

Logistics manual for suppliers of Dörken GmbH & Co. KG

Edition January 2023

Version 1.0

Abridgment

Open communication is an essential part of the successful cooperation between suppliers and Dörken GmbH & Co. KG. This logistics manual serves as a basis for continuous improvement.

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Table 1: Revision Table 7

List of Abbreviations

LU	Loading Unit
VDA	„Verband der Automobilindustrie“ (german). Association of the Automotive Industry
CMR	Agreement of all participating states on the contract of carriage (contract that involves the carriage of people, luggage and/or freight) in international road haulage.

1 Revision Report

Table 1: Revision Table

Version	Created on	Created by	Checked by	Released by	Remark
1.0	13.01.2023	Hillebrecht	Beringhoff	Schuldzinski	Creation of the logistic manual

2 General

This chapter provides general basics.

2.1 Scope

Individually agreed delivery contracts have priority. Unless otherwise negotiated, this logistics manual applies to all deliveries to the following Dörken GmbH & Co. KG locations:

- c/o van Eupen, Former Str. 15, 59425 Unna
- Plant Hagen, Brüninghausstr. 58089 Hagen
- Plant Herdecke, Wetterstr. 58, 58313 Herdecke
- Other external warehouses (see delivery address)

2.2 Validity

This manual is valid for the locations mentioned in 2.1. It does not replace existing specific packaging data sheets, quality and design documents. If separate agreements are made between Dörken GmbH & Co. KG and the supplier, the individual agreements shall apply.

2.3 Goals

The aim is to provide information about the requirements and regulations for the delivery of material to Dörken GmbH & Co. KG, so that through standardization on the part of the supplier an optimal material and information flow can be guaranteed.

Furthermore, Dörken GmbH & Co. KG has the highest demands on the following topics:

- Environmental sustainability
- Sustainability
- Quality Assurance
- Occupational safety and environmental protection
- Economic efficiency

If the supplier does not comply with the specifications of the logistics manual, Dörken GmbH & Co. KG reserves the right to demand corrective measures or to return the goods to the supplier. In addition, Dörken GmbH & Co. KG reserves the right to charge all costs that arise due to non-compliance with the logistics manual through repacking, difficult handling, difficult assignment or disposal, as well as for quality losses that can be attributed to improper or soiled packaging.

3 Packaging System

The supplier ensures a packaging system that complies with the product requirements, the requirements of the logistics manual of Dörken GmbH & Co. KG, as well as all applicable regulations of national, regional and local authorities, including the regulations applicable at the place where the packaging is disposed of.

3.1 Definition of Terms

This section defines the basic terms. Further terms are described in DIN 55405 (see 10 [1]) (siehe Figure 1).

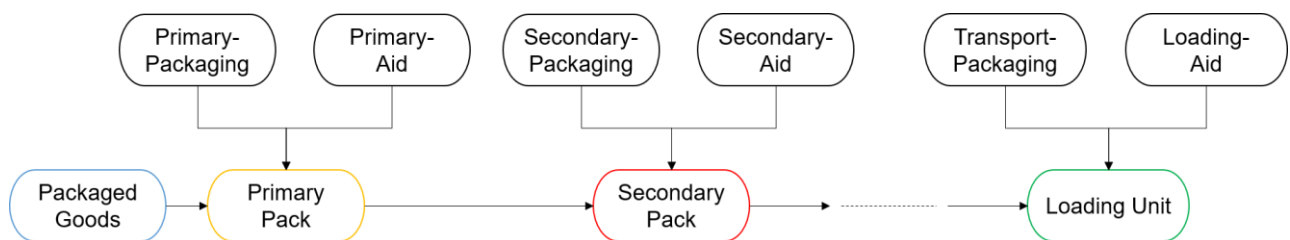


Figure 1: Stages of the packaging process

- **Packaged goods:** Articles or goods themselves
- **Primary Packaging:** protects the packaged goods (foil, bag, bucket etc.)
- **Primary Aid:** Supports the primary packaging (e.g. label)
- **Secondary Packaging:** Protects the primary packaging (e.g. carton)
- **Secondary Aids:** Supports the secondary packaging (e.g. label)
- **Transport Packaging:** Disposable or reusable pallet (e.g. Euro pallet)
- **Loading Aids:** Strapping, wrapping foil, transport label, etc.
- **Loading Unit (LU):** Entire shipping unit

In principle, LU can be formed from primary and secondary packs, but if more stages are necessary, they are expanded with tertiary, quaternary packs, etc.

