



**SUMITOMO ELECTRIC
BORDNETZE**



Logistics Manual for Suppliers

Requirements for the Supply of Production Materials

Wolfsburg, July 2023 – Version 1.7

SUMITOMO ELECTRIC GROUP

Logistics Manual - Guidelines for Production Material SuppliersSupply Chain Management –
Logistics Team

Version 1.7

Date: 28.08.2023

Preface

In order to meet the ever-increasing challenges of global value chains within the automotive industry, Supply Chain Management – Logistics Team (SCM) at Sumitomo Electric Bordnetze SE (henceforth: SEBN) is committed to make an essential contribution to the elimination of supply chain waste potentials and environmental sustainability while simultaneously ensuring the corporate competitiveness.

The product-related variation in production materials and suppliers, complex storage and transport networks in an international environment, as well as the constantly increasing time and costs pressure is resulting compellingly in the definition of requirements for the packaging and transport of raw materials.

SEBN strives to maintain a long-term, successful and partnership-based cooperation with the production material suppliers. For this purpose, clear and binding regulations must be taken in order to ensure smooth processes for the own production supply. Accordingly, this directive should be understood as a central part of the contractual relationship.

In the interest of continuous improvement, SEBN reserves the right to demand changes in the supplier's processes as well as to update respective specifications and requirements.

We would like to thank you for your cooperation.

Wolfsburg, July 2023



signed Uwe Miess
Executive Officer
Supply Chain Management
& SEBN MX

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Protocol of amendment

Edition	Version	Type of modification	Creator
April 2017	1.0	First version / approval	Central Logistics Management (CLM)
June 2017	1.1	Pallet requirements for export in third countries (section 2.2.1)	Central Logistics Management (CLM)
December 2017	1.2	Requirements for wooden products (section 2.2.1)	Central Logistics Management (CLM)
December 2018	1.3	Scope of application and contact person	Central Logistics Management (CLM)
March 2020	1.4	Standard of labeling VDA 4994	Central Logistics Management (CLM)
June 2022	1.5	TMS update	Central Logistics Management (CLM)
July 2023	1.6	Change CLM to SCM	Supply Chain Management – Logistics Team
September 2023	1.7	General update	Supply Chain Management – Logistics Team

The newest version of this document can be found on www.sebn.com under the point “supplier area”.

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List of abbreviations

ABD	Export accompanying document (Ausfuhrbegleitdokument)
SCM	Supply Chain Management – Logistics Team
SCM	Supply Chain Management – Purchasing Team
EDI	Electronic Data Interchange
EXW	Ex Works
FCA	Free Carrier
GLT	Large load carrier (Großladungsträger)
KLT	Small load carrier (Kleinladungsträger)
ldm	Loading meter
LSP	Logistics Service Provider
MOQ	Minimum Order Quantity
MRN	Moving Reference Number
SEBN	Sumitomo Electric Bordnetze
VDA	Association of Automotive Industry (Verband der Automobilindustrie)
VPE	Packaging Unit (Verpackungseinheit)

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1 General

1.1 Purpose and background

This letter serves as a specification sheet of SEBN Supply Chain Management – Logistics Team concerning the delivery and packaging of production materials after nomination to SEBN plants (see **Annex 1**). Thus, it is intended to provide certain framework conditions and standardized guidelines to suppliers. Therefore, the suppliers are called upon to comply with the directives laid down in this manual, to implement them in the operational logistics processes and, in addition, to communicate any deviations at an early stage.

As a matter of principle, the packaging for each purchased part must already be agreed at the time of the nomination or respectively the contract agreement between SEBN and the supplier in order to meet the standards and requirements for packaging as part of the delivery process. Ideally, the packaging unit (VPE) should be based on standardized quantity calls and binding minimum order quantities (MOQ) with SEBN in terms of dimensioning, quantity and weight. The described instructions and requirements for packaging and loading units should be understood independent of the respective INCOTERM regulation or transport type.

SEBN Supply Chain Management – Logistics Team will not accept any other customary agreement with individual reception plants beyond the content of these guidelines. Inquiries about points of this kind as well as general questions, remarks or requests for packaging and transport topics are needed to be addressed to the SEBN Supply Chain Management – Logistics Team department via supplier.packaging@sebn.com.

1.2 Information requirements

The supplier must provide a contact matrix with all contact details of persons in charge, especially the responsible persons of the delivery process. The logistics contact in general must be noted in the supplier self-assessment form. The SEBN contact matrix is included in **Annex 1**.

Furthermore, the Supplier must also arrange and communicate the name and telephone number of a 24-hour hotline that can be reached on all days including weekends and holidays and can give competent answers in the occurrence of material bottleneck situations:

- In any case of delivery concerns, the supplier shall inform the SEBN contact matrix and take the appropriate actions to avoid material shortages at SEBN plants.

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- The supplier should also review & update the contingency plan if required and communicate any changes to SEBN immediately.

All enquiries and requests need to be answered immediately by those involved in the processes. All issues concerning material availability and delivery date issues are to be clarified within a maximum of 24 hours. All information on quantities and dates is considered true and binding. All changes need to be communicated to involved participants immediately.

