

Delivery and Packaging Specifications for Spare Parts and Professional Accessories of Alfred Kärcher SE & Co. KG

Table of contents

1	General notes	.2		
2	Delivery information for the Global Parts Centre Obersontheim	.2		
2.1	Time Slot Registration			
2.2	Delivery times and modalities	.2		
2.3	Shipping documents	.3		
2.3.1	Information on delivery notes			
2.4	Identification of Goods			
2.5	Packaging unit requirements			
2.6	Special rules			
Packa	Packaging specifications			
3	Primary packaging: General requirements			
3.1	Bulk material			
3.1.1				
3.2	Plastic bags			
3.2.1	•			
-	Examples			
	Requirements			
3.3	Folding carton			
	Pack materials			
	Requirements			
	Examples			
3.4	Wooden pallets / frames			
	Pack materials			
	Requirements			
	Examples			
3.5	Wooden boxes			
	Pack materials			
	Requirements			
	Examples			
3.6	Other accepted packaging tools			
3.7	Auxiliary Packaging materials			
	Standard label			
	Duct tape			
	Upholstery and stuffing material			
	Foam cushioning			
	Examples			
4	Shipping / Transportation Units	0.		
-	Shipping / Transportation Onits	.9		
4.1 4.1.1	Loading equipment/ loading medium			
	Requirements			
	The condition of the loading medium (Euro-pallets)			
	Pallet container boxes			
	(UIC) Lattice boxes/ grid boxes			
4.2	Exchange of loading mediums			
5	Transport damages			
6	Special arrangement / contact			
7	Additional standards and documents	12		



KN 056.002 English Version_September 2019 Page: 2 of 12

NORM / STANDARD

1 General notes

This Kärcher specification serves as a guideline to insure correct packaging conditions for spare parts and purchase accessories (professional) as well as safe and fast processes of the delivered goods throughout the logistic center.

These regulations are additional to product specific packaging-guidelines. That means, if there are no other agreements the following requirements apply to all products and deliveries.

Compliance with these conditions of delivery and packaging shall be checked on every delivery.

In the event of non-compliance, the supplier will be charged with any additional labor costs for rework processes.

2 Delivery information for the Global Parts Centre Obersontheim

2.1 Time Slot Registration

All deliveries are to be scheduled in advance on TRANSPOREON: https://login.transporeon.com/?locale=de#TsmLoadingSchedule

TRANSPOREON				
Sprache	Deutsch			
E-Mail				
Kennwort				
	Kennwort vergessen? 7			
	Anmelden			
	Systeminformation Hilfe benötigt? 7			

Booking a time slot beforehand will help you plan your delivery and reduce waiting time, especially during peak periods. Your time slot reservation does not require any additional KÄRCHER confirmation. Should you not receive a revocation from KÄRCHER, you can deliver at your appointed date. If there are no free time slots available on your preferred delivery date, please contact the goods in (Phone: +49 7973 692-6309).

Arriving without a time slot will lead to waiting and / or a postponement to another day.

This policy applies to all deliveries at the Global Parts Center (GPC) Obersontheim and the external storage in Vellberg, operated by Schmitt Logistik GmbH.

2.2 Delivery times and modalities

The goods-in department operates Monday through Friday from 8:00 to 14:00 o'clock. Time slots can be booked up to 24h before your delivery on the TRANSPOREON website.

Due to the structural conditions at the GPC we cannot process any truck and / or vehicle that is not ramp capable and cannot be offloaded from the rear. The necessary vehicle's height to unload is > 1meter. Exceptional to this are package deliveries that can be handed into the warehouse.

If the delivery is carried out with a smaller vehicle (i.e. a Sprinter) the suppliers have to unload the handling units themselves, otherwise the delivery will be refused. Any costs in connection with the nonacceptance have to be paid by the supplier.

The supplier is exclusively responsible and unloads the goods at his own risk! KÄRCHER is not liable to any damage to the vehicle, the goods or to a person. An electronical unloading device can be provided for the exchange of a deposit. The unloading person is obliged to use the necessary personal protective equipment for operating the device. He / she needs to make sure to be in possession of the required personal skills and undergo a handling instruction on the spot.

The supplier will be held responsible for all damages caused to the electronical fork lift or any KÄRCHER equipment.

KARCHER

NORM / STANDARD

2.3 Shipping documents

The following documents are required to process and accept your shipment:

- delivery note
- packing list (amount of packages, item number, quantity)
- freight papers
- all necessary paperwork to declare goods (invoice, customs papers, EUR1, T1 etc.)
- additional documents (declaration of hazardous goods, etc.)