3.2 Packaging Planning Process

In order to ensure a smooth delivery process, planning and choosing the right packaging is of crucial importance. The packaging planning process should be followed as shown (siehe Figure 2)

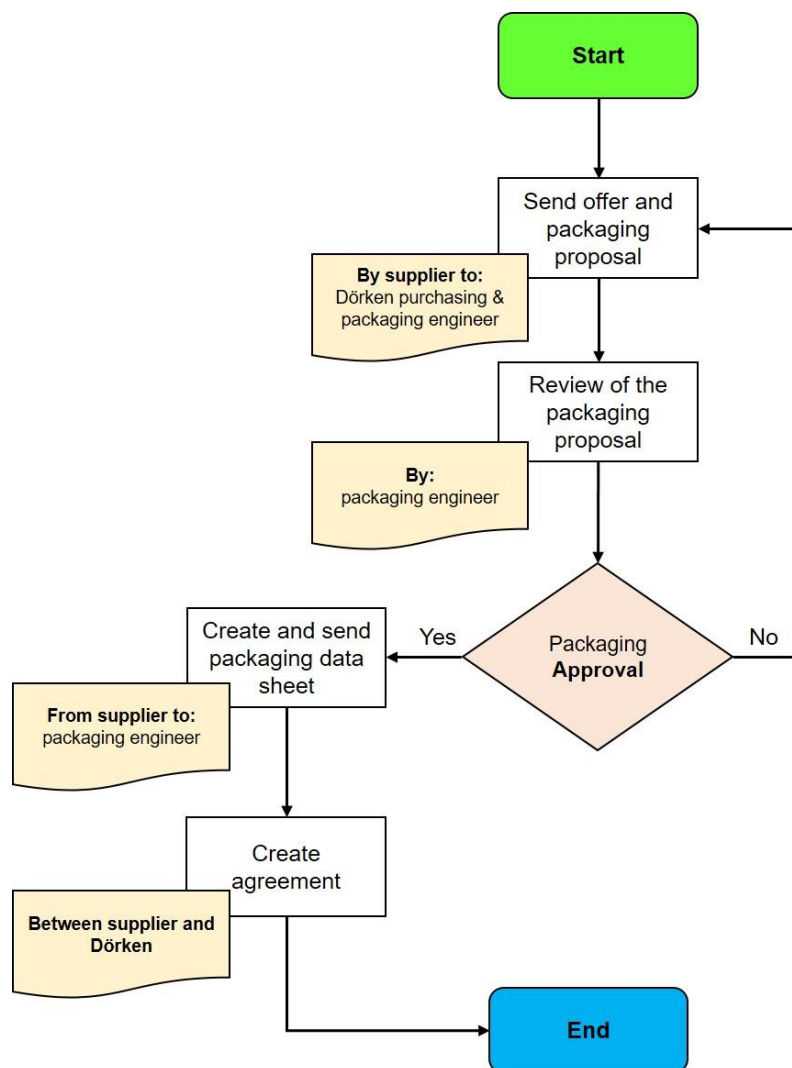


Figure 2: Packaging planning process between suppliers and Dörken

The packaging planning process can be used in both directions (suggestion supplier - suggestion Dörken GmbH & Co. KG).

3.3 Packaging Data Sheet

The packaging data sheet contains part-specific data for determining the packaging (see Figure 3).

Article	Number
Description	Product Name
Supplier	Name

		Form	Dimensions	Weight	Number	Labelling	Comment
Primary Pack	Packaged Good	Form of Merchandise	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
	Primary Aid	Form of Aid	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
	Primary Packaging Material	Form of Packaging	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
Secondary Pack	Secondary Aid	Form of Aid	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
	Secondary Packaging Material	Form of Packaging	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
Loading Unit	Loading Aid (1)	Form of Aid	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
	Loading Aid (2)	Form of Aid	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
	Loading Aid (3)	Form of Aid	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference
	Transport Packaging	Form of Packaging	(Length x Width x Height) in [mm]	1 Piece. in [kg]	in [Piece] per Loading Unit	For Example with Label	Important Reference

Figure 3: Packaging Data Sheet

The released packaging is binding when delivering the goods. The aim of the packaging data sheet is to standardize the exchange of data and the documentation of packaging data between the supplier and Dörken GmbH & Co. KG. The standardized packaging data sheet makes processing easier for the supplier and

Dörken GmbH & Co. KG, avoids misinterpretations and reduces the frequency of errors.

