

VERSION 4.0 / 2025

SUPPLIER LOGISTICS HANDBOOK



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1 Preface

1.1 Purpose & Scope

Purpose of the Supplier Logistics Handbook (SLH) is the formal communication of the Vaillant Group (VG) packaging, labelling and documentation requirements to external suppliers.

The requirements are applicable to any supplier who delivers goods related to VG contracts/purchase orders unless otherwise specified in the product definition or contract/purchase order. The supplier must impose the obligations of the SLH on its subcontractors.

The SLH describes the minimum requirements that need to be observed by the supplier. Product specific requirements could be added by VG or also by the supplier itself. The SLH is the basis for the acceptance of shipments to VG locations. In the event of non-compliance with the requirements and standards described in this document, VG reserves the right to pass on possible resulting costs to the supplier.

The supplier is responsible for ensuring sufficient packaging to protect his goods during transportation, handling and storage. Even VG requirements, proposals and standards do not discharge from liability for damages. If they are not sufficient to protect the supplier's goods, the supplier must inform VG and a new solution will be aligned. It is also the responsibility of the supplier to ensure that the goods arrive undamaged. In addition to packaging, this also includes the entire transportation process.

Furthermore, the contents of the SLH do not release the supplier from compliance with any other regulations, directives and laws applicable to him.

1.2 VG Daily Contact

The VG daily contact person of the supplier is the responsible Material Supply Planner a/o Project/Commodity Buyer. It is the supplier's first point of contact for any questions. If a topic cannot be aligned directly between both parties, the VG daily contact coordinates the alignment between suppliers and other VG departments.

2 Handling Units

2.1 Introduction

VG distinguishes between different handling units, which are built on each other in a multi-level system. Each handling unit consists of different components. The first level handling unit is the packaging unit. The packaging unit can be a component of the pallet unit, which is the second level handling unit. The third and last level is the transport unit, which consists of one or more pallet units. All types of handling units are shown in Table 1. An additional handling unit is the master packaging unit, which represents an exceptional case.

2.2 Packaging Unit

The packaging unit describes all the components which are necessary to protect the parts. Typically, this is at least a plastic or cardboard box. In some cases, packaging means such as separators, foamed materials or paper were placed inside the boxes to increase the protection of the parts. These packaging means are also components of the packaging unit.

2.3 Pallet Unit

The pallet unit consists of the pallet itself as the main component. VG distinguished between two different variants of pallet units. The two variants differ in whether packaging units are components of them or not.

There is the variant which includes boxes (packaging units) that are loaded on the pallet. Therefore, the packaging units are components of the pallet unit.

Furthermore, there are pallet units without packaging units. This is the case e.g. with grid boxes or large load carriers. In this variant the packaging units are not components of the pallet unit and are not defined.

Packaging means such as covers, straps and foils that ensure safe transport are also components of the pallet unit. The same applies for packaging means which are necessary to protect the parts inside the pallet unit such as nestings, separators or interlayers.

2.4 Transport Unit

The transport unit is the third level handling unit. It describes the stackability of the pallet unit permitted for transport to the VG locations. If a pallet unit is not stackable, the transport unit is 1+0 and thus equal to the pallet unit. If the stackability for the transport of a pallet unit is e.g. 1+1, the transport unit consists of two pallet units.

2.5 Master Packaging Unit

The master packaging unit is an exceptional case (see Figure 1: Master Packaging Unit). If for example there are some small cardboard boxes that are packed in a bigger cardboard box, the smaller ones would be defined as packaging units and the bigger one as master packaging unit. Generally, master packaging units shall be avoided to reduce waste.



Figure 1: Master Packaging Unit

Examples of Handlings Units

Packaging Unit



Pallet Unit



Transport Unit



Table 1: Examples of Handling Units

2.6 Packaging Data Sheet (PDS)

The Packaging Data Sheet (PDS) is the description of the handling units for a specific part number in one or more specific location. Generally, the PDS is handed over to the supplier and needs to be filled with packaging details.

For a specific part number only one PDS per VG location is permitted. This is to ensure that the packaging type and quantity of a part number is always the same within a specific VG location. If the packaging and quantity of a part number are identical at several locations, only one PDS should be created for all locations.

The PDS is a mandatory document and needs to be shared with the Head of Production Logistics of the receiving locations. In the event of non-compliance with the content of the PDS, VG reserves the right to charge the supplier for the resulting costs (e.g. for repackaging) or to return the goods at supplier's costs.