Missing paperwork will automatically lead to a non-acceptance.

2.3.1 Information on delivery notes

In order to identify the delivery, the following information need to be included in the delivery papers:

- Name of the supplier
- KÄRCHER order number
- Delivery note number
- KÄRCHER material number
- Delivery quantity (to avoid delays, any deviation between the ordered and the delivered quantities needs to be coordinated with the goods disposition department beforehand)
- Number of packages
- Sum of handling units

In order to avoid mistakes, it is necessary that the position number on the paperwork matches the position number on the order.

2.4 Identification of Goods

Transportation / Shipping / Handling Unit:

All transportation units need to be visibly marked with the shipping address: Alfred Kärcher SE&Co.KG, Irene-Kärcher-Straße 2-8, 74423 Obersontheim. Unmarked palettes will be refused.

Furthermore every handling unit needs to be equipped with a neutral label that contains the following information: KÄRCHER - item number both as a barcode and as a number series and the quantity in pieces.

Handling units that contain more than one item need to be marked as mix-unit.

In order to improve our order quantities, we would appreciate the information on your "full" handling unit (quantity per palette / transportation unit), for they are faster and easier to handle on both ends.

Master carton / selling unit / piece

To ensure identification every item requires a label in compliance with KÄRCHER regulations: neutral label, without supplier logo / identification, KÄRCHER material number, article description in English, piece content and "Made in" specification. (for further information see chapter 3.6.1)

In case of missing data, delays and identification problems occur.

2.5 Packaging unit requirements

The packaging units must comply with the units specified of the order.

Bundling small parts in lots need to be coordinated with the KÄRCHER goods disposition department. Small parts and bulk materials have to be packed, unmixed separately and marked as stated above.

Transportation / Shipping / Handling Unit:

The required form of delivery for all items is neatly stacked EPAL palettes. If the material does not support this form of delivery (material cannot be stacked, cartons collapse under pressure), we advise you to use container-boxes made of cardboard to ensure the necessary support. More information on the shape and size of shipping units are found in chapters 3.3.1, 3.3.2 and 4.



Page: 4 of 12

Do avoid any delivery in (UIC) lattice boxes, unless it is crucial to meet work / transport safety regulations. (i.e. due to high weight of items)

For a faster unloading of the truck we advise you to have the palettes loaded crosswise.

Master carton / selling unit / piece

Details regarding the packaging requirements of spare parts and professional accessories of Alfred Kärcher SE & Co. KG are summarized below.

2.6 Special rules

KÄRCHER reserves its right to negotiate product-specific packaging regulations with the supplier, such as delivering all cut to size items on coils.

NORM / STANDARD

Packaging specifications

3 Primary packaging: General requirements

The packaging needs to meet the requirements of the product in order to protect it from shock, vibration, pressure and environmental influences such as moisture and dust.

It should be ensured that the packaging guarantees an optimal product protection, while using as little packaging material as possible.

All used packaging materials and packaging accessories have to comply with relevant legal requirements in Germany and the EU (especially in case of dangerous substances and hazardous goods).

3.1 Bulk material

Components that do not require a single packaging for transport and storage can be packaged as bulk material in a folding carton or in a container defined by Kärcher. Please consider that the packaging / container is labeled according to the specifications.

3.1.1 Examples

O-Rings
 Screws
 Screw nut
 Metal and plastic washer
 Hoses (<600mm)
 Cable (<600mm)
 Springs
 Copper cable
 Unpainted metal components (if no visible part)

3.2 Plastic bags

Components, that are very little sensitive to pressure and shock, can be packed in a plastic bag. Parts that will be visible after installation can only be packed in bags with the necessary upholstery (see chapter 3.7.3). Bags are eligible to building sets, keeping extendable parts together, or as an overpack in order to attach labels onto items.

3.2.1 Packaging materials

Plastic bags made of PE (Polyethylene), PP (Polypropylene) and ESD-bags (for components that can be electrically discharged) are accepted. The use of PVC (Polyvinylchloride) is not accepted.

3.2.2 Examples

Sealing rings
 Suction lips
 Soction lips



3.2.3 Requirements

- Bags need to be welded / sealed, or closed by staples or tape
- Bags need to be adjusted to the size of the item
- Bags need to be neutral, without any reference to the producer / supplier
- Each selling unit (spare part / or set) needs to be individually packed
- For components which can be electrostatically discharged, KÄRCHER Norm 050.004 applies

Alfred Kärcher SE&Co.KG Alfred-Kärcher-Straße 28-40 71364 Winnenden Germany

The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design. Copyright © Alfred Kärcher SE & Co. KG
Technical responsibility: Woellhaf/ Polla / ROC-P/OSD-OI / 4839/6667
Department: PRS-C / akli / 5568

KN 056.002 English Version_September 2019

Page: 6 of 12

NORM / STANDARD

3.3 Folding carton

Pressure- and shock-sensitive spare parts need to be packed in folding cartons.

