



PACKAGING MANUAL LOGISTICS

Requirements for the packaging of purchased parts

Logistics requirements of Carl Walther GmbH & Co. Produktions KG in Ulm





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Preface

The packaging manual of Carl Walther GmbH & Co. Produktions KG which you have before you is a reference document for everyone who comes into contact with packaging in goods traffic: Customers, suppliers, incoming goods and warehouse departments, shipping points, freight forwarders.

This document compiles all general information that is important and should be complied with in daily handling of packaging and products according to Carl Walther GmbH & Co. Produktions KG requirements.

Proper and economical packaging for Carl Walther GmbH & Co. Produktions KG is an important part of the logistics chain.

The packaging must meet the various requirements for quality, production technology, warehouse technology, transport and handling. In addition, it requires information from people who have something to do with packaging in the various processes.

This information is compiled in the packaging manual and can be looked up quickly as necessary.

Carl Walther GmbH & Co. Produktions KG takes the approach of consistently using standardized reusable containers and packaging systems supplemented by special packaging units that are adapted to specific components and models.

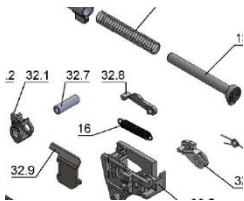
Carl Walther GmbH & Co. Produktions KG will further develop its logistics in the future as well. Accordingly, this packaging manual will continue to be supplemented and updated with the information needed for all disciplines involved in the logistics chain.

It is not possible to cover all of the detailed information on packaging for specific components and models within the framework of this packaging manual. More information is available from other sources, such as specifications and handling guidelines as well as from other departments at Carl Walther GmbH & Co. Produktions KG.

1.0 Definition of terms

1.0.1 Packing goods

Packing goods refer to the product to be packaged.



1.1.2 Packing material

Packing material is the term for the container in which the packing goods are packaged. The following packing materials are differentiated:

Crate, box, pouch, bag, can, sack, barrel, and others.



1.1.3 Packing aid

Besides strengthening and sealing the packing material, packing aids are also used to protect the packing goods. They include stretch film, dry fill, and packaging straps.

1.1.4 Packing unit

A packing unit is the totality of all packing materials and packing aids together with the packing goods which are considered a unit in a delivery. They include crates, pallets, box pallets and closed load barrels.

1.1.5 Packaging

Packaging is understood as products made of any sort of materials whose purpose is to contain, protect products for handling and delivery. They are transferred from the producer to sellers or to end users.



1.1.6 Inner or single packaging

The task of the inner packaging is to provide cushioning or to secure parts within the outer packaging, depending on their level of fragility. Single packaging is the smallest packing unit. It may only contain one article (parts with the same part number).

1.1.7 Outer packaging

The outer packaging combines multiple inner and/or single packaging units. Its purpose is to resist internal and external forces (pressure, inertial loads, etc.) and to protect against the ingress of moisture.

1.1.8 Disposable packaging

Disposable packaging is packaging that is intended for a single use, i.e., it may not be reused. After it is used, it is discarded for material recycling, e.g., corrugated cardboard boxes, disposable pallets.

1.1.9 Reusable packaging

Reusable packaging is packaging that can be used multiple times. After its use, it remains in packaging circulation, e.g., folding cartons.

1.2.0 Load carrier

A load carrier is a load-bearing means for combining packing units into a load unit, e.g., a pallet or euro box pallet. The purpose of the load carrier is to protect the packing goods in transport and assure safe transport and storage.

1.2.1 Load unit

A load unit consists of the load carrier, e.g. pallet, and the packing unit(s).

1.2.2 Load

A load represents the totality of all load units.

1.2.3 Empty container voucher

The empty container voucher is issued to you as an exchange voucher from Carl Walther GmbH & Co. Produktions KG and its service providers. It is a voucher that documents the receipt and/or exchange of load carriers. The original voucher must be presented when requesting load carriers from Carl Walther GmbH & Co. Produktions KG. Requests invoked otherwise will not be recognized.



2.0 General

The following guidelines and regulations for the delivery of goods to Carl Walther GmbH & Co. Produktions KG form the foundation for our business terms and are considered a contractual agreement that is supplemental to the general terms of purchase. Verbal agreements have absolutely no validity.

2.1.1 Shipping addresses and delivery times

The goods-specific shipping address can be found in the specific purchase order.