If deviations from the PDS are planned, these must be approved in writing by VG in advance. One-time or short-term changes must not affect the packaging quantity, as this would necessitate a major change in the affected systems. One-time or short-term deviation from the PDS that are made within the scope of the SLH requirements can be aligned directly between supplier and VG daily contact person. In this case local production logistics team of the receiving location must be informed in advance. The same applies to permanent packaging changes, but with adjustment of the PDS and affected systems. All packaging changes that lead to deviation from the SLH requirements and affected only one location must be also aligned with consulting the local production logistics team. If several locations are affected, the Group Production Logistics Department (IM-OL) must be involved.

Supplier hands in the PDS in digital format. The latest SLH version and PDS template can be downloaded from VG Homepage or can be requested via VG daily contact person. The PDS template also contains detailed instructions on how to complete it. An example of the PDS is shown in Figure 2.

Vaillant Group Packaging Data Sheet (PDS)									
Version:	1								
Part Name:	Sample Part								
Vaillant Part-No.:	12345678910111213								
Vaillant Plant:	Remscheid, Senica, Belper, Nantes								
Supplier Name:	Sample Supplier								
Supplier-No.:	12345								
Packaging Specification-No.:	111213141516191817								
General Information									
Quantities & Packaging Types									
Packaging Level	Quantity in Pieces	Packaging Type							
Pallet Unit	900	One-Way Pallet							
Packaging Unit	75	Multi Pack 5 (ESD)							
Packaging Unit per Pallet Unit	12	-							
Dimensions & Weights									
Packaging Level	Outside			Inside			Outside Volume [L]	Total Weight [kg]	
	Length [mm]	Width [mm]	Height [mm]	Length [mm]	Width [mm]	Height [mm]			
Pallet Unit	1200	800	810	-	-	-	777,6	287,54	
Packaging Unit	600	400	222	531	342	213	53,3	22,67	
Part (Single Part)	300	10	10	-	-	-	0,03	0,25	
Detailed Packaging Information									
Pallet Unit (SAP Main Level Packaging)									
Packaging Mean	Relevant	Reusable	Sell & Buy	Material	Quantity per Pallet	Vaillant SAP-Number	Type / Description	Weight per Piece [kg]	Total Weight [kg]
One-Way Pallet	Yes	No	No	Wood	1	-	-	15	15
Layer / Interlayer	No	-	-	-	-	-	-	-	0
Separator / Tray / Nesting	No	-	-	-	-	-	-	-	0
Poles	No	-	-	-	-	-	-	-	0
Foil (wrapped pallet unit)	Yes	No	No	Plastic	1	-	Stretch Foil	0,5	0,5
Strap	No	-	-	-	-	-	-	-	0
Additional Cover (with own SAP-No.)	No	-	-	-	-	-	-	-	0
Master Packaging	No	-	-	-	-	-	-	-	0
Others (description obligatory)	No	-	-	-	-	-	-	-	0
Packaging Unit (SAP First Level Packaging)									
Packaging Mean	Relevant	Reusable	Sell & Buy	Material	Quantity per Box	Vaillant SAP-Number	Type / Description	Weight per Piece [kg]	Total Weight [kg]
Multi Pack 5 (ESD)	Yes	Yes	Yes	Plastic	1	20202748	Comepack Packaging	3,02	3,02
Layer / Interlayer	Yes	No	No	Cardboard	6	-	Interlayer	0,15	0,9
Separator / Tray / Nesting	No	-	-	-	-	-	-	-	0
Foil / Bag	No	-	-	-	-	-	-	-	0
Others (description obligatory)	No	-	-	-	-	-	-	-	0
Stackability									
Stackability	Qty.								
Number of stackable Pallet Units in truck (dynamic load)	1 = 1 + 0								
Number of stackable Pallet Units in storage (static load)	1 = 1 + 0								
Miscellaneous									
Transport test necessary?	No								
UN Number	No								
Water Hazard Class (to be specified for each destination where a corresponding regulation)	No								
Special warehouse Requirements such as temperature, humidity range, shelf life etc. (see supplier logistics handbook)	No								
Waste [kg]	26,3	kg/pallet unit							
Plastic	0,5	kg/pallet unit							
Cardboard	10,8	kg/pallet unit							
Paper	0	kg/pallet unit							
Wood	15	kg/pallet unit							
Metal	0	kg/pallet unit							
Biodegradable Material	0	kg/pallet unit							
The Packaging Data Sheet is content of the VGPA									