1.3 Logistics related documents for this manual

The supplier must also check / fill / agree with the other logistics related documents, which are available on the SEBN supplier portal:

- Annex 1 – Delivery locations & contact matrix
- Annex 2 – GTL label
- Annex 3 – Packaging data sheet
- Annex 4 – Long term supplier declaration
- Annex 5 – EDI for supplier

1.4 Purchase ordering process and order release after nomination

1.4.1 Forecast and order release

For smooth production and delivery processes, SEBN provides their Suppliers the scheduling agreements with call-off and requirement forecasts that correspond to those of their own customers. The released orders include quantities and due dates according to the Incoterms. Valid orders of SEBN are based on cumulative quantities (CQ) for production release and raw material release only. An order acknowledgement is not requested. The indicated quantities and dates are valid unless objected to within 2 working days from call-off notification. The Supplier must receive the final release order early enough to guarantee punctual delivery at normal production and transport conditions.

The time periods for the production and raw material releases are given in the release orders. Unless agreed otherwise, a production release allows four (4) weeks of production and a raw material release another four (4+4) weeks of material procurement.

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1.4.2 Flexibility requirements

Quantity reduction/increase of up to $\pm 20\%$ are to be taken into consideration for the next delivery date. The frozen period is equivalent to 2 weeks (no order change is expected within the defined horizon). Any extension won't be accepted only after a mutual agreement and SCM approval.

1.4.3 Wrong release of orders

If the Supplier does not receive any call-offs / orders within the specified or usual cycle (weekly), he shall inform the respective SEBN plant immediately. The Supplier shall clarify wrong or for him implausible release orders with the plant in question.

1.4.4 Delayed delivery

SEBN is to be informed immediately of all difficulties concerning delivery issues and in accordance with the information requirements (see section 1.2). The supplier shall introduce containment actions and set binding alternate dates. In case of risk of bottleneck in a SEBN plant, the plant procurement informs by Email to the Supplier contact. The Supplier feedback is mandatory within 24 hours from the Supplier with action plan (special measures) and/or cost take over. All bottleneck notifications have impact on the Suppliers delivery performance evaluation.

1.5 Definition of terms

Within the scope of the present transport and packaging guidelines, the following conceptions are needed be defined:

Packaging unit	a single package that compiles parts of a SEBN article number (e.g., cartons or containers); alternatively: charge carriers
One-way packaging	packaging which is only used for a single delivery and is disposed of by the receiving factory
Re-usable packaging	packaging which can be used several times and is thus regulated by an empties cycle

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Packaging aids	material that secures parts within a package and protects against quality degradation (e.g., intermediate layers made of paper)
Loading unit	summary of several packaging units to form a transportable unit (for example cartons on Euro pallet)
Transport securing	aids for securing one or more loading units during transport
Stackability	possibility of stacking several packaging and / or loading units without damage on top of each other
Packaging data sheet	agreement and approval for the use of supplier packaging
Packaging quantity	the optimum quantity of each article, determined per packaging unit and delivery unit

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2 Packaging units

2.1 Packaging functions

The production materials to be delivered to SEBN must be packed in a single-use packaging, which has been pre-defined and SEBN-approved, as long as no further special regulations are laid down. The adjusted, optimal filling quantity of the articles per packing unit must be observed. Over- and under-deliveries at the packaging unit level can only be carried out under an explicit coordination with the respective receiving plant. In addition, the supplier packaging must fulfill the following functions:

- ❖ **Protective function:** The packaging must guarantee a delivery of the parts without any loss in quality, i.e., protection against physical damage must be ensured during the transport process (with sufficient stability for a maximized stack height) or against environmental damage.
- ❖ **Storage function:** The packaging must ensure an optimum use of the storage space by means of standardized dimensions and ensuring adequate stacking capacity. For this purpose, an optimized conformity of the packaging units with the corresponding loading units (pallets) must be provided as well.
- ❖ **Transport function:** The packaging must ensure optimal use of the transport space by means of standardized dimensions and ensuring adequate stacking capacity. For this purpose, an optimized conformity of the packaging units with the corresponding loading units (pallets) must also be provided as well.
- ❖ **Manipulation function:** The packaging must facilitate the combination of individual packages as well as the handling at delivery for separate SEBN locations.
- ❖ **Information function:** The packaging must be characterized in terms of order compilation and processing (by labels) as well as the identification of transport-relevant factors (e.g., fragility or load-bearing force).

Concrete – non-agreed – deviations with regard to the packaging functionality pre-defined by SEBN lead to a cost acceptance or invoicing of an appropriate proportion of any additional costs incurred by the supplier.

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2.2 Packaging requirements

The statutory provisions on occupational safety and environmental protection apply to all suppliers' packaging types. This results in the need for recyclability (i.e., no composites) for the one-way packaging. The respective disposal will be carried out by the recipient plant of SEBN. The supplier is obliged to design his packaging units in conformity with the recognized rules of technology in order to be able to secure a corresponding load securing according to § 22 (1) Cargo StVO of the freight forwarder. Furthermore, packaging, especially with regard to long-distance and sea-freight transports, should be optimally prepared for potential transport complications. Accordingly, SEBN insists on equipping the used packaging with adequate securing aids, such as edge protection angles or stretch films, as required.

