materials accounts**

Existing loaned materials accounts with a supplier are adjusted if new materials are purchased. To do so, the account is first "cleaned up" by carrying out a stock check (see section 3.1.4 "Balancing accounts". Agreement on discrepancies must be
reached between KKS and the supplier. The additional returnable packing delivered to the supplier or allocated to him by the division of ownership are booked initially as a stock entry in the relevant loaned materials account.

3.1.3. Bookings in accounts

All inward and outward movements of returnable packing are booked in the loaned materials accounts operated by KKS. An inward movement is the arrival of a full returnable packing unit at KKS and an outward movement is the departure of an empty returnable packing unit. Incoming materials are booked on the basis of the delivery note and or delivery note advice. Departing materials are booked on the basis of the delivery note for the empty packing.

3.1.4. Balancing accounts

Each month or when requested by KKS the supplier must carry out a balance of the loaned materials accounts. To do so the supplier asks the KKS empty packing management department (or a company authorized by KKS) to provide the movements data in the KKS loaned materials account and checks the entries which have been made. Any discrepancies must be reported to the KKS empty packing management department in writing within 14 days.

In addition, the supplier must carry out a stock check on 30 June and 31 December. In this, all returnable packing units physically present are counted and the results are sent in writing to the KKS loaned materials management department. Any losses must be replaced by the party responsible for the loss. If the supplier does not carry out a stock balance within 6 months the stock details recorded in the KKS loaned materials account is agreed and is accepted by the supplier.

The supplier is responsible for any losses (see section 3.1.5 "Losses") in the stocks held in the loaned materials accounts. The balancing out of losses is made exclusively at the supplier's cost. In this the period considered starts from the last balancing of the account to the present day.

3.1.5. Losses

Losses are discrepancies in holdings of returnable packing units which are greater than the natural wastage planned by the supplier.

The losses of returnable packing units in the stock in circulation are calculated by comparing the stock check data and loaned materials accounts operated by the supplier and those operated by KKS. Losses must be replaced at the cost of the party responsible for the loss.

3.2. Repairs

The supplier must ensure that the returnable packing units in his organisation are suitable for use and must carry out any repairs which are necessary. Returnable packing not suitable for use must not be used for deliveries to KKS (or to a company authorized by KKS) and must be returned separately to KKS, marked in a suitable manner. KKS will handle the disposal of returnable packing unit which are not
capable of use and the costs involved will be charged to the party responsible for the problem.

A packing unit is suitable for use if, apart from external marks, it has no other damage and continuing use will not cause any negative effects on the quality of the bought-in items to be delivered.

3.3. Cleaning

The supplier must ensure that only cleaned returnable packing is used for deliveries to KKS (or a company authorised by KKS). In this regard the supplier must determine the cleanliness requirements for returnable packing, based on need and packing requirements for the specific items and must satisfy these requirements. Cleaning is carried out at the supplier's cost.

3.4. Exchanging returnable packing

3.4.1. Transport of empty packing units

The principles covering the organisation and acceptance of costs involved in the return of empty packing units are set out in the delivery conditions agreed with the supplier. If delivery has been agreed "free house" the supplier is responsible for the return of empty packing units and the costs involved are paid by the supplier. If delivery has been agreed "ex-works" KKS accept the costs of transporting the empty packing units.

3.4.2. Bought-in items for use in production

The exchange of full packing units for empty packing units takes place exclusively with the delivery, following booking-in by the goods receiving department on a 1:1 basis and/or, as a deviation from this, by batches of empty packing units firmly agreed with KKS.

The exchange with empty packing units may be handled by external logistics service providers appointed by KKS. In such cases the supplier must advise the service provider of the empty packing units required for the exchange, using the empty packing units requirements form - see section 5 "Appendix documents".

3.5. Adjusting the stock in circulation following changes in requirements

At regular intervals the supplier must carry out a comparison between the stock in circulation and the actual quantity of packing units required, based on KKS's enquiry quantities for the items in question.

If a change in the amount of stock in circulation becomes necessary the supplier must inform KKS and draw up a new planning status. This new planning status is arrived at exclusively on the basis of changes in demand and not on the basis of stock checks.
3.6. Technical changes to the bought-in item

Technical changes to the bought-in item may be requested via the KKS purchasing department. The supplier must check the previous packing planning and the packing requirements regarding the technical change to the item. If necessary, the supplier must quote for a change to the packing - this must be done on the basis of a new packing planning - see section 1.3 "Planning the packing".

4. End of production of bought-in items

When the bought-in item goes out of production a stock check must be made of the returnable packing - see section 3.1.4 "Balancing accounts".

The supplier checks the future demand for spares and replacement items and determines a maximum stock of packing units in circulation to cover deliveries to KKS, based on a new quantity planning. All returnable packing units in circulation which are no longer required must be returned to KKS. The supplier is responsible for any losses. The associated loaned materials account is changed accordingly - see section 3.1.2 "Adjusting existing loaned materials accounts".

5. Closing comments / appendix documents

Any changes or additions to these guidelines must be made in writing.

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<th>Explanation</th>
<th>Access or the supplier</th>
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</tr>
<tr>
<td>Drawing of the bought-in item</td>
<td>Technical drawing of the bought-in item</td>
<td>Enquiry documents</td>
</tr>
<tr>
<td>Packing check-list</td>
<td>List of packing requirements for the specific bought-in item</td>
<td><a href="http://www.kostal.com/kks/de/download.php">http://www.kostal.com/kks/de/download.php</a></td>
</tr>
<tr>
<td>General documents</td>
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<td></td>
</tr>
<tr>
<td>Data sheet covering packing structure</td>
<td>Specifies the packing structure</td>
<td><a href="http://www.kostal.com/kks/de/download.php">http://www.kostal.com/kks/de/download.php</a></td>
</tr>
<tr>
<td>Data sheet for planning quantities in circulation</td>
<td>For calculating the quantities of packing units in circulation</td>
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<td>Data sheet covering orders for empty packing units</td>
<td>Form for ordering empty returnable packing units</td>
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<td>KKS logistics guidelines</td>
<td>Requirements for the supplier's supply logistics</td>
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