Template Version 4.1

Packaging Unit



Pallet Unit



Transport Unit



Figure 2: Packaging Data Sheet (PDS)

VAILLANT GROUP

3 Selection, Test & Inspection

3.1 Introduction

This chapter simplifies the process of selecting the right packaging for shipments to VG locations. Furthermore, it describes the need for an external test and the execution of an inbound inspection. Generally, VG requests the use of standard packaging from Comepack. It is the VG service provider for reusable packaging. It should be mentioned that VG can predefine packaging solutions and quantities. The supplier then checks whether the requests can be implemented. If this is not the case, another solution needs to be discussed. Selections that are made within the scope of the SLH requirements can be aligned directly between supplier and VG daily contact person. Selections that lead to deviation from the SLH requirements and affect just one location must be aligned with the local production logistics team of the receiving location. If several locations are affected the Group Production Logistics Department (IM-OL) must be involved. The selected packaging must be approved in writing by VG and needs to be documented in the PDS (see Chapter 2.6).

3.2 Packaging Selection

Preferred packaging are the reusable boxes provided by Comepack. Comepack is the VG service provider for reusable packaging and responsible for providing the load carriers to the supplier and collecting them from the VG locations. Most of Comepack's load carriers can be used in any VG location. There are also some special load carriers that must be approved by local logistics before use. The Comepack service and load carriers are described in detail in Chapter 5.1. The use of a packaging solution other than Comepack should only occur in exceptional cases. Generally, there are four main reasons for choosing a different packaging.

One reason to refrain from Comepack packaging is a distance that does not justify the provision and collecting of the packaging from an economic (and sometimes environmental) point of view. This is the case for suppliers located on the geographical borders of Europe or who deliver from overseas. These suppliers should use one-way cardboard boxes and wooden pallets. For overland transport within Europe the use of reusable EPAL 1 (EU pallet) or EPAL 2 (ISO pallet) can be discussed. Detailed information about the use of one-way packaging and pallets are described in Chapter 6 and 4.4.

Customs charges are also a reason to refrain from the use of Comepack packaging due to economic reasons. In this case the use of cardboard boxes and reusable EU/ISO pallets (EPAL 1/2) should be considered. Ultimately, the final packaging decision depends on the prevailing customs regulations. Deliveries to and from the UK are an exception. For this Comepack packaging is the preferred solution.

Another reason to refrain from Comepack packaging is an annual demand which does not justify the provision at the supplier from an environmental and economic point of view. The annual demand should be at least one full truck load of empties. If the annual demand is too low, cardboard boxes and reusable EU/ISO pallets (EPAL 1/2) are the preferred solution. Detailed information about the use of one-way packaging and pallets are described in Chapter 6 and 4.4.

The dimension and shape of the parts could also be a reason to refrain from Comepack packaging. If the parts do not fit into Comepack boxes, special packaging needs to be provided by the supplier. A suitable pallet must also be selected. Detailed information about the use of supplier owned packaging and pallets are described in Chapter 5.2 and 4.4.

3.3 External Transport & Storage Test

The supplier is responsible for ensuring the required quality of the goods during transport and storage. Therefore, in the case of sensitive parts or the implementation of a new packaging solution, the supplier must take into consideration the execution of an external transport and/or storage test. If the supplier recognizes the need for such tests, it shall be responsible for carrying them out and for their scope.

3.4 Inbound Inspection

At inbound inspection the pallet and packaging unit of a specific part number is checked against the corresponding PDS. In addition, the packing and parts are checked regarding quality issues (mainly damages).

In the event of quality issues or non-compliance with PDS, VG reserves the right to charge the supplier for the resulting costs (e.g. repackaging) or to return the goods at supplier's costs. This is also the case when any other requirements or standards of the SLH or any other guidelines or contracts between supplier and VG are not fulfilled.

In case of an issue the supplier will be informed promptly and asked to analyse in accordance with VG 's 8D report.

4 Logistics Requirements

4.1 Introduction

The supplier must meet various specific requirements and standards that are described in the single chapters of the SLH. This chapter contains general logistics requirements and standards, which are listed according to different topics.