Cartons can also be used to build larger handling units.

The stability of the carton is correct, when it withstands twice the pressure of the stacking factor on a pallet.

3.3.1 Pack materials

It is advised to use only cartons made of corrugated cardboard.

3.3.2 Requirements

- Cartons needs to be adjusted to the size of the item
- Cartons for spare parts need to be neutral, without any reference to the producer / supplier
- Cartons for accessories need to comply with the item-specific packaging guideline
- Each carton needs to be labeled with content specifications, see chapter 3.6.1
- The packaging needs to provide optimal product protection
- Hollow spaces within the box need to be filled with paper or bubble wrap



3.3.3 Examples

- Engines (<8 kg)
 - Pumps
 - Cylinder heads

- Vacuum motors
 Transformers (<8 kg)
 - Gear boxes
- Controls
- Light elements
- Reflectors

3.4 Wooden pallets / frames

EPAL Palettes represent the preferred form of shipping / loading tool. Components of more than 30 kg net weight have to be fixed onto a wooden pallet / frame.

3.4.1 Pack materials

All wooden parts (palettes/ boxes / frames) have to comply with IPPC-standard If this rule is disregarded, for instance any wooden part misses the required marks or shows traces of bark, it will be replaced by KÄRCHER at the expense of the supplier.

3.4.2 Requirements

- EPAL-pallets of quality A + B according to UIC 435-2 standard are to be used
- Shipping units, including the palette must not exceed a max. height of 1050 mm
- The palletized shipping unit must not exceed the basic size of 1200x800mm
- Processing euro industrial palettes (1200x1000mm) or one-way / disposable palettes is timeand manpower-intensive and therefore to be avoided, if possible.
- Items that can be delivered on Euro-palettes will be unpacked and restacked on such. Labor costs will be passed on to the supplier. (This does not apply for all products that needs to be packed differently, due to its outstanding size, or other article-specific regulations)
- Loading units have to be adequately secured

Further information on shipping / transport units are to be found in chapter 4.



Page: 7 of 12

NORM / STANDARD

3.4.3 Examples

engines (>8 kg)
 stray constructions

hose carts

3.5 Wooden boxes

Large and breakable components have to be packed in suitable wooden boxes.

3.5.1 Pack materials

All wooden parts (palettes/ boxes / frames) have to comply with IPPC-standard

3.5.2 Requirements

For the protection of the material within the boxes, hollow space should be avoided and filled with paper or bubble wrap, or other similar padding materials.

3.5.3 Examples

 Glass panes Glass doors Glass windows

Other accepted packaging tools 3.6

- Slip lid boxes (cardboard)
- . Shipping tubes
- Shipping bags .

3.7 Auxiliary Packaging materials

3.7.1 Standard label

Each packaging unit needs to be marked with a label for identification reasons. The following information has to be on the label:

- KÄRCHER material number
- Description in English
- . Quantity
- "Made in" information

The following additional information would be helpful:





3.7.2 Duct tape

Carton boxes / packages are to be closed safely with neutral duct tape. The use of staples should be avoided.

NORM / STANDARD

3.7.3 Upholstery and stuffing material

Especially pressure- and shock sensitive components and visible parts of a maschine need to be additionally protected by paper and / or air cushions (i.e. bubble wrap). As previously stated, void space has to be filled with stuffing material.

Not accepted are: packing peanuts, shredded materials, wood wool and similar padding material.



3.7.4 Foam cushioning

For certain sensitive, high-quality and high value products foam cushions with 2K foam (depending on their weight) should be used.



For alternative options, please contact the KÄRCHER packaging development department: package@de.kaercher.com.

3.7.5 Examples

- Engines (<8 kg)</p>
- Batterys (> 8 kg)
- Pumps (> 8 kg)
- Pump sets (> 8 kg)
- Drive shafts (> 8 kg)
- Crank shafts (> 8 kg)
- Transmissions (> 8 kg)
- Bottom rollers (> 8 kg)
 - Hydraulic valves (> 8 kg)

NORM / STANDARD

4 Shipping / Transportation Units

4.1 Loading equipment/ loading medium

For a safe composition of goods on a palette it is necessary to select proper loading devices and appropriate load securing materials.