3.4 Packaging Features

The packaging must fulfill several functions during transport, storage and use:

- **Protection:** (see Section 4.2 and 5.1.1)
- **Load securing** (see Section 5.1.1)
- **Transport, handling, storage** (see Section 5.1.1)
- **Communication** (see section 5.1 and 6)
- **Purity of variety** (see Chapter 6)
- **Environmental compatibility** (see Section 3.5)
- **Warranty** (see Chapter 4)
- **Stackability** (see Section 4.2)
- **No overhang** (see Section 4.2)

3.5 Approved Packaging and Materials

In order to protect the environment in a sustainable manner, waste should be avoided by using the smallest possible amount of packaging material, reusable transport packaging should be used and a simple recycling has to be possible.

The recyclability must not be impaired by the identification of a label or transport accompanying document. In general, all primary, secondary and transport packaging must be made from environmentally friendly materials that are recognized as recyclable in Germany and must be labeled if necessary (siehe Chapter 10 [2]):

- **Paper/cardboard:** Must be delivered free of undesirable substances.
- **Plastics:** Only the following plastics are to be delivered for VP items:

- Shrink, stretch or other film: PE should be selected
- Strapping: PET or PP should be chosen
- Adhesive tapes: Adhesive tapes, sealing tapes and adhesive labels must not impair the recyclability of the carrier material.
- Other plastics such as styrofoam are not permitted
- Avoid **ferrous metals** in VP materials.
- Avoid **aluminum** in VP materials.
- **Composite packaging:** Composite VP and loose filling material are to be avoided
- Wooden crates are to be avoided
- **Reusable plastic** packaging should be avoided
- **Packaging wood:** In the case of deliveries originating from or intended for countries outside the EU, the wood must be treated in accordance with IPPC standard 15. In addition, the proper labeling of all treated materials according to the IPPC standard is necessary (siehe Chapter 10 **[3]**).

4 Shelfalbe Articles

Important aspects of storage are discussed in this chapter.

4.1 Types of Storage

There are basically three types of storage:

- **Rack storage (Dörken GmbH & Co. KG):** The rack height is a maximum of 1,600 mm. The maximum LU weight must not exceed 1,000 kg.
- **Rack storage (c/o van Eupen):** Three rack heights are possible 1,450 mm, 1,750 mm and 2,000 mm. The maximum LU weight must not exceed 1,000 kg.
- **Block storage (Dörken GmbH & Co. KG):** The maximum height is 2,000 mm. The LU must be designed to be stackable. The maximum LU weight must not exceed 1,600 kg.

4.2 Storage Conditions

For optimal utilization of the entire floor space, the surface module should be (1,200 x 800) mm (siehe Chapter 10 [4], [5], [6], [7], [8] und [9], [10], [11], [12])

The condition for damage-free stacking are a level surface, sufficient and safe stability and the avoidance of an overhang (see Figure 4).