4.2 Packaging

- The packaging method and quantity for a specific part number must always be the same.
- All reusable packaging components must have a Vaillant SAP number. An exception are packaging components which are transported permanently together.
- Suppliers must ensure ideal protection of goods against damage, humidity, corrosion, contamination, decay, tampering and other risks.
- Packaging must not overlap the pallet.
- Parts which are not finally approved and released must be marked separately and preferably with the lettering “blocked” on a red label. A corresponding note “blocked” must also be included on the delivery note.
- Mixed pallets that contain more than one part number shall be avoided. If a separate pallet is not feasible, it needs to be clearly marked as a mixed pallet.
- If a handling unit is not stackable it needs to be clearly indicated on the packaging.
- Unnecessary a/o excessive packaging must be avoided according to PPWR 2025.
- If one-way (non-reusable/single-use) packaging means such as cardboard boxes, foils, plastic straps are used VG requirements described in Chapter 6 must be observed.

4.3 Labels & Shipping Documents

- Quantities can be specified with a max. of seven digits.
- Pallet- and packaging-unit must be correctly labeled (see Chapter 7)
- All shipping documents need to be attached to the shipment (see Chapter 7).
- Goods receipt certificates are generated automatically on request. For each location the supplier requires goods receipt certificates a registration is necessary. After registration a monthly digital confirmation of all deliveries of direct materials will be provided.

4.4 Pallets

- Pallets from the EPAL exchange system are the preferred solution, the first choice is EPAL 1 (800 x 1200mm, EU pallet) and second EPAL 2 (1000 x 1200mm, ISO pallet).
- One-way pallets should have the following dimension: 1st choice EPAL 1 dimension (800 x 1200mm, EU pallet), 2nd choice EPAL 2 dimension (1000 x 1200mm, ISO pallet).
- If above mentioned preferred dimension cannot be used, the chosen pallet needs to have min. one size of the EPAL 1 (EU pallet, width = 800mm, length = 1200mm).
- Bottom clearance of pallets must be at least 100mm to ensure movement with standard means of transport.
- It must be ensured that the pallet can be entered with a forklift from all four sides and with a manual and electronic pallet truck from two sides.
- Pallet should have skids instead of feet to ensure usage for automatic systems and roller racks.
- Ensure solid pallet quality that allowing at least 12 to 15 handling steps.
- Pallet needs to be stackable 2,4m in truck (dynamic load) and min. 4m during storage (static load).

4.5 Transport

- The parts must be free from damage and meet fit, form and function requirements without the need for repair or rework when they arrive at a VG location. This is expected regardless of who is responsible for freight and transportation.
- When selecting methods, systems and materials for packaging and transport the supplier shall consider the statutory regulations applicable in the countries of delivery and receipt.
- Booking of unloading slots might be requested in some of the receiving locations.

4.6 Storage

- Requirements of VG warehouses must be observed when selecting the packaging and pallet size (see Chapter 4.10).
- All used packaging must ensure a shelf life of 2 years (up to 15 years in the case of spare parts) in a warehouse without climatization. That means a regulation of temperature and humidity is not the case in VG warehouses. Thus, the supplier needs to consider ranges in temperature and humidity for the warehouses in which their goods will be stored after delivery to VG.

4.7 Ergonomics / Health & Safety

- To avoid injuries, sharp edges are not allowed at any packaging means.
- Packaging and packaging methods should enable easy and safe handling, lifting, loading and unloading.
- Boxes and other handled packaging components must be designed with recessed grips.
- Interlayers need to be designed for easy handling.
- The weight of boxes must not exceed a maximum weight of 10 Kg for handling. Deviation from this rule is only allowed after approval in writing from local Health & Safety Responsible via supplier's daily contact person.
- Ergonomic requirements are determined by local laws and local VG guidelines.

4.8 Hazardous Goods

- Hazardous goods must be packed and shipped in accordance with international and local hazardous goods regulations.
- The packaging must have a label with the note of hazardous parts.

4.9 Electrostatic Discharge (ESD)

- The supplier must specify for which part ESD (Electrostatic Discharge) packaging is necessary.
- The packaging of the parts must follow ESD requirements in accordance with DIN EN 61340-5-1.
- The packaging must have a label with the note of ESD parts.

