

Document no. **FO-4.3.2.1-07**

Version **10**

Document type Technical specifications

Project All projects

Supplier instructions

Stadler Rheintal AG

Table of contents

1	General	4
1.1	Objective and purpose	4
1.2	Contact persons	4
1.3	Abbreviations and definitions of terms	4
2	Terms of delivery	5
2.1	Delivery size/scope of delivery	5
2.2	Outgoing goods inspection (supplier)	5
2.3	Loading and unloading	5
2.4	Transport and shipping.....	6
2.5	Deliveries	6
2.6	Incoterms	7
2.7	Incoming goods inspection	8
2.8	Loading equipment exchange/empties management.....	8
3	Load unit, load carrier and packaging	8
3.1	Load unit	9
3.2	Load carriers and packaging	10
3.2.1	General requirement.....	10
3.2.2	Protection of materials in load carriers and packaging.....	10
3.2.3	Specific requirements for load carriers and packaging.....	11
3.2.4	Packaging of set items or kits	11
3.3	Classification of delivery variants (load carriers).....	12
3.4	Creation and description of delivery variants	13
3.4.1	Specific requirements for non-standard load carriers.....	14
3.5	Release of non-standard load carriers.....	14
4	Identification	15
4.1	Labelling of delivery parts and material	15
4.1.1	General minimum requirements	15
4.1.2	Labelling of material with article numbers	16
4.1.3	Labelling of parts requiring serial numbers	16
4.2	Labelling of load units/packages.....	17
4.2.1	Minimum requirements for the label of the load unit/package	17
4.2.2	Content of the labelling.....	17
4.3	Labelling of non-standard load carriers.....	18
4.4	Other labelling	18
4.5	Stadler internal labelling (container label).....	18

5	Documentation	19
5.1	Attestations	19
5.2	Safety data sheets.....	19
5.3	Package insert: Technical documents/advertising catalogues	19
5.4	Shipping documents.....	19
6	Appendix.....	20
6.1	Appendix 1 Creation of delivery variants	20

1 General

Observance of and compliance with the currently valid version of these supplier instructions is a mandatory component of every purchase order placed by Stadler Rheintal AG. In addition, the applicable statutory regulations and provisions must be complied with.

In the event of non-compliance with the supplier's instructions and the statutory regulations, the supplier shall bear the resulting costs and the resulting risk.

1.1 Objective and purpose

The aim of these specifications is to clearly define the framework conditions and standards for the processing of deliveries ordered by Stadler Rheintal AG.

This is intended to create a standard that leads to clarity and simplicity in the supply chain.

1.2 Contact persons

The responsible purchaser at Stadler Rheintal AG is generally regarded as the first point of contact, especially for commercial questions.

The operational contacts are as follows:

Coordination/deadlines	Material planner as per purchase order
Packaging/MWLT	gebindemanagement.star@stadlerrail.com
Transport	star.transporte@stadlerrail.com
Customs	star.customs@stadlerrail.com

1.3 Abbreviations and definitions of terms

ESD	Electrostatic discharge
FAI	First Article Inspection
Load unit	Shippable package or combination of package and load carrier
Carrier	Tool for internal and external transport and storage processes
MWLT	Returnable load carrier
Package	Unit of article(s) and packaging
STAR	Stadler Rheintal AG
TMS	Stadler's system for recording and registering transports (Transport Management System)
Packaging	Generic term for all packaging elements

2 Terms of delivery

The delivery dates specified in the purchase order must be adhered to and apply in the case of Incoterms DAP or DDP when arriving at STAR and in the case of EXW or FCA when departing from the supplier. In the event of any delay in a delivery, the material planner must be notified immediately in writing. If express costs are incurred because of a delay in delivery, these shall be borne by the party responsible.

A special release from container management must also be available for the use of non-standard load carriers (see Chapter 3.3-3.5).

2.1 Delivery size/scope of delivery

Unless otherwise agreed in writing between the supplier and Stadler Rheintal AG, purchase orders will be delivered by vehicle but packed by carriage. If Stadler has defined assembly installation groups, these must also be observed on delivery. The delivery of parts of an assembly is only permitted after written release by Stadler Rheintal AG. The provisions in accordance with Chapter 3.2 must be complied with.

2.2 Outgoing goods inspection (supplier)

The supplier is requested to carry out an outgoing goods inspection before dispatch and delivery to Stadler Rheintal AG and to rectify any discrepancies found before delivery.

2.3 Loading and unloading

The legislation on load securing must be observed when loading cargo units. With the Incoterm EXW, costs and risks are transferred to the buyer as soon as the goods have been loaded onto the collection vehicle. Stacked load units must be perpendicular. When stacking load units, it must be ensured that the load units with the greatest gross weight are at the bottom. The load units in the upper levels must not protrude beyond the lower levels. Furthermore, the load units must be loaded in such a way that side unloading with a 2-tonne forklift truck is possible without additional effort. Agreements to the contrary must be made in writing with Stadler Rheintal AG.

2.4 Transport and shipping

Notification of transports:

All transports, regardless of the freight payer and organiser of the transport, must be registered by the supplier including all delivery and customs documents via the Stadler Transport Management System. In the case of EXW or FCA, the notification must be made in full by 12:00 noon (UTC+1) on the working day before collection at the latest. In the case of DAP or DDP, notification must be made at least two working days before delivery. At the request of Stadler Rheintal AG, the supplier is also obliged to book a time slot for delivery to STAR via us TMS for all DAP or DDP consignments.