Carl Walther GmbH und Co. KG
Incoming Goods
Im Lehrer Feld 1
89081 Ulm / Germany

Delivery times:

Mon. – Thurs. 7:00 am – 2:30 pm
Fri. 7:00 am – 12:00 noon

2.1.2 Delivery

Time windows for acceptance of goods:

- Monday through Friday, 7:00 am – 2:00 pm
- Liquid raw materials, steel: Monday through Friday, 7:30 am – 12:00 noon
- Earlier or later deliveries outside of these hours require prior coordination with Logistics; Tel. +49 731 1539 205
- Suppliers / freight forwarders, CEP service providers at Carl Walther GmbH & Co. Produktions KG who deliver regularly get a delivery date(s) and a time window. If this time window cannot be attained, the supplier must report this to the supplier as soon as possible. If this does not occur, it might not be possible to accept the goods.
- Ideally, the truck driver should make contact one hour before arrival.

2.1.3 Deliveries at the freight company Spedition Allgaier (external warehouse, intermediate warehouse)

- Delivery only after prior notification via email to xxx@n.de or by phone at +49 7832 9191 0
- The waiting time can be up to 1 hour.
- The instructions of employees of Spedition Allgaier must be followed.

2.2.1 Delivery of hazardous goods per ADR

When delivering hazardous goods rated above 1000 points per ADR, and for liquid raw materials, ADR equipment must always be on hand.

- The driver must speak German or English and be able to verify up-to-date training



and instruction (e.g., ADR training).

- Loose or individual containers of hazardous goods are not permitted.

2.2.2 Delivery quality

- The equipment of trucks, trailers and semi-trailers must be in proper condition.
- Pallets must be able to withstand the weight of the payload and be designed for the product. It must also be possible to handle it with fork lifts, i.e., the height of the openings for fork entry must be at least 9 cm.
- IBCs must have a standard connection (outlet).
- Drum goods may only be packed in steel drums.
- Protrusions from pallets (e.g., bags, big bags, glasses, etc.) are not permitted. Furthermore, protection against shifting must be used to avoid damage when the goods are transferred to material handling equipment.
- Sufficient loading safety by:
 - at least 2 circumferential straps and/or stretch film and/or shrink wrap film
 - Lashing straps
- The delivery is only permitted on certified intact pallets:
 - Euro (per EPAL)
 - CP1-3
 - No disposable, INKA or closed pallets
- The following shipping documents are necessary:
 - Delivery note including entry of order number, lot number, Carl Walther GmbH & Co. Produktions KG article number.
 - Test certificate, material test certificate or analysis certificate must be enclosed, and notification 1 day before delivery by email to arrival@carl-walther.de

2.2.3 Equipment/requirements of tankers

- Discharge hoses must all conform to the EC directive for pressure devices 97/23/EC Guidelines, Water Resources Act
- Length of hoses for solids: at least 20 meters
- Certificate of tank and hose cleaning
- The hoses must be provided by the freight forwarding company
- Connection sizes must be asked for in advance.

3.0 General logistics requirements

3.1.0 Work times, delivery times, pick-up times

The SUPPLIER must comply with the incoming goods business hours of Carl Walther GmbH & Co. Produktions KG.



Delivery of goods at a defined unloading or delivery point can be regulated according to time windows according to Incoterms. When picking up goods at the supplier, this pick-up time window must be complied with, and the goods must be reported to the freight forwarding company.

4.0 Requirements related to hazardous goods

4.1.1 Definition of hazardous goods according to the Carriage of Hazardous Goods Act (German GGBefG)

Materials and objects which, by their nature, their properties or their state could pose risks for public safety or order, especially for the general public, for important common goods, for the life and health of people as well as for animals and property.

4.1.2 Guidelines

For products which are classified as hazardous goods, the carrier-specific hazardous goods regulations outlined below must be followed:

Carriers, hazardous goods regulations (each in their legally valid versions)

Road/Rail/Inland waterways: GGVSEB / ADR / RID / ADN

Air ICAO-TI: ICAO-TI / IATA-DGR

4.1.3 Safety data sheet

To ensure that products with hazardous properties can be evaluated according to German regulations for the carriage of hazardous goods, the following documents must be submitted to the hazardous goods manager at Carl Walther GmbH & Co. Produktions KG for a preventive risk assessment:

- Safety data sheet in accordance with REACH Directive VO (EC) no. 1907/2006
- Test certificates of inner and outer packaging and of any combined packaging units.