4.10 VG Warehouses

The following table shows the requirements for VG warehouses:

VG Warehouse Requirements											
Storage Conditions VG Warehouses	Remscheid RS	Nantes NA	Belper BE	Trencin TR	Skalica SK	Bergheim BM	Bozüyük BO	East Hub SK	Senica SE	Roding RO	Technocargo Neuss
Lengths (mm)	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1200	1.200
Width (mm)	800	Standard: 800 Exception: 1.000	800 1.000	800	800	Standard: 800 Exception: 1.000	800 1.000	800 1.000	800 1.000	800	800 1.000
Height incl. pallet (mm)	960	1.200	1.200	1.100	1.100	1.000	1.100	1.200 1.700 1.900 2.300	1.200	900	600 1.200 1.900 2.300
Weight (kg)	1.000	1.000	500	500	500	1.000	500	750	500 (EPAL 1, EU) 660 (EPAL 2, ISO)	800	1.000
Important Information	only pallet with 4 feet or skids								only pallet with 4 feet or skids		according to fire regulations Megapacks not allowed

Table 2: VG Warehouse Requirements

5 Reusable Packaging

5.1 Comepack Leasing System

Comepack is the VG service provider for reusable packaging. This packaging is the preferred one for external suppliers. Other packaging solutions should only be used in exceptional cases (see Chapter 3.2). Comepack provides packaging that meet VG packaging standards and requirements. In addition, Comepack is taking care about distribution and collection of its packaging as well as about maintenance and cleaning. It is necessary that the supplier have separate contracts with Comepack. In those contracts additional requirements regarding inventory management, damages and other topics are defined between the supplier and Comepack.

Comepack Large Load Carriers				
SAP-No.	Name	Dimension inside/outside (l x w x h) in mm	Max. net gross in kg	Important Information
922035	Mega Pack S 1200-975	1225x820x975 1150x750x795	1000	Deliveries to or via TechnoCargo Neuss are not allowed
922036	Mega Pack S 1200-1185	1225x820x1185 1150x750x990	1000	Deliveries to or via TechnoCargo Neuss are not allowed, not usable in Remscheid high rack

Table 3: Comepack Large Load Carriers

The Comepack Leasing System can be summarized as follows: The supplier requests and buys boxes from Comepack. The boxes need to be counted and checked for damages by an incoming inspection, afterwards the supplier must post them into stock. For the box pool management, the supplier needs to be always able to provide stock quantity and must carry out regular stock counting. The supplier charges the boxes with every shipment of goods to VG, who then sells the boxes back to Comepack at a lower price. By the price difference Comepack get paid for the service.

5.1.1 Comepack Large Load Carriers

Comepack provides two types of large load carriers which you can find in Table 1 as well as Figure 3 & Figure 4.



Figure 3: Mega Pack S 1200-975



Figure 4: Mega Pack S 1200-1185

5.1.2 Comepack Small Load Carrier

Comepack provides three different types of small load carriers, which all include a cover. The carriers are tapered so that they can be nested inside each other for empty transportation. As a result, they are slightly larger at the top than at the bottom, which is why a maximum inside (top) and minimum inside dimension (bottom) is specified in Table 4 where each small load carrier is listed.

Figure 6 shows the Multi Pack. It is a normal plastic box and available in five sizes. They are numbered according to their size with Multi Pack 7 is the smallest and Comepack 3 (size 3 have a different name called “Comepack” not “Multi Pack”) the biggest one. Multi Packs 5-7 can be used in any location without restriction. Comepack 3 and Multi Pack 4 should only be used in exceptional cases and with agreement of the receiving locations.

The Multi Pack ESD is shown in Figure 7. This variant is used for shipments of electronic sensitive components. ESD stands for electrostatic discharge and the boxes are provided in two different sizes (Multi Pack ESD 5 and 6).

The third variant is a basket (see Figure 5) which is available in 18L and 40L sizes.

5.2 Reusable Supplier Packaging

Supplier owned reusable packaging should just be used if the goods do not fit into the reusable packaging from Comepack or special packaging is necessary due to parts requirements (e.g. shape or sensitiveness). In addition to the general requirements described in Chapter 4 - 8 -supplier owned packaging must fulfill the following requirements:

- Pallets from EPAL exchange system must be used. 1st selection EPAL 1 and 2nd EPAL 2.
- Posting and inventory management of reusable packaging is mandatory.
- Empty packaging needs to be stackable and picked up regularly by the supplier, otherwise a storage fee must be paid.
- Supplier must ensure 100% liability of packaging for forecasted volumes of +/- 30%.
- Supplier is responsible for the cleaning of the boxes.
- All attachments must be removed from packaging prior to delivery to VG.
- The supplier is responsible for the exchange or maintenance of inoperable packaging.