The packaging must be sufficiently stable to ensure the protection of the material. If this requirement is not met, the supplier is encouraged to produce quality reports (e.g., 8D) at the request of SEBN in order to offer optimized solutions and implement these in accordance with a new agreement. SEBN will record these incidents as logistical complaints in the internal supplier assessment and, if necessary, check the implementation of the optimization measures as part of supplier audits.

2.2.1 Packaging materials

About the selection of the packaging materials, the following criteria or permissible materials per packaging type must be observed:

Paper/cardboard	marking with RESY symbol (for further quality requirements, cf. <i>section 2.2.2</i>)
Plastic	generally: PE, PP, PS, PET foil: PE; foam: PE, PP, PS
Strapping tapes	PP, PET; (no metal straps)
Corrosion protection	VCI paper (usable with regular paper)
Wood	Solid, ply and compressed wood (ensuring the application of the regulation (EU) no. <i>995/2010</i>)
Pallets	IPPC standard; heat treated (fumigated) ISPM 15 for export in third countries

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2.2.2 Packaging quality

In general, the entire packaging and the transportation mode must be suitable to protect the goods against humidity and corrosion. In the case of corrugated one-way packaging, care must be taken to use an at least **double-wall construction** of the cardboard. There are the following distinguishing features, which must be considered:

- Single-wall: E-wave (2 mm carton width), B-wave (3 mm), C-wave (4 mm)
- Double-wall: e.g. **BE-wave** (5 mm carton width) or **BC-wave** (7 mm)
- Triple-wall: e.g. **CAA-wave** (14 mm carton width)

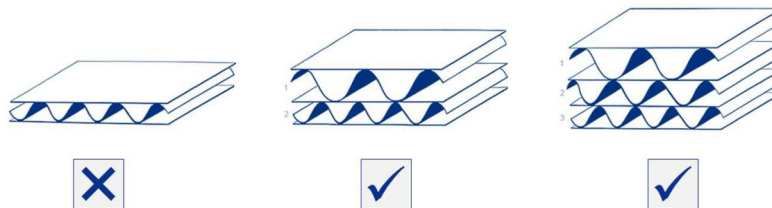


Figure 1: Wave concepts for cardboard packages

2.2.3 Packaging dimensions

In order to guarantee continuous standardization across different material groups, the packaging units must be in compatibility with the basic dimensions of **1200 x 800 mm** of the standard loading unit of a euro pallet. As an exception is allowed to use **1200 x 1000 mm** industrial pallet after confirmation of SEBN only. The load that should fit to the pallet dimension and thus the load should neither be smaller nor bigger than the pallet. Therefore, only the use of following packaging dimension bases (including cartons with the basic dimensions of 1200 x 800 mm with a tolerance of max. -5%) are permitted:

- **800 x 600 mm** (2x per pallet layer) with a tolerance of -40 and -30 mm
- **600 x 400 mm** (4x per pallet layer) with a tolerance of -30 and -20 mm
- **400 x 300 mm** (8x per pallet layer) with a tolerance of -20 and -15 mm
- **300 x 200 mm** (per pallet layer) with a tolerance of -15 and -10 mm

Material- and / or load-unit-related deviations are only permitted as subject to an explicit agreement with the SEBN headquarter (Supply Chain Management – Purchasing Team and Supply Chain Management – Logistics Team). In these cases, the supplier is encouraged to produce a packaging data sheet for the plausibility check of the packaging used and to send it to SEBN

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immediately after receiving the transport and packaging guidelines. Regarding the packaging unit height, a rational and volume-optimized compatibility with the maximum height limitation of the total charging unit (cf. *section 3.2*) of 1.20m must be guaranteed.

A further particularity is linked to the packaging of goods delivered to the oversea destination in Mexico (SEBN MX) by sea-freight transport. Here, SEBN recommends an adjustment of the loading means or pallets to the more restrictive width limits of 20', 40' or 45' HC ISO containers (inner dimension: approx. 2.35m), provided that the respective packaging units are fitted with a corresponding double compatibility in order to ensure simultaneous use on the euro and container pallet within the limits of the packaging units' tolerances. As an optimized solution for the use of container pallets, *INKA pallets of type F76* (basic dimensions: 1140 x 760 mm, dynamic load capacity of approx. 1,250kg) are recommended. SEBN declares its willingness to cover the handling of the additional expenses on the supplier's supply side by means of a partial cost transfer after a corresponding bilateral agreement.

The use of one-way pallets is the standard for delivery to SEBN MX and plants which are located outside EU. There will be no pooling, return or financial return for euro-pallets in case that the supplier uses euro-pallets for delivery to SEBN plants outside EU.

2.2.4 Packaging weight

The maximum weight per packaging unit is 30kg. Charging units or pallets must not exceed a total weight of 1,000kg.