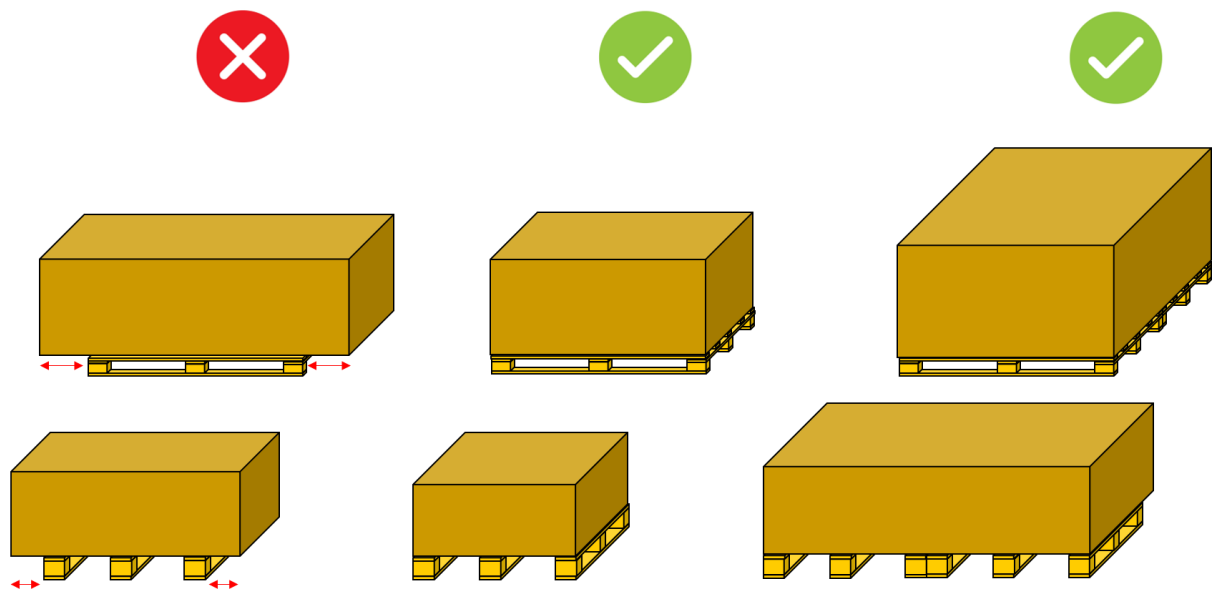


Figure 4: Overhang on transport packaging (left), no overhang on single transport packaging (middle), no overhang on double transport packaging (right)

When stacking the LU, transshipment must be made possible using an industrial truck or hand pallet low-floor vehicle. Basically, the top layer must form a level. Non-stackable LU are to be marked accordingly.

5 Delivery Conditions

It must be ensured that important shipping information is visibly attached, that the correct documents are taken and that the delivery data is clearly marked.

5.1 Freight Documents

The consignment note must be written in German or English and must include the following information:

- Type of LU
- Article number
- Number of packaged goods
- Order number of Dörken GmbH & Co. KG

In addition, the LU intended for Dörken GmbH & Co. KG must be clearly marked with the company name and address. There is no handling of goods that are not intended for Dörken GmbH & Co. KG. For c/o van Eupen, the delivery note from Dörken GmbH & Co. KG must also be available at the time of delivery. It must also be specified whether a one-way or multi-way transport packaging is used. The carrier must always carry the delivery note with him.

5.1.1 Delivery Note

The supplier must prepare the accompanying documents required for the transport in accordance with the agreed delivery conditions. A delivery note must be enclosed with each delivery. The delivery note contains the following information (siehe Chapter 10 [23]):

- **Dörken article number**
- Article description
- **Quantity** on the LU
- Gross and net weight
- **Batch number**
- Order number and position
- Best before date (MHD) (if available)
- Type of transport packaging (pallet)
- Delivery note date and delivery date, if applicable

5.1.2 Waybill (CMR)

Furthermore, a bill of lading must be carried as a transport document. In Germany, it contains the following information in accordance with § 408 HGB (siehe Chapter 11).

5.2 Goods Receipt

Too tightly clamped LU should be avoided due to possible damage to the packaged goods. Overall, unsecured LU are not permitted. The LU must be secured in accordance with VDI 3968 (siehe Chapter 10 [13], [14], [15], [16]). In the case of damaged, improperly transported shipments or a breach of the listed conditions, acceptance may be refused.

In this case, photo documentation is created and the associated form will be sent afterwards.

The following points should be observed for the packaging:

- The packaging is to be delivered free of quality defects and dirt
- Packaging are to be selected in such a way that easy and safe handling is possible during acceptance and storage
- The transport packaging must be checked and designed for the total weight

- The entry area of the transport packaging must be designed for all common low-floor vehicles (siehe Chapter 10 [5])
- The transport VP must be accessible from all sides
- An article must always have a transport packaging (siehe Section 3.1)
- The packaging is adequately protected against external influences and, if necessary, secured with edge protectors and straps (see Chapter 10 [17], [18], [19])
- The delivered LU remain in the supplier's possession until the receipt of goods is completed

5.3 Plant Herdecke

The following must be observed upon delivery:

- The unloading takes place at the side of the truck
- Deliveries must be announced two working days in advance
- The delivered LU must not exceed a total weight of two tons
- Deliveries are possible on working days Monday to Thursday from 06:00 to 14:00 and Friday from 06:00 to 12:00. Deviating deliveries are to be reported
- Last deliveries must be made one hour before the end of opening hours
- Deliveries are to be announced at the registration
- The registration and de-registration of the company premises takes place at the gate

5.4 Plant Hagen-Vorhalle

The following must be observed upon delivery:

- The unloading takes place at the side of the truck
- Deliveries must be announced two working days in advance
- The delivered LEs must not exceed a total weight of two tons