Figure 6: Multi Pack 5



Figure 7: Multi Pack ESD 5



Figure 5: Basket 40L

Comepack Small Load Carriers

SAP-No.	Name	Outside Dimension (l x w x h) in mm	Inside Dimension top/bottom (l x w x h) in mm	Important Information
922034	Multi Pack 7	300x200x160	267x175x143 238x150x143	
922033	Multi Pack 6	400x300x224	363x257x213 348x240x213	
922032	Multi Pack 5	600x400x222	559x367x213 531x342x213	
20186005	Multi Pack 6 ESD	400x300x224	363x257x213 348x240x213	For electronic components, Electrostatic Discharge (ESD)
20202748	Multi Pack 5 ESD	600x400x224	559x367x213 531x342x213	For electronic components, Electrostatic Discharge (ESD)
8000014331	Basket 18L	400x300x220	295x245x202 290x240x202	
8000014330	Basket 40L	600x400x220	489x345x202 485x340x202	
922031	Multi Pack 4	600x400x335	559x367x325 531x342x325	Only in exceptional cases <u>with agreement of receiving locations</u>
922089	Comepack 3	800x300x327	740x370x295 700x300x295	Only in exceptional cases <u>with agreement of receiving locations</u>

Table 4: Comepack Small Load Carriers

6 One-Way Packaging

6.1 Introduction

In this chapter the requirements for the use of one-way (non-reusable/single-use) packaging are described. These refer to all boxes which are not reusable and all other one-way packaging means (foils, straps, layer etc.) for the transport of goods from a supplier to a VG location.

6.2 Sustainability

The supplier should select the most sustainable solution regarding social, environmental and economic aspects. This is usually reusable packaging, but in some cases one-way packaging needs to be selected (see Chapter 3.2.). VG selection criteria regarding sustainability are as follows, in order of importance:

1. Reusable (1st solution Comepack)
2. Made from recycled material, which can be recycled
3. Made from material, which can be recycled
4. Made from material, which is biodegradable

If one-way packaging needs to be selected, the preferred material is cardboard or paper and should have the highest possible proportion of recycled material. Furthermore, one-way packaging must always be 100% recyclable or biodegradable.

6.3 Environmental Protection

As mentioned, paper and cardboard are the preferred materials for one-way packaging. This includes the boxes and all other packaging means such as separators, inlays and layers.

If films or plastics are used, they must be of high-quality recyclable material such as PET, PE or PP. EPS is not allowed as packaging material. Responsible for the register of allowed recycling materials is the local Environmental Officer. Composite materials made of paper and plastic should be always avoided as they are difficult to recycle.

For deliveries to a VG location the supplier needs to observe the requirements of the PPWR 2025 (Regulation (EU) 2025/40 of the European parliament and of the council on packaging and packaging waste). Furthermore, ISPM 15 standard (if applicable), the International Plant Protection Convention (IPPC) and relevant national regulations must be observed.

6.4 Cardboard Boxes Requirements

Dimensions of cardboard boxes need to be compatible with standard EU pallet (EPAL 1). To avoid problems, such as cardboard boxes not fitting into the racks of the assembly lines, the cardboard boxes should be the same size as Comepack boxes. Allowed dimensions of cardboard boxes are:

- 1200 x 800 x 975 mm
- 300 x 200 x 160 mm
- 400 x 300 x 224 mm
- 600 x 400 x 222 mm

Other dimensions need to be approved in writing by VG daily contact person and additionally by the receiving locations.

When using cardboard boxes, the following requirements must be observed in addition:

- Cardboard packaging must be easy to open without a knife.
- To avoid injuries, metal cramps are not allowed at cardboard boxes. Instead, the usage of an appropriate adhesive tape is required.
- Cardboard boxes must not be permanently fixed to the pallet.

7 Labelling

7.1 General Labelling Requirements

The labelling is an explicit marking of packaging and pallet unit. It helps the consigner, the forwarder and the consignee to identify the load. For all shipments to VG the following label requirements must be met:

- Barcode Code 128 shall be used to avoid mixing up different barcodes.
- Quantities can be specified with a max. of seven digits.
- Scanning of the labels must be easy without any extra handling like unpacking.
- All old labels or other attachments must be removed from packaging prior to delivery to VG.
- It is just allowed to attach labels in the required amount and standard, no other labels or items are allowed to be attached to the packaging.
- Deviation from the required label standards must be approved by local production logistics and VG daily contact person in writing.
- Labels are required for the pallet unit and each packaging unit.