2.2.5 Packaging labelling

Packing units must be labeled with individual adhesive labels according to VDA 4994 and according to **Annex 2**. The labels should be clearly visible from the outside on the front or the longitudinal side, whereby the outer contour of the packaging must not be exceeded. The quality condition of the label against environmental influences and transport stress is to be selected in such a way that the goods hanger is machine-readable at the delivery point. In addition, labeling of the corresponding packaging features according to ISO 7000 is necessary.

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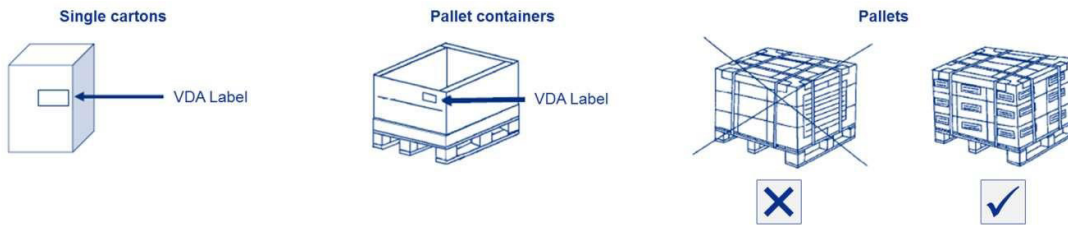


Figure 2: Correct affixing of VDA labels

The SEBN part number must be mentioned in the P-prefix field; Quantity must be mentioned in the Q-prefix field and should be the same for every delivery. For the quantity field (Q-prefix field) only the following units of measurement can be used: PCS (Pieces), MTR (Meter), KGM (Kilogram), LTR (Liter).

2.3 Packaging change

In the case of a packaging change, which is either prescribed by SEBN or initiated by the supplier, the data must be recorded and mutually approved in a packaging data sheet. A request for a packaging change must be addressed to supplier.packaging@sebn.com.

The rough procedure for a packaging change process as well as the necessary interaction steps between SCM-Logistics Team and plant logistics, SCM-Purchasing Team and supplier are outlined below. In the case of a packaging change request initiated by the supplier, the first two process steps can be ignored.

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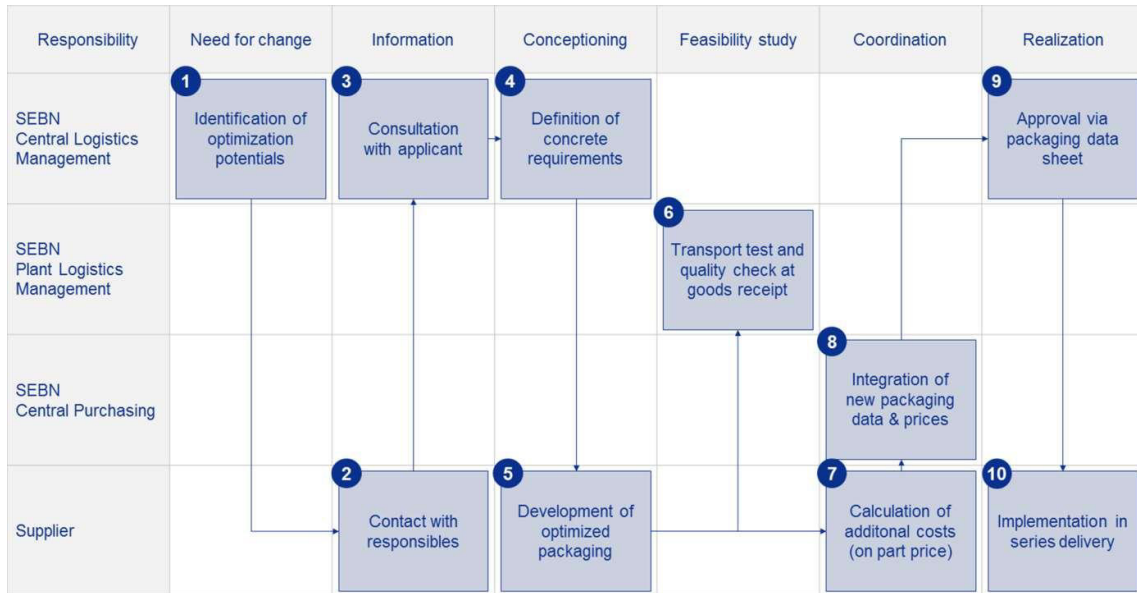


Figure 3: Packaging change

Depending on the individual case, the process sequence can be individually varied. The Supply Chain Management – Logistics Team (SCM) contacts naturally declare their willingness to support the suppliers in the context of the change process with experience reports, analysis exchanges and logistical workshops.

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3 Loading units

3.1 Layer formation of one pallet

Cartons of the same part number must be grouped on one pallet. A homogeneous pallet should be the standard. If the order volume per shipment and item nr. does not enable full homogeneous pallets, then mixed part numbers on one pallet are allowed.

Generally, SEBN is enforcing its suppliers to load exclusively fully accomplished layers on a pallet which is aligned with the respective edges. If this is not possible due to the dimensioning of the packaging unit, the supplier is requested to use edge protection angles at the edges or close the space between the packaging units with filling material. Accordingly, the packaging requirements with regard to dimensioning (cf. *section 2.2*) must be strictly followed. Individual packing units above the finished layers of a pallet are prohibited, as this does not ensure the stackability of the pallets. Packaging which is not stackable due to the material nature must be explicitly marked.