- Deliveries are possible on working days Monday to Thursday from 07:00 to 15:30 and Friday from 07:00 to 12:00. Deviating deliveries are to be reported
- Last deliveries must be made one hour before the end of opening hours
- Deliveries and entry are to be announced at the registration
- The registration and de-registration of the company premises takes place at the gate

5.5 Central Warehouse Unna (c/o van Eupen)

The following must be observed upon delivery:

- Loading platforms are available in the factory.
- Lateral unloading is only possible in exceptional cases (see Chapter 8)
- Deliveries must be announced two working days in advance (see Chapter 8)
- The delivered LU must not exceed a total weight of two tons
- Deliveries are possible on working days from Monday to Friday in the time windows 07:00, 09:00, 11:00, 13:00 and 15:00. Deviating deliveries are to be reported.
- Deliveries are to be announced at the registration
- The registration and de-registration of the company premises takes place at the gate

6 Labeling

The LU to be delivered must be labeled with the following information for each order item using transport labels.

- **Dörken article number** (ideally with barcode - Code 128 B - 10 digits)
- Article description
- **Quantity** on the LU
- **Batch number** (ideally with barcode - Code 128 B - 10 digits)
- Order number and position (ideally with barcode - Code 128 B - 10 digits)
- Supplier
- Best before date (if available) (see section 7.3)

The above **information** can be read from a distance of one meter. White should be selected as the transport label background and black as the font color (see Figure 5) (see Chapter 10 [22]).

Consignee	Unloading Point		
Delivery-Note Number	Lieferantenanschrift		
	Weight Net	Weight Gross	Quantity on the LU
Doerken-Article Number			
Capacity	Article Description		
	Supplier Item Number		
Order Number and Position 	Supplier Designation		
	Date	Change State	
Best Before Date	Batch Number		

Figure 5: VDA-Labeling Standard

The label shown serves as a reference for the design of a transport label; the supplier is free to deviate.

Only one material number per packing unit is to be attached. The items to be delivered should preferably be of the same batch. Labeling an LU with different article numbers is not permitted. By delivering an undamaged LU, the supplier guarantees that the information on the LU matches the content.

At least two transport labels with the same information must be attached to the LU (see Chapter 10 **[20]**, (see Figure 6).

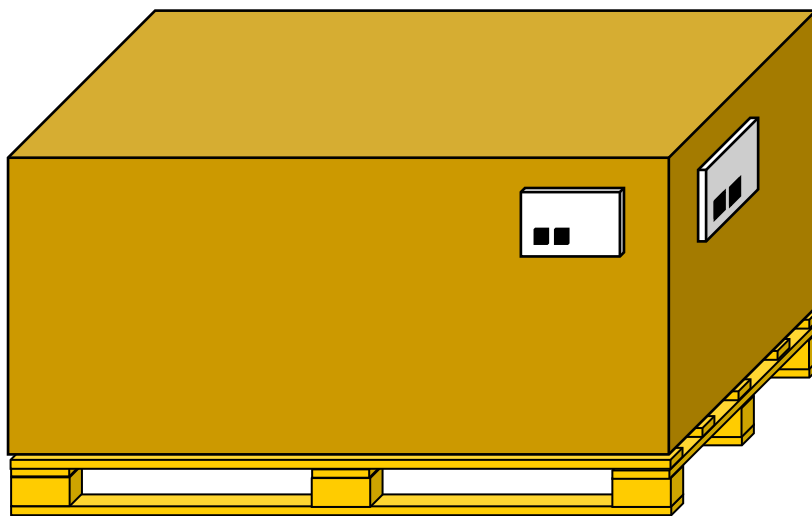


Figure 6: Attachment of the transport label

7 Safety Aspects

This chapter deals important security aspects.

7.1 Rules of Conduct on Sites

The Road Traffic Act generally applies at the locations (see Section 2.1). Drivers are required to drive at walking speed on the sites premises. When unloading, the vehicle must be secured against movement with all necessary measures, i.e. wedges, apply the handbrake, etc. A reversing camera on the delivery vehicle is desirable. Without a reversing camera, reversing is only permitted with security guards. Please contact the responsible person at WE (see Chapter 2.1). It is also important to ensure that suitable high-visibility vests or high-visibility clothing and safety shoes are worn. Furthermore, smoking is only allowed in defined places. When working on the truck, the scaffolding provided by Dörken GmbH & Co. KG must be used.