4.1.1 Requirements

- Euro-pallets, according to IPPC-standards, with a length of 1200 mm and a width of 800 mm are to be utilized
- a max. heights including the pallet of 1050mm should not be exceeded
- the weight limit is defined at 1000 kg
- a shipping unit should be stackable at least twice
- In order to keep the material safely secured on the palettes, it needs to be wrapped neatly, or tied down
- Depending on the material and sensitivity of the item, a cardboard palette container box is recommended
- Neither the product, nor the packing material, tapes, labels etc. may exceed 1200 x 800mm or stick out from them. The use of edge protection can offer additional support.
- Packaging and loading devices should not weigh more than 30 Kg
- If the ordered quantity exceeds the quantity of one shipping unit, the amount is to be split evenly onto several units, creating only one unit with a differing quantity. --> In order to optimize the system order proposals the supplier supports KÄRCHER by providing information on "full - pallet" quantities.

4.1.2 The condition of the loading medium (Euro-pallets)

As stated in previous chapters only Euro-pallets and if absolutely necessary (UIC) lattice boxes are to be used to deliver goods to the GPC. They are the only two shipping devices that will be exchanged one to one.

The following stated defects (according to the EPAL exchange criteria guideline) make the palettes valueless. Pallets are not suitable for storage and will not be exchanged if...

• ... a board is broken, or missing



... one or more boards are chipped to the extent of (a) visible nail or screw shank(s)



... a block is missing, broken or chipped in a way that more than one nail or screw shank is visible.



... the essential characteristics are missing or scraped to the undecipherable.





- ... parts of the palette have been replaced with improper components. (too short and / or thin boards or blocks)
- ... the overall condition is poor to the extent that the carrying capacity is no longer guaranteed (rotten, decayed or several chipped boards or blocks)

Depending on the damage it might be necessary to switch palettes to ensure safe handling within the logistic center. In such cases, KÄRCHER will charge the supplier with the labor cost.

4.1.3 Pallet container boxes

Even by using palette container boxes it is necessary to ensured that the palette size of 1200mm x 800mm is not exceeded at any point. Therefore the filling level needs to be considered. Bulging boxes will not pass the scan of the automatic conveying system and need to be repacked.



4.1.4 (UIC) Lattice boxes/ grid boxes

As stated in chapter 2.5 the use of lattice boxes is to be avoided. Items that are being delivered in lattice boxes that can be stacked on a pallet will be repacked at KÄRCHER at the expense of the supplier.

If it is necessary to use a lattice box, the box needs to be undamaged and built according to the UICnorm 435-2. Lattice boxes also need to pass through the contour scan of the automatic conveyor and will be sorted out once damages or any loose parts are detected. Therefore please take care that there is nothing loosely attached to the box or sticking out of it at any point.

Euro- lattice boxes are not suitable for storage if....

• ... the steep angle attachments or the corner pillars are bent.



• ... the front flap cannot be opened or closed.



 ... the bottom frame or the supports are bent in a way, that the boxes don't stand on level or can no longer be stacked safely.



... the steel grid are torn apart, that the ends protrude inwards or outwards.



... a board is broken or missing .



• ... the essential characteristics (EUR mark, signs of the railway/ train, Y-number) are missing.



• ... the general condition is so bad due to rust or soiling that the loads can be dirtyed.



Page: 12 of 12





... the side walls are bent, dented or similarly deformed.

4.2 Exchange of loading mediums

Valuable EUR- palettes and UIC lattice boxes will be exchanged 1:1.

KÄRCHER holds a stock of 2nd choice palettes for the empties exchange.

If the delivering truck cannot load empties, the driver receives a "Transportmittelschein" (voucher for empties) that will allow him to pick up the empties within a twelve month period. KÄRCHER does not accept copies and will not compensate for the loss of original bills.

5 Transport damages

The supplier is responsible to ensure that the ordered materials are delivered in a good condition. Damaged goods might be returned to the sender at the supplier's expense.

If the extent of damaged items cannot be evaluated during visual inspection and the effort of unpacking the handling unit is unreasonable, KÄRCHER reserves the right to return it.

6 Special arrangement / contact

If there are no product specific packaging agreements and the requirements stated in this regulation cannot be applied, you need to contact KÄRCHER for support (<u>packaging@de.kaercher.com</u>).

7 Additional standards and documents

KN 050.018	Packaging Guidelines
KN 050.004	Packaging of electronic components