If the uppermost pallet layer can't be loaded flush or unloaded due to missing packaging units, SEBN asks the supplier to undertake an appropriate communication with the receiving plant for the purpose of matching a potential quantity completion. If this can't be ensured, empty packaging units should be used to fully utilize the pallet layer in certain cases (if a pre-coordinated minimum utilization of the pallet position is already present). These cartons should be appropriately labeled (e.g. as "empty"). However, a use of empty cartons requires, first a clarification of the cost acceptance and release of the appropriate receiving plant. Mixed pallets with different items per pallet are also needed to be clearly marked (e.g. as "mixed"). Pallets, on which deliveries with different receivers of SEBN are packed, are not accepted.

In order to ensure a smoother process for automated generation of fully utilized pallet layers, it is advisable to implement a largely standardized order behavior. For this purpose, the SEBN SCM needs the specific information on the number of pieces per package and the number of pieces per layer (based on the respective number of packages per fully utilized layer) in a packaging data sheet. This packaging data sheet template is available on the SEBN supplier portal. Based on these data, it is possible to fix the binding order quantities of the receivers for specifically selected articles ("runners") based on layer-equivalent quantities. This data is queried at controlled intervals from the supplier in order to guarantee continuous data correctness.

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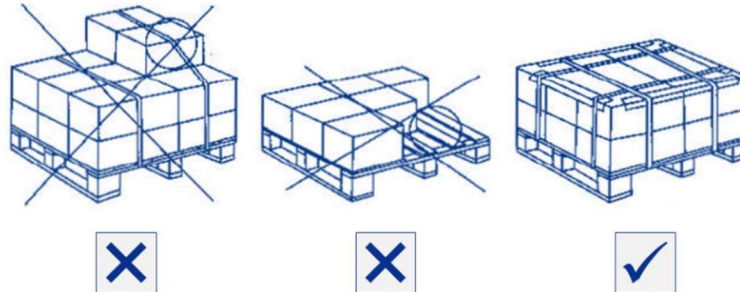


Figure 4: Proper layer formation of pallets

3.2 Stackability

The load and stacking capacity must be visible on the packaging. In principle, the total bundles or loading units must be at least two-times stackable (staple factor of 1+1) and thus, be designed according to their quality, shape and volume. Basically, the total height of the loading unit or pallet can vary but may only have a **maximum height of 1.20m**. If a stacking factor of 1+2 (triple stacking) can be ensured, a maximum total height of 0.95m per pallet is desired.

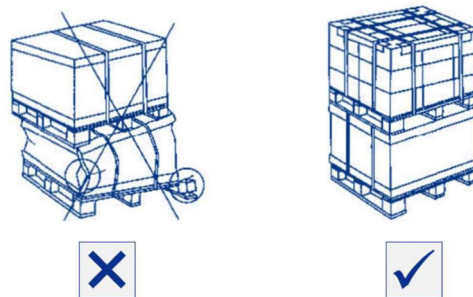


Figure 5: Proper stacking of pallets

The use of DO NOT STACK label is prohibited. Exceptional use of DO NOT STACK label have to be agreed and will not exempt the supplier from damaged product claims.

Boxes must be designed to withstand a dynamic (in transit) load of 3 times the static load of the stacked pallet units. The stackability in the trailer is according to the weight of the pallet unit and the trailer height of 3000 mm as follows:

a) pallet unit < 350kg and height of pallet unit < 1000mm: 3 times

Example: Pallet unit of 200kg, 900mm height => Dynamic load: 1800 kg.

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b) pallet unit between 350 kg and 700 kg or height of pallet unit >1000 mm: 2 times

Example: Pallet unit of 400kg => Dynamic load: 2400 kg.

In individual cases, material-related deviations with regard to stackability can be accepted. However, these must be communicated to the SEBN Head Office (Supply Chain Management – Purchasing Team and Supply Chain Management – Logistics Team) immediately upon receipt of the transport and packaging guidelines, with the request for release.

3.3 Transport securing

For the transport protection and stabilization of the pallets, edge protection angles and re-strapping tapes (made of plastic) should be used as well as the packaging units and pallets should be secured using stretch film or shrink sleeves. Metal straps are not allowed. Strapping must not cut into cardboard boxes and thus the use of corners is mandatory.

Furthermore, it is possible to use consolidation packages in the form of pallet containers (cf. *section 4.1 and figure 5*), which combine several small consignments. This charging unit form can, in certain cases, be carried out in consultation with SEBN and can be implemented via an appropriate cost acceptance by the receiving unit.