7.2 Hazardous Substances

The identification of the hazardous substance must be clearly recognizable on the LU.

7.3 Qualitative Aspects

The labeling of the best before date must be clearly recognizable (see Chapter 6). The product must not have expired upon delivery, otherwise acceptance of the goods may be refused (see Section 5.1.1).

7.4 Grounding

The attached instructions must be followed for proper grounding (see Figure 7). For assistance, please contact the person in charge of the goods receipt (see Chapter 8). (see Chapter 10 [21]).

Use

Important Note: Before starting hoses or performing any other procedure, the grounding chamber must be, in accordance with the recommendations of ATEX 2014/34/EU, ATEX 137, EN 60079-14, IEC TS 60079-32-1 and CLC/TR: 60079-32-1 can be attached.

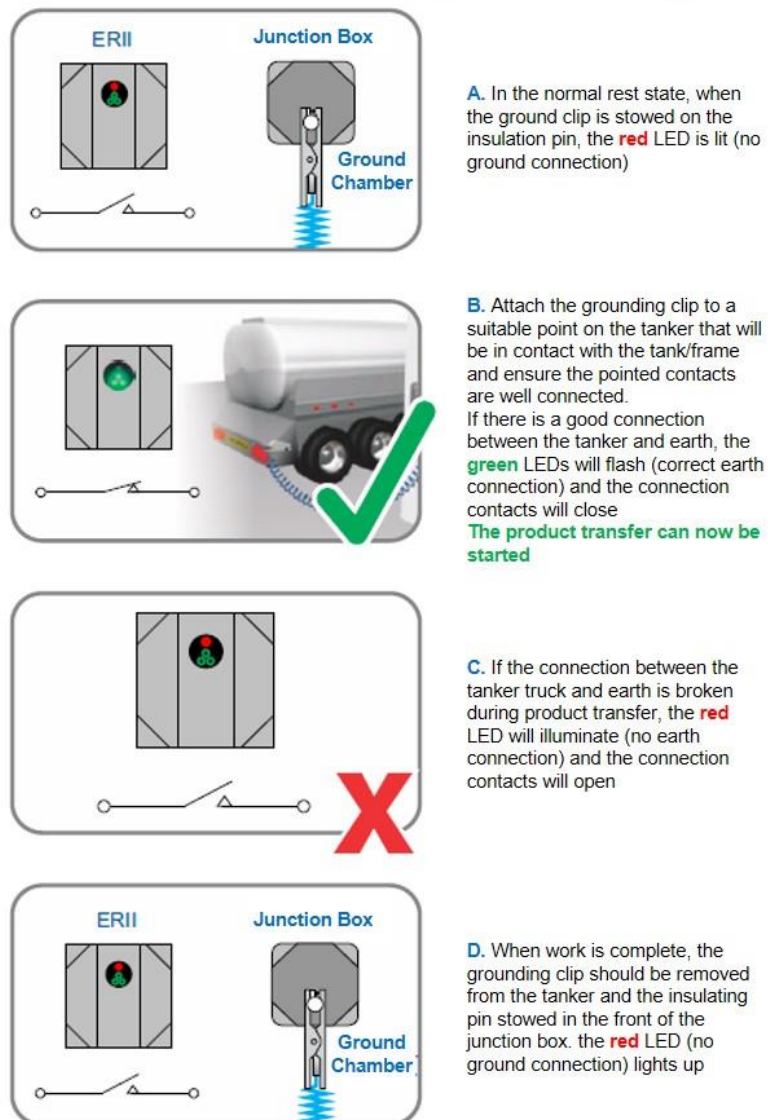


Figure 7: Instructions for use for grounding

8 Contact Persons

The following people are available to register for deliveries to the Herdecke and Hagen-Vorhalle plants:

Name	E-Mail
Registrations (Hagen)	intra Logistik_hagen@doerken.de
Registrations (Herdecke)	intra Logistik_herdecke@doerken.de

For questions regarding the packaging, the following person is at your disposal:

Name	E-Mail
Mr. Nil Hillebrecht	nhillebrecht@doerken.de

Your responsible strategic buyer is at your disposal for commercial or contractual questions regarding the logistics manual.

When registering at c/o van Eupen:

Name	Contact Data
Registrations	we-doerken@vaneupen.com

Note: Please write your request to c/o van Eupen, you will be called back in urgent cases.