7.2 Labelling of Pallet Units

For the labelling of the pallet unit additional requirements must be followed:

- Label size for a pallet unit should be minimum DIN A6.
- For each pallet unit two labels are required. One label must be attached to the long side of the pallet unit and one to the short side.
- For Comepack packaging additional requirements (see Chapter 7.4) need to be observed.

The supplier is responsible for the labelling in the style of VDA – Norm 4902 (see Figure 8). The content of the label needs to be:

1. Consignee (*)
2. Unloading point (*)
3. Delivery note number – in addition as barcode (*)
4. Supplier (*)
5. Net weight
6. Gross weight
7. Total quantity of delivery (quantity pallet units)
8. VG part number (big enough to be read in racks) – in addition as barcode (*)
9. Qty. (parts/pallet unit) – in addition as barcode (*)
10. Description of material
11. Part number of supplier
12. Supplier number/business partner number (*) (**)
13. Date
14. VG purchase order number or delivery schedule number – in addition as barcode (*)
15. Handling unit number – in addition as barcode
→ will be generated in Ariba in future and might be a separate label (see Figure 9)
16. Batch/serial no.

(*) mandatory for all materials

(**) to be replaced by Serial Shipping Container Code (SSCC; German: NVE) for trading goods

(1) Warenzettel Vallant GmbH Berghäuserstrasse 40 42859 Remscheid		(2) Adresse - Lagerort - Verwendungszweck Lager PZV Halle 8/1	
(3) Lieferschein-Nr. (4) 123456 		(5) Liefermengenart (Zusatz, Ware, PZ, GG) Musterlieferant	
		(6) Gewicht netto 500	(7) Gewicht brutto 520
		(8) Anzahl Pakete/Boxen 10	
(9) Send-To-Kunde (7) 0 166 496			
			
(10) Packmenge (2) 24		(11) Bezeichnung, Vermerk, Leistung Blende	
		(12) Sachfr. Lieferant (300) 123456789	
(13) Warenzeichen (1) 573496112		(14) Datum 01.12.2008	
		(15) Änderungs- und Anzahl 13	
(16) Packstück-Nr. (5) 12345		(17) Chargen-Nr. (4) 67890	
			
(18) Musterlieferant		Warenempfänger (Zu 400), Version 4	

Figure 8: Standard label for pallet unit (VDA-Norm 49902)

HU Label  HU 1000000866		
 8000000701 - FERT - Print Shop Final	 1 ST	
Batch Number:	BBD:	Goods Receipt Date:

Figure 9: HU Label

7.3 Labelling of Packaging Units

For the labelling of the packaging unit the following requirements must be followed:

- One label needs to be fixed on every packaging unit.
- Label dimension must be minimum 76 x 66 mm.
- Labels must be attached in the middle of the short side (front side) of the packaging unit (see Figure 10).
- The label needs to contain the following minimum information:
 1. VG part number (written & barcode)
 2. Quantity (written & barcode)
 3. Supplier
 4. HU number (will be required in future in every VG location, today not)
- For Comepack packaging additional requirements (see Chapter 7.4) needs to be observed.

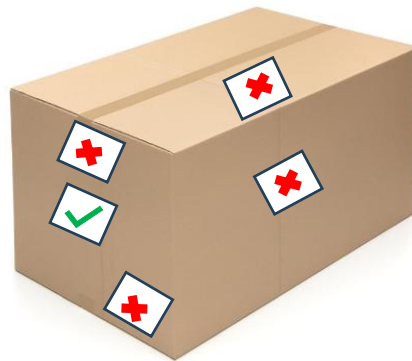


Figure 10: Labelling packaging unit

7.4 Labelling of Comepack Packaging

In addition to the labelling requirements described in Chapters 7.1 - 7.3, there are further requirements for using Comepack packaging. This is necessary because in contrast to one-way or supplier owned packaging it is crucial that the labels do not leave any residue. More precisely, the labels need to be removable in the first attempt without leaving residue. If residue is leaving, VG needs to pay Comepack for a higher cleaning effort. VG reserves the right to pass on these costs to the supplier. To avoid extra costs the following requirements must be observed when using Comepack packaging.