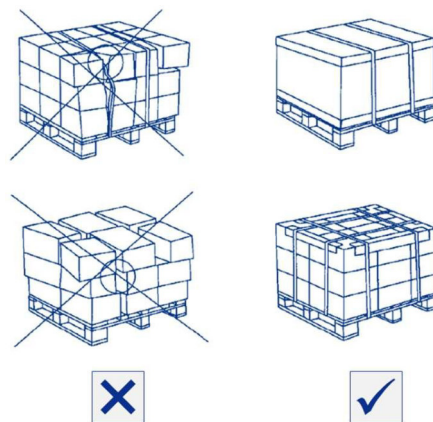


Figure 6: Proper transport securing of pallets

3.4 Labelling of loading units

If a Pallet load consists of a single part number (homogeneous pallet), a pallet label must be attached to adjacent sides of the pallet showing part number and total quantity of parts. If multiple part numbers are being shipped within one Pallet, a mixed load bar-coded label must

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be attached to adjacent sides. In any case, the gross weight for the complete pallet must be easily visible.

In addition to the actual packaging labeling with VDA 4994 labels (cf. *section 2.2.5*), an explicit identification of the loading units with shipping labels at the delivery level is required as well. For this purpose, SEBN provides the concrete statement that these labels must be generated automatically in the shipment notification process in the transport management tool "*Alpega TMS*". In this case, the transport label is needed to be visible from the outside and must be mounted on a corresponding outer side of the loading unit without any damage. In this case, consignments comprising a plurality of loading units or pallets are in any case defined by the notification process with the corresponding identification (as "*Colli 1/x*").

The actual instructions for dispatch notification and label production can be found in the current "*Suppliers Manual*" transport management tool "*Alpega TMS*"

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4 Alternative packaging concepts

4.1 Consolidation packaging

Temporary unbalanced orders of a SEBN plant, which can be owed to external factors such as production fluctuations, often result in unbalanced picking and delivery of ready-to-ship items at the supplier. This in turn leads to wastes in the volume utilization (both in the storage and transport processes of the materials). In order to counteract this effect, SEBN asks suppliers to use consolidation or outer packaging (for example in the form of pallet containers with a maximum height of 1.20m) and to collect individual packages therein. Each individual cardboard box within the outer packaging consists of one part number only. It is prohibited to have mixed parts in one individual cardboard box.

Alternatively, several consignments containing irregularly ordered articles (for example, classified as "exotics" within the framework of an ABC-XYZ analysis) can also be consolidated in a transport packaging. Furthermore, there is a need for consolidation or outer packaging in cases where an increased security is required for the stackability of the goods. But again, each individual cardboard box within the outer packaging consists of one part number only. It is prohibited to have mixed parts in one individual cardboard box. For reasons of economic profitability and the environment safety, however, it is necessary to make a concrete regulation with the corresponding receiving facility or SEBN headquarters with regard to the minimum filling level of the consolidation packaging used.



Figure 7: Exemplary illustration of pallet containers

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SEBN offers to provide already developed concepts (optional with loading flap and lid) and packaging manufacturers as well as to regulate the use of these outer packaging via order-related costs.

4.2 KLT carton

As an alternative concept for one-way packaging units of production materials, SEBN recommends corrugated cardboard boxes in the KLT standard. These are available in equivalence to the values of the known VDA-KLT and can be distinguished terminologically (with indication of the respective internal dimensions) as follows:

- **15 1740** (260 x 162 x 125 mm) in equivalence to *R-KLT 3215 / RL-KLT 3147*
- **15 1741** (360 x 260 x 125 mm) in equivalence to *R-KLT 4315 / RL-KLT 4147*
- **15 1742** (360 x 260 x 260 mm) in equivalence to *R-KLT 4329 / RL-KLT 4280*
- **15 1743** (560 x 360 x 260 mm) in equivalence to *R-KLT 6429 / RL-KLT 6280*
- **15 1744** (560 x 360 x 125 mm) in equivalence to *R-KLT 6415 / RL-KLT 6147*

The use of KLT cartons is approved by the OEM Volkswagen AG Group Logistics and is served primarily as an alternative type of alternative packaging in case of missing empties. By means of the relevant procedure instructions "Cardboard Totes: Directions for Purchasing and Application" (in the currently valid version) the certification is authorized in equivalence to the above-mentioned KLT standards and the quality of the packaging is assured.



Figure 8: Exemplary illustration of KLT cardboards

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The implementation of a packaging change to KLT cartons as a primary delivery form is preferred by SEBN, as both dimensional and quality standards can be guaranteed. For the respective suppliers, a comprehensive packaging change has also proved successful in the long term due to the increased process, storage and transport security.

In the case of an individual packaging change to be coordinated with the respective supplier, the general packaging change approach (cf. *section 2.3*) needs to be followed. For an implementation of the packaging change, SEBN offers its suppliers to provide a contact to authorized packing manufacturers of KLT cartons by request to supplier.packaging@sebn.com.

4.3 Re-usable packaging

Primarily, these guidelines refer to the most common form of one-way packaging. In principle, the implementation of procurement processes by means of reusable packaging is desired, but subject to individual coordination with the suppliers with regard to the provision and defined circulation and stock quantity of containers. Suppliers packaging, which exhibit material-related deviations to the underlying specifications (e.g. cable drums) and thus, are not completely compatible with the requirements, are again subject to individual coordination with Supply Chain Management – Logistics Team.