When hazardous goods are delivered, it is absolutely mandatory to comply with local rules governing labeling and transport.



Explosive Stoffe



Ersticken Gas



Nicht entzündbar,
nicht giftiges Gas



Giftige Gas



Irritieren flüchtige Stoffe



Ersticken flüchtige Stoffe



Selbstentzündliche Stoffe



Stoffe, die in Berührung mit Wasser
entzündliches Gas entwickeln



Ersticken (starkend)
wirkende Stoffe



Organische Peroxide



Giftige Stoffe



Anstrichungsgefährliche
Stoffe



Radioaktive Stoffe



Ätzende Gas



Verschiedene gefährliche
Stoffe und Gemische



Oben (Lage beim Lagern und
Beladen beachten)

5.0 Weight limitations

Exceeding the maximum allowable weight of packing units and load carriers is only permissible if it is not possible to conform to the maximum weight for technical reasons.

The total weight must be shown visibly and clearly on the packing unit and on the load carrier.

5.1.0 Manual lifting of packing units

To minimize the risk of injury to employees of Carl Walther GmbH & Co. Produktions KG and the supplier, care must be taken to ensure that the permissible (gross) weight of a packing unit of max. 20 kg is not exceeded.

5.2.0 Load carriers

The allowable maximum weight for load carriers is 1000 kg; exceptions require that written approval be issued by the Logistics department of Carl Walther GmbH & Co. Produktions KG.

6.0 EPAL exchange containers

Carl Walther GmbH & Co. Produktions KG provides an exchange when delivery is made by the supplier or by freight forwarder. Requests for containers can only be accepted if an empty container voucher issued by Carl Walther is presented; any other types of requests will not be recognized. Exchanges are only made for the classes defined at



www.epal-paletts.org. Damaged load carriers and/or load carriers which are not delivered according to EPAL criteria are treated as disposable.

6.1.1 EPAL EURO PALLET (EPAL1)



SPECIFICATIONS for boards: 11

Nails: 78

Blocks: 9

Length: 800 mm

Width: 1,200 mm

Height: 144 mm

Weight: approx. 25 kg

Load capacity: 1,500 kg

Payload: max. 4,000 kg when stacked on a solid and even surface



IDENTIFICATION MARKINGS

1/2 branded marking of the European Pallet Association e.V.

IPPC branded marking according to national plant protection regulations (for EPAL pallets this has been mandatory since 01-01-2010)

Country code

Registration number of the authorized plant protection agency

Treatment method (heat treatment)

EPAL control staple (obligatory)

Repair nail (only available if it is a repaired pallet)

License number – year – month

Non-exchangeable EPAL pallets

- One board missing
- A block is missing or is split in such a way that more than one nail shaft is visible.
- A base board or cover board is splintered such that more than one nail shaft is visible.
- Rotated blocks must not protrude more than 10 mm.
- A board is broken laterally or diagonally.
- Other characteristics demonstrating poor general condition.
- The load bearing ability is no longer assured (soft and rotted, severe splintering, damaged cross-boards).
- Contamination is so severe that the load goods are contaminated.
- Severe splintering exists at multiple blocks.
- Unallowable parts have obviously been used (e.g., boards that are too thin, blocks that are too narrow)

6.1.2 EPAL box pallet



SPECIFICATIONS

Boards: 4

Hinged panels: 2

Design: Steel mesh frames

Length 1,200 mm

Width 800 mm

Height 970 mm

Weight 70 kg starting with 2011 production; prior to that date 85 kg

Load capacity 1,500 kg starting with 1990 production; prior to that date 900 kg

Load space 0.75 m³

Payload: max. 6,000 kg when stacked on solid and even surface

IDENTIFICATION MARKINGS

The embossed EPAL symbol in an oval mark, embossed letter "Y", number is stamped/stenciled on

EPAL control seal

Embossed inscriptions tare weight/load capacity/superimposed load/load space

Producer's name and location or EPAL license number and production year

If EPAL box pallets exhibit one or more of the following types of damage, the box pallets cannot be exchanged and must be repaired according to EPAL technical rules. Non-

exchangeable EPAL box pallets:

- The EPAL trademark in oval is missing or is illegible.
- The stacking frame or the corner posts are deformed.
- The base frame or the feet are bent in such a way that the box pallet no longer stands evenly on four feet or cannot be stacked without creating a hazardous situation.
- The hinged front panels can no longer be opened or closed.
- A board is missing or is broken.
- The tubular steel mesh is torn in such a way that the wire ends protrude inside or outside of the box (one mesh per wall may be missing).
- The general state is so poor due to rust or contamination that the load goods could be contaminated.