7.4.1 Comepack Large Load Carriers

In addition to the labelling requirements described in Chapters 7.1 & 7.2, the following requirements must be observed when using Comepack large load carriers.

VG is using Comepack large load carriers Mega Pack S 1200-975 / -1185 for which it is crucial to attach the labels on special anti-adhesive areas. These areas are attached on the long and short side of the Mega Pack's (see Figure 11: Mega Pack labelling area) and prevent the leaving of residues when the labels were removed. On each side (long and short) a label must be attached.

If labels are not attached on the anti-adhesive area (see Figure 12: Mega Pack incorrect labelling 1 & Figure 13: Mega Pack incorrect labelling 2) a higher cleaning effort is necessary by Comepack. This leads to extra costs for VG which can be pass on to the supplier.



Figure 11: Mega Pack labelling area



Figure 13: Mega Pack incorrect labelling 2



Figure 12: Mega Pack incorrect labelling 1

7.4.2 Comepack Small Load Carriers

In addition to the labelling requirements described in Chapters 7.1 & 7.3, the following requirements must be observed when using Comepack small load carriers.

VG is using multiple Comepack small load carriers (see Chapter 5.1.2) for which it is crucial to use the right label because they do not have an anti-adhesive area to attach labels like the large load carriers. The wrong label can lead to residues after removal for which a higher cleaning effort is necessary. This leads to extra costs for VG which can be pass on to the supplier.

In general, every label which is removable in the first attempt without leaving residue can be used. For this it is helpful if the corner should be non-sticky. Approved labels can be also ordered directly at Comepack. A label that is recommended by VG is the following one:

- Material: A 002R paper - VELLUM SC / RP3000 (matte with rubber glue)
- Dimension: 76x66mm
- Overprint: 1 colour (black flexo) + glue deactivation

A second recommendation by VG is to print the labels on robust paper and use round patterned self-adhesive tape. The paper needs to be robust enough to withstand logistic processes such as transport and longer storage time. You can see the round stickers in Figure 15. The diameter needs to be more than 30mm otherwise it is not possible to grip it while removing.

Highly recommended are tesa 54657 round sticker. 4657 is the code for the material. This sticker consists of a 145 mesh cotton fabric covered with a thermosetting natural rubber adhesive. It is removable without leaving any residue, even after being exposed to high temperatures. The recommended tesa stickers have the following specification:

- Material: acrylic coated fabric
- Dimension: 30mm (no less no more)
- Type of adhesive: Natural thermosetting rubber
- Tensile strength: 105N / cm
- Total thickness: 290 µ m



Figure 15: Round sticker

It is necessary to use just one sticker for one label. Figure 14 shows an example for correct labelling with round stickers.



Figure 14: Correct labelling round sticker

8 Shipping Documents

8.1 Delivery Note

The delivery note must be handed over with each shipment.

It is mandatory that reusable packaging with a VG SAP number is listed on the same delivery note as the shipped parts.

The laws and regulations of the respective country must be satisfied.

The following information are required in delivery note style of DIN 4991 or VDA 4912:

1. Name and unloading point of the consignee
2. Date
3. Delivery note number (text and barcode)
4. Name and address of the supplier
5. Gross weight / Net weight
6. Vaillant purchase order number or delivery schedule number
7. Part numbers and description including reusable packaging (Vaillant SAP number)
8. Quantity (max. 7 digits) and measure unit
9. Inbound delivery no. if applicable (SAP Ariba reference)
10. Transport details (e.g. name of forwarder)
11. Delivery conditions (Incoterms 2010)

9 Imprint

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List of Abbreviations

ESD	Electrostatic Discharge
EPAL	European Pallet Association
EPAL 1	Reusable wooden pallet also known as "EU pallet"
EPAL 2	Reusable wooden pallet also known as "ISO pallet"
HU	Handling Unit
IE	Industrial Engineer
IM	Industrial Manufacturing
IM-OL	Group Production Logistics
IQ-TE	Group Quality - Test Engineering
NVE	Nummer Versandseinheit (SSCC)
PDS	Packaging Data Sheet
PPWR 2025	Regulation (EU) 2025/40 of the European parliament and of the council on packaging and packaging waste
RP	Reusable packaging
SCM	Supply Chain Management
SLH	Supplier Logistics Handbook
VG	Vaillant Group
VGPA	Vaillant Group Part Approval

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