In the sense of continuous optimization of the logistics processes, SEBN is principally interested in obtaining production materials in reusable packaging. In this context, VDA-standard small (KLT) as well as large charge carriers (GLT) can be taken into account. Accordingly, it is possible at any time to include change projects with the suppliers. In turn, these are asked to support SEBN in change processes as well (e.g. in container selection or packing and transport tests).

In each case, in consultation with the respective responsible persons on the supply side, the respective circulation days and stock level of containers should be defined for each individual case, according to the following process steps:

- Empty stock in the delivery plant
- Production stock in the delivery plant
- Full stock in the delivery plant
- (Transport to LSP warehouse)
- (Re-transport to delivery plant)
- (Full stock in LSP warehouse)

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- (Empty stock in LSP warehouse)
- Transport to SEBN recipient plant
- Re-transport of empties to delivery plant
- Full stock in SEBN recipient plant

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5 Transport management

5.1 Electronic Data Interchange (EDI)

With the electronic data interchange business related data is sent between the information systems of SEBN and the supplier. SEBN communicates all data via electronic remote data transmission. This type of data transfer allows the elimination of paper receipts and repeat data inputs at the receiving party. Wrong entries can thus be reduced to a minimum. Hence the supplier accepts and promises to employ the below Automotive standards and should be able to process the following formats:

1. VDA4905: released orders/Delivery instruction. SEBN is responsible for the flawless electronic communication of release orders to the Supplier. The Supplier is responsible for the necessary hardware and software equipment at his site as well as for the adaptation of his IT system in order to process this information.
2. VDA4913: ASN (Advanced Shipment notification). All data regarding the consignment in transit are to be communicated online to the receiving plant via electronic consignment note (VDA 4913) immediately after dispatch. Complete packaging data (with SEBN agreed box type, packaging numbers for master as well as single units) has to be listed.
3. VDA4906: Invoices transmission for finance

If further information is needed, the supplier is in charge of contacting SEBN and clarify as well as solve the issues. Initially the attachment “EDI-Organization-Data” has to be filled out and unasked sent to oi.hotline@sebn.com.

5.2 Notification of shipments

5.2.1 General

SEBN follows the approach of steering and managing all consignments through a holistic transport management system (TMS). Suppliers who advice consignments based on the INCOTERMS 2020 of the International Chamber of Commerce of EXW or FCA to pick up are therefore obliged to comply with the respective conditions of the inbound transport service provider which is used extensively. These requirements primarily relate to the proper use of the “Alpega TMS” transport management tool, which is the basis for the correct notification of

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the deliveries, the provision of the corresponding delivery documents and the additional labeling of the delivery. The use of the TMS by the supplier is mandatory in order to avoid costs of non-compliance (see chapter 6.3). The suppliers are consequently requested to create standardized labels from “Alpega TMS” and to attach them visually per load unit or pallet (cf. section 3.4). The following information should be provided to create a transport request:

- Date and place of pick-up
- Reference (delivery note number)
- Receiver and unloading station
- Number of packages and loading units
- Weight and dimensions
- Information on stackability
- Information about possible hazardous goods
- If necessary: indication of the UN number and substance name according to ADR
- Pick-up reference of the supplier
- In case of export to a third country: exhibitor, export declaration, value of goods and MRN number or information on who is responsible for the export declaration
- Copy of the delivery note

The relevant detailed information can be found in the “*Manual for Suppliers*” which on request can also be sent to the supplier via SEBN.TMS-support@sebn.com

5.2.2 Packaging relevant specifications

In the context of a desired increased degree of automation and standardization for a quicker and more miscalculated handling of the operational transport logistics, the central transport management tool coordinates the shipment orders, route planning and loading area registration with regional freight forwarders based on the data input of the suppliers. Accordingly, a very conscientious and careful application or information provision of the transport order preparation is necessary to be able to guarantee a smooth process and the claim to the partnership-based cooperation in terms of cost and environmental pollution reduction.

Since a consignment can consist of several packs or loaders and thus, these can have a direct influence on the loading area to be advised, special packaging-specific characteristics must be considered at the time of the registration. The supplier is requested by the system to provide

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information on the weight, dimensions and stackability of the consignment. SEBN encourages suppliers to ensure that these data are entered correctly and checked for plausibility. About the transmission of the message, particular attention must be paid here to the fact that consignments which have a plurality of identical loaders (in respect of dimensions, weight and stackability) must be consolidated and indicated with the total number of loaders or pallets. Accordingly, the system automatically calculates the loading area or halves it accordingly if the consignment is declared as stackable.