7.0. Positioning the packing goods and packing units

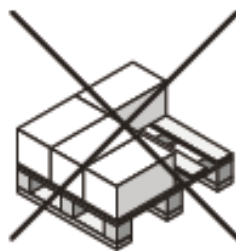
7.1.0 Stacking the packing units onto a pallet

The packing goods must be arranged in the packaging or packing material so that the weight is distributed uniformly.

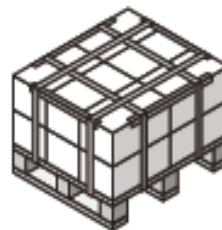
The size of the packaging must be suitable for the packing goods.



Falsch



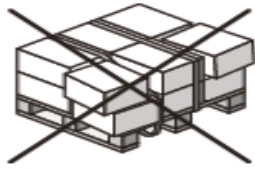
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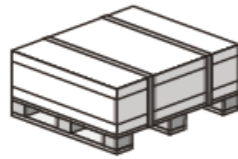
Richtig

To protect the packing goods from shifting during transport and handling, all cavities in the packing material must be filled. The packing units must be arranged on a load carrier so that the weight is distributed uniformly. The basic dimensions of the packing units must be adapted to the load carrier.

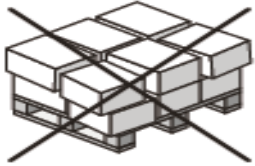
If there is an incomplete layer, the packing units must be arranged on the load carrier such that the weight is distributed uniformly, and there is protection against load shifts. The load units must be protected so that the transport packaging units do not shift during transport. This can be achieved by using circumferential straps and stretch films. The circumferential straps must not be allowed to cut into the cartons, and is to be prevented by using edge protectors. It must be assured that the stability of the load unit is assured when the container is opened.



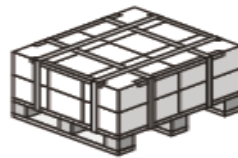
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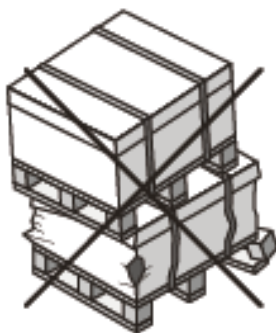
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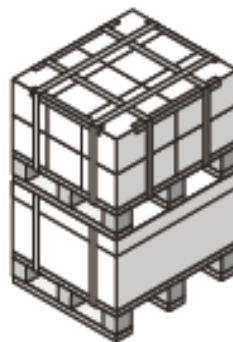
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7.0.2 Stackability of the load units

The stackability of load units must be assured, e.g., assuring that pallets can be stacked, either with or without auxiliary stacking aids, without causing deformation or other damage.



Falsch



Richtig

8.0. Carl Walther GmbH & Co. Produktions KG specific packaging

We are a premium manufacturer, and we strive to produce top-notch products in our areas of specialty. In our efforts to attain top quality, standard packaging does not always meet our standards. To meet these standards, we have continually developed new packaging concepts for our parts and products.

8.1.0 Boxes

Article number 1517511





Article number 1567314



Article number 1591550



Article number 4602294



Article number 4602398



Article number 4602399



Article number 4602414



Article number 4602415



Article number 4602417



Article number 4602418



Article number 4602470



Article number 4602486



Article number 4602936



Article number 4602942



Article number 4602988

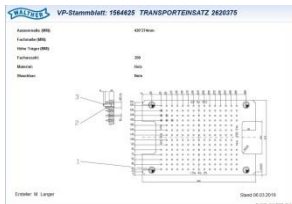


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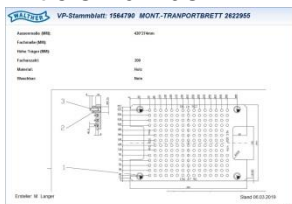


