



Solid metals. Fine solutions.

## **Zollern Drive Technology**

### **Packaging regulation**

General packaging regulation for fully processed materials,  
standard and purchased parts, components as well as  
unprocessed / unmachined parts



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# 1 General

## 1.1 Exclusions

This packaging instruction does not apply to container deliveries. If separate material-related packaging regulations are in place between the supplier and Zollern, these regulations take priority over this general packaging regulation.

## 1.2 Cleanliness and preservation

In general, all materials must be delivered in a clean, preserved, chip-free, dust-free and dirty-free condition.

## 1.3 Documents applying concurrently

The standards concerning pallet cages and Euro pallets such as DIN 15155, EN 13698-1, EPAL, UIC, etc. are documents applying concurrently.

## 1.4 Quality records

Quality records must be sent to the e-mail addresses stated in the technical delivery conditions. It must be possible to access these documents from the e-mail addresses upon receipt of the materials.

## 1.5 Mixed storage of containers / mixed delivery of materials

Identical material numbers may not be delivered distributed across multiple containers together with other material numbers.

Due to the danger of confusion, no similar components (parts families) may be delivered in a single container.

## 1.6 Small volumes

When delivering multiple small volumes of different materials numbers, they may be delivered in a single container provided that they are clearly labelled and that the agreed delivery window is guaranteed.

If the delivered components are of a small volume (below 30kg) and the use of a pallet would not be justified from an economic standpoint, a deviation in order to use a suitable container and packing may take place.

## 1.7 Weather impacts

All materials must be preserved and protected against weather impacts in such a manner that no impairments to the material can occur during loading and unloading as well as during transport through to handover to incoming goods at Zollern.

## 1.8 Repackaging costs

If the delivered containers do not correspond to the specifications as stated under Point 1.3, they must be repackaged by us as it may otherwise lead to faults in the roller conveyors or high-bay warehouse at Zollern. The repackaging process will be invoiced at the hourly rate valid at the time of the complaint.

## 1.9 Standard and purchased parts

Intermediate bottoms and oil paper may be omitted depending upon the individual packaging of the standard and purchased parts. In order to prevent plat faults at Zollern, the lowest bottom between the pallet and the standard and purchased parts must be present.

## 1.10 Unmachined and forged parts

Weather-resistant packaging in accordance with the processing state and the type of preservation must be used.

# 2 Approved containers

## 2.1 These containers may be used

**Euro pallets 800x1200x144** → Use in the high-bay warehouse  
(EN13698-1, EPAL, UIC and container appendix)  
Permitted total weight per container 1000 kg.  
Attention! No point weight -loading permitted.

**Pallets 1200x1200x147** → Use in the high-bay warehouse  
(Container appendix)  
Permitted total weight per container 2000 kg.  
Attention! No point weight-loading permitted.

**Pallet cages** → Outdoor use, see 1.10 unmachined and forged parts.  
(DIN 15155, benchmark of the Deutsche Bundesbahn [German Federal Railway])  
Permitted total weight per container 1200 kg.  
Attention! No point weight-loading permitted.

**Special pallets**, depending on component dimension and component weight.  
Attention! No point weight-loading permitted.

With containers bearing the note → Use in the high-bay warehouse.  
The containers in the as-receipt condition must be flawless as disruptions in the high-bay warehouse may otherwise occur or repackaging campaigns may have to be performed. Such cases are handled via our complaint process.

## 2.2 What needs to be taken into consideration with the packaging

Wooden containers may not exhibit any paint residue (special waste).  
Roughened oil paper must be inserted between wooden supporting surfaces and bare, processed, and preserved parts of the components.

Stable intermediate bottoms (no cardboard) must be used when dealing with multiple material layers. An intermediate bottom must also be inserted on the bottom layer between the pallet and the component.

A bumper must be inserted if each layer contains multiple materials.

The materials must be provided with outer protection by means of wooden frames when using Euro pallets. A maximum of 4 wooden frames may be stacked on top of each other. Nothing may protrude over the outer contour of the container. When dealing with large parts without a wooden frame, the pallet must be selected in such a manner that the component does not protrude over the base of the pallet.

The materials must be secured against slipping. No point weight-loading of the container may take place, the loading must always be spread across the pallet. The load securing aspects and specifications must be observed.

## 3 Labelling of containers and components

### 3.1 The delivered containers must bear the following labelling:

- Delivery address
- Supplier name
- Delivery date
- Number of containers / total amount
- Zollern- Material order number
- Material volume per container
- Zollern- Material designation
- Zollern- Material number

The labels must be firmly adhered to both fronts of the container.

### 3.2 Labelling of initial sample parts

Initial sample parts must also be specially labelled as such on the container and on the component. The components may not be delivered in a container mixed with other components.

### 3.3 Labelling of findings and rejected parts

Findings and reject parts must also be specially labelled as such on the container and on the component. The circumstances must be noted on the delivery papers.

### 3.4 Delivery paper data

- Zollern order number
- Zollern material number
- Packing information: Number of pallets, pallet cages, frames and insert floors
- Packing: Invoiced or borrowed goods

Labelling example:

Delivery to:		<b>Zollern GmbH + Co. KG</b>	
		Zollernstrasse 4 D-88518 Herbertingen	
<b>Supplier:</b>		<b>Delivery date:</b>	<b>Number of containers:</b>
<b>Order number</b>	<b>Quantity</b>	<b>Article designation</b>	<b>Article number</b>

## 4 Appendix

### 4.1 Euro pallets 800x1200x144 → Use in the high-bay warehouse

Exchange criteria in the European pallet pool for Euro pallets. The pallet must correspond to the exchange criteria in the event of an exchange.

This is what an 80x120 cm exchangeable pallets in the European pallet pool looks like:



### 4.2 Not- exchangeable Euro pallets:

If Euro pallets display one or several of the following examples of damage, the pallets are non-exchangeable and must be repaired in accordance with the provisions of the UIC leaflet 435-4.

On bottom or top edge plank is so severely split that more than one nail or screw shaft is visible.



The EUR marking on the right and the symbol or a railway company on the left are missing.



A board is missing.



A board is transversely or diagonally broken.



A block is missing or is split in such a manner that more than one nail is visible.



More than two bottom or top edge planks are so severely split that more than one nail or screw shaft is visible.









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