Loading metre (ldm) as of (A) stackable and (B) non-stackable pallets

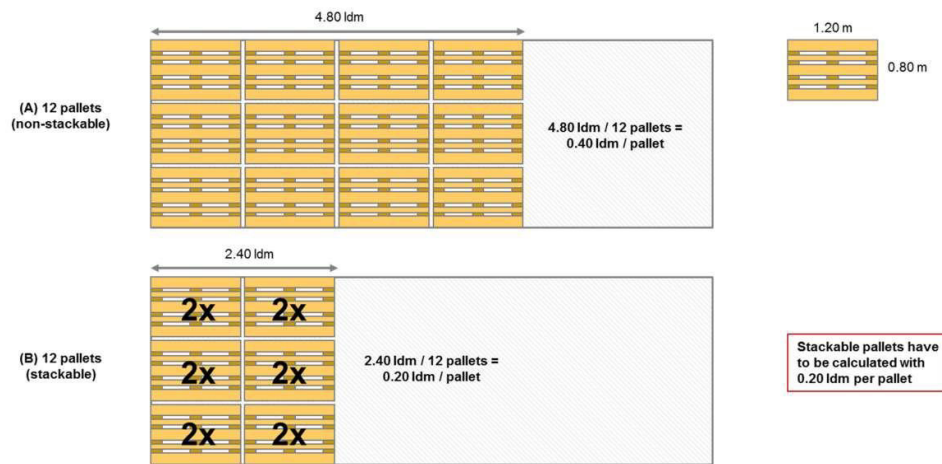


Figure 9: Exemplary calculation of loading area reservation

5.3 Shipping documents

The supplier is responsible for

- providing all necessary documents (Delivery Note, CMR, Invoice) in line with local, national and international legislation.
- the preparation of export documents for NON-EU-Countries according to the agreed Incoterms.
- the fulfilment of specific requirements from custom authorities of NON-EU-Countries (e.g., original stamp on the paper)
- providing proof of origin for all its products if customs preferential treatment can be applied in the importing country and/or in the European Union. This proof must be in line with EU legislation (e.g., EUR1, Invoice declaration, EURMED, long term supplier declaration).

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5.3.1 Shipping order

The shipping order or freight note shall be completed in accordance with the VDA 4922 standard. In the context of the shipment notification, however, an upload of the forwarding order is optional and falls under the category of "others".

5.3.2 Delivery note

A delivery note is compulsorily required for the collection of the supplier materials in the goods receipt of the respective SEBN receiving plant, since this clearly describes the shipment reference. The suppliers are needed to consider the following:

- A) In the case of dispatch via parcel service, the delivery note must be delivered in duplicate in corresponding cases on the outside of the associated parcels.
- B) In the case of shipment via freight forwarder, the delivery note must be handed over to the carrier with the freight documents. It must be ensured that each single carton box is nevertheless clearly identifiable from the outside with SEBN article and order number and content volume as well as with an additional delivery note. The delivery license at the package should be replaced by a VDA product trailer.

According to DIN 4991, at least the following must be stated on the delivery notes:

- Order number as reference to which the delivery note refers
- Delivery note number and date
- Sender and recipient

Depending on the delivery note position, details of the SEBN article number, delivery quantity with unit of measure, net weight of the delivered quantity as well as number of packages should be made.

The delivery note is compulsory to be uploaded within the scope of the shipment notification and serves as a concrete reference for the physical collection on the spot using the number.

5.3.3 Export accompanying document

An export declaration is necessary for consignments to third countries. This requires an export accompanying document (ABD), which must be uploaded together with the commercial invoice

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in the transport portal. The Moving Reference Number (MRN) of the corresponding export declaration must also be entered with the goods value.

Based on the desired partnership, SEBN asks suppliers to issue or upload export documentation for shipments with a value of less than € 1,000, even if the legal provision does not provide for such cases. This often leads to a subsequent document creation which proves to be very time-consuming and cost-intensive and possibly leads to a return transport of the goods. If the supplier does not have the option to implement this requirement, the document preparation is to be arranged by the freight forwarder Meyer & Meyer within the framework of the sender notification.

5.4 Load securing

Pursuant to Section 22 of the Road Traffic Regulations and Section 412 HGB, all persons (drivers, shippers, consignors, freight carriers) involved in loading, both directly and indirectly, are responsible for ensuring proper load securing. In addition to the legal requirements, the VDI guideline 2700 is to be observed with indications for the safe handling of traffic on road vehicles.

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6 Deviations and non-compliances

6.1 General deviations

The guidelines described in this guideline apply in principle. Deviations must be submitted to the approval at an early stage and agreed with SEBN. If this guideline is not complied with, or if deviations are not released, the supplier is given a logistical complaint asking him to take corrective actions. Complaints are included in the supplier assessments.

In the case of gross deviations, the acceptance of goods may be refused. The supplier will bear the costs of additional expenses for unauthorized deviations (e.g. additional transport, re-packaging, handling, waste disposal, quality degradation due to inadequate or contaminated packaging).

6.2 Pickup waiting times

The goods must be made available for pickup as scheduled. In case of excessively long loading and waiting times or delayed clearances, the costs for such times shall be carried by the causing party. None of the parties shall be blamed for waiting periods that cannot be influenced by any of them, e.g., customs clearance including trips to the customs office.

If waiting periods are exceeded due to the supplier's fault and if the truck has to leave in order not to endanger other appointments or deliveries, the supplier shall organize and carry the costs for special transports to punctual delivery of the concerned goods.

If the forwarder arrives late, i.e., does not respect the agreed upon period of collection of the goods, he has to accept the assignment of a later pickup period. The supplier shall make sure to minimize the delay.

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7 Contacts

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