8.2.0 Inserts

Article number 1564625



Article number 1564790



Article number 1565681





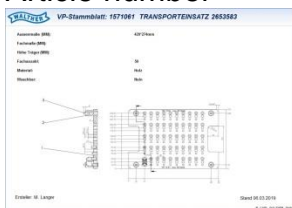
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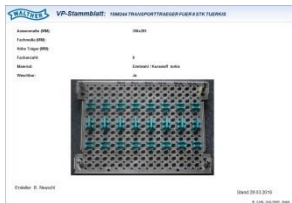
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Article number 1571460



Article number 1598244



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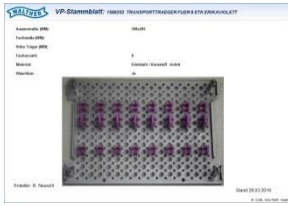


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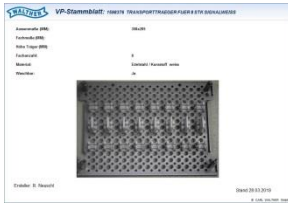
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Article number 1598376



Article number 1599798



Article number 1600056



Article number 1600081



Article number 1601806





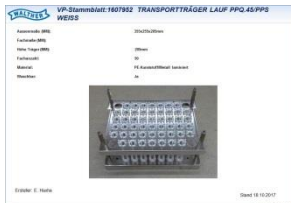
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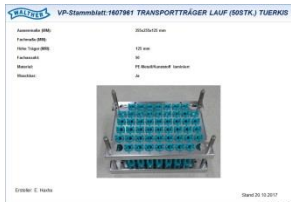
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Article number 1607961



Article number 1608746



Article number 1608754

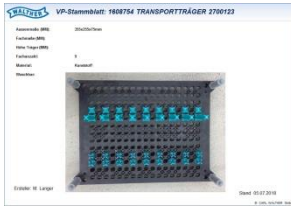


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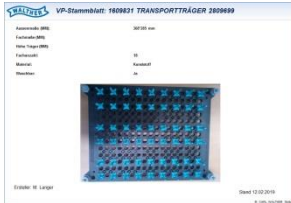
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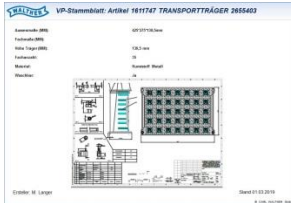
Article number 1609831



Article number 1611488



Article number 1611747



8.3.0 Cartons

Article number 2440202



Article number 2672375





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Article number 2731533



Article number 2731541



Article number 4602812



Article number 4602814



Article number 4602903



Article number 4602855





Article number 4603481



8.4.0 Special load carriers

Article number 1567021



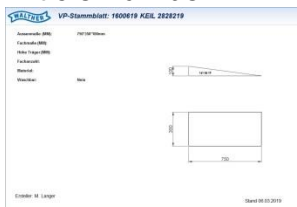
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Article number 1573268



Article number 1600619



Article number 2668262



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Article number 4601082



Article number 4602310



Article number 4602326



Article number 4603118



Article number 4603137





Article number 4603234



Article number 4603119



8.5.0 Film pouches

Article number 217178



Article number 2176521



Article number 2177269



Article number 2218348



Article number 2218399



Article number 2805944



Article number 4602165



Article number 4602939



8.6.0 Die cuts

Article number 2730430



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Article number 2732203



Article number 2732211



Article number 2732696



Article number 2752395



Article number 275492



Article number 4600536



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Article number 4601340



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Article number 4602327



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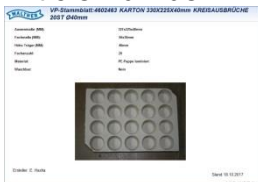
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Article number 4602465



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Article number 4602772





Article number 4602901



Article number 4602974



Article number 4603083



Article number 4603084



Article number 4603087



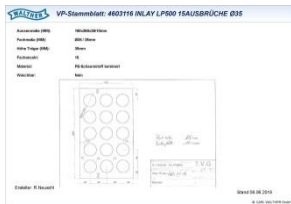
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Article number 4603092



Article number 4603116



Article number 4603211



Article number 4603211



Article number 4603402



Article number 4603436





8.7.0 IPPC exchange containers

Article number 4601928



8.8.0 In-house tools

Article number 4601984



9.0 Customer property

9.1.0 HK empty containers

Article number 4603291



Article number HK686332



Article number HK947227



Article number HK983332



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