9 Final Statement

With my signature, I assure that I have read and understood all information and conditions. All exceptions to the form of delivery described in this document require the written approval of Dörken GmbH & Co. KG.

I accept the logistics manual

(Please tick accordingly!)

and have no comments

only with the following remarks

Point:	Remark:
1	
2	
3	
4	
5	
6	
7	
8	

Place, Date

Signature and stamp of the supplier

10 Bibliography

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- [14] **VDI 3968 Blatt 3:1994-01:** Sicherung von Ladeeinheiten; Umreifen

- [15] **VDI 3968 Blatt 4:1994-01:** Sicherung von Ladeeinheiten; Schrumpfen
- [16] **VDI 3968 Blatt 5:2009-12:** Sicherung von Ladeeinheiten - Stretchen
- [17] **DIN EN 13394:2001-07:** Verpackung - Spezifikation für nichtmetallische Umreifungsbänder; Deutsche Fassung EN 13394:2001
- [18] **DIN EN 13393:2001-07:** Verpackung - Spezifikation für Kantenschutzmittel; Deutsche Fassung EN 13393:2001
- [19] **DIN EN 13247:2001-07:** Verpackung - Spezifikation für Umreifungsbänder aus Stahl zum Heben, Binden und Sichern von Ladungen; Deutsche Fassung EN 13247:2001
- [20] **Allgemeine GS1 Spezifikationen:** Symbolplatzierung auf Einheiten im Distributionsbereich (S. 456)
- [21] **Earth-Rite II RTR:** Erdüberwachungssystem; Installations- und Bedienungsanleitung (S. 6)
- [22] **VDA 4994 – Global Transport Label – Version 1.3 Juni 2021**
- [23] **DIN 4994:1969-09:** Vordrucke im Lieferantenverkehr; Lieferschein/Lieferanzeige

11 Appendix

Waybill (CMR)

1) Versender / Lieferant 2) Lieferantennummer 2				3) Speditionsauftrags-Nr.			
5) Beladestelle				4) Nr. Versender beim Versand-Spediteur:			
8) Sendungsnummer				SPEDITIONS-AUFTRAG			
11) Empfänger 5		12) Kundennummer 123456		6) Datum 1		7) Relationnummer	
14) Anliefer-/Abholstelle 5				9) Versandspediteur 3		10) Spediticumnummer	
10) Zeichen und Nr./ Lieferschein-Nr.		19) Anzahl		20) Packmitteltyp		21) Inhalt	
6		7		6		22) Inhalt	
B5165		5		Karton je		Blende kpl.	
B5166		10		Karton je		Gehäuse	
23) Lademittelgewicht kg		24) Druttogewicht kg		25) Summe		26) Rauminhalt edm/ Ladungsmittel	
8		8		15		Summen	
7		8		27) 59		28) 70	
29) Gefahrgut-Klassifikation 6				30) Gefahrgut-Bezeichnung wenn vorhanden, siehe zusätzl. Vormerk			
31) Frinkat ab Werk 9		32) Warenwert für Transportversicherung		33) Versandart-Nachname			
34) Anlagen 10				35) Auftragsnummer Kunde		36) Kartierung	
42) Übernahmebestätigung des Fahrers: Obige Sendung vollständig und in ordnungsgemäßen Zustand übernommen 4				37) Transportmittel-Nr.		38) LKW-Code	
Datum Uhrzeit Unterschrift				39) Versandart		40) Abrechnungs-Schl	
43) Es gelten die Allgemeinen Deutschen Spediteurbedingungen (ADSp). Gerichtsstand ist der Firmensitz des Versandspediteurs				41) Empfangsbestätigung des Warenempfängers: Obige Sendung vollständig und in ordnungsgemäßen Zustand erhalten			
				44) Die Sendung enthält		davon getauscht	
				2 Euro-Flach-Pal(TP)		2 Euro-Flach-Pal(TP)	
				Euro-Gitter-Pal(GP)		Euro-Gitter-Pal(GP)	

- [1] Place and day of the exhibition
- [2] Name and address of the sender
- [3] Name and address of the carrier
- [4] The place and date of acceptance of the cargo and the intended place of delivery
- [5] Name and address of the recipient and any registration address
- [6] The usual designation of the type of goods and the type of VP, in the case of dangerous goods their intended according to the dangerous goods regulations, otherwise their generally recognized designation
- [7] Number
- [8] LU weight (gross in kg)
- [9] Incoterms
- [10] Other facilities