You can find the link to the Transport Management System at: www.stadlerrail.com/en/supplier/

Button «TRANSPORT REGISTRATION»

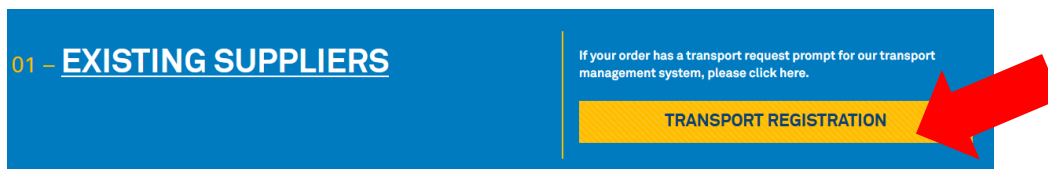


Figure 1 Stadler website/button for transport notification

Post and courier shipments:

If a shipment is sent by post or courier, the individual packages must be sent to the delivery address specified in the purchase order in accordance with the prescribed labelling instructions. For DAP parcels we only accept shipping via FedEx. If parcels are sent to us via another CEP, we reserve the right to charge the additional costs to the supplier.

When sending parcels, the contact person at Stadler Rheintal AG must be mentioned on the delivery notes. The shipping documents (e.g. packing lists, delivery notes, invoices, etc.) must be created in duplicate, once inside the parcel and once on the outside, and provided in digital form via the TMS.

2.5 Deliveries

The delivery addresses of Stadler Rheintal AG must be taken from the purchase order. Different delivery addresses can be defined for each project or purchase order:

Main plant

Stadler Rheintal AG

Neudorfstrasse 8

CH 9430 St. Margrethen

Delivery times: Mon-Thu 07:00-12:00/13:00-16:00

Branch plant

Stadler Rheintal AG
Industrie- und Gewerbepark
CH 9423 Altenrhein
Delivery times: Mon-Fri 07:00-12:00/13:00-15:00

Box parts/aluminium profiles for box detail production

Stadler Rheintal AG
Hall 4/profile hall
Industrie- und Gewerbepark
CH 9423 Altenrhein
Delivery times: Mon-Fri 07:00-12:00/13:00-15:00

2.6 Incoterms

The trade terms (Incoterms) are specified in the purchase orders. These must be complied with, taking into account the following information.

EXW/FCA

In the case of Incoterms EXW and FCA, transport must be carried out exclusively by the forwarding agent commissioned by Stadler Rheintal AG. The supplier is obliged to register all shipping documents (for FCA including customs documents) and shipment-relevant data in Stadler TMS by 12:00 noon (UTC+1) on the day before the planned loading. Additional costs for consignments that are not registered correctly and completely shall be borne by the supplier. Deviations and special cases regarding the type of shipment must always be clarified in advance with the responsible contact persons (material coordination/purchasing/transport and customs department) at Stadler. If transport for EXW or FCA deliveries is ordered directly by the supplier without Stadler's authorisation, the costs and risk of transport shall be borne in full by the supplier.

DAP/DDP

The supplier is obliged to clear all consignments through a customs agent nominated by Stadler and to deliver them duty paid. At least 48 hours before the planned border crossing, all consignments must undergo mandatory registration in TMS and notified to star.customs@stadlerrail.com without being requested to do so. For this purpose, the delivery note, the invoice, the export document and any proof of origin (movement certificates, invoice declarations) including the corresponding TMS consignment number must be submitted. Please also state the planned border crossing, the licence plate number of the means of transport and the estimated time of arrival at the border. The goods must then be cleared through customs at the border customs agent subsequently notified. The supplier is liable for all penalties in connection with goods delivered duty unpaid and for waiting times at the borders resulting from improper pre-declaration.

2.7 Incoming goods inspection

After delivery, an incoming goods inspection is carried out to check the identity of the goods and for obvious quantity deviations and mechanical damage to products and packaging. FAIs can also be carried out on non-standard load carriers with release during the incoming goods inspection. Further quality control checks are carried out at the discretion of STAR.

Any defects found shall be reported to the supplier as soon as possible in the form of a BM ticket. All incoming deliveries are only accepted subject to final acceptance.

Complaint report

If the fault for a BM (complaint report) lies with the supplier (article as well as packaging), the supplier shall bear all costs incurred (transport, customs, taxes, etc.). The Incoterm for return shipments to the supplier is "EXW". The costs for the new shipment to Stadler are also borne by the supplier. The franking in this case is "DDP". It is not permitted to list Stadler as the importer on the pro forma invoice for these return shipments and to pay customs duties to Stadler Rheintal AG. The supplier undertakes to ensure that Stadler is named as the delivery address in the customs clearance for the purpose of proof of preference and to provide the corresponding evidence as quickly as possible via the TMS. Any costs for scrapping the goods by Stadler Rheintal AG shall be borne by the supplier.

2.8 Loading equipment exchange/empties management

In principle, Stadler Rheintal AG does not exchange loading equipment. The costs of the load carriers and tools used are included in the purchase price. If a written agreement to the contrary has been reached on an exchange of loading equipment, the following loading equipment is deemed to be exchangeable:

- Euro pallets (DIN EN 13698)
- Mesh box pallets (DIN EN 13626)
- Wooden stacking frame (Euro pallet) (1200 x 800 x 200 mm)
- Wooden lid (Euro pallet) (1200 x 800 x 40 mm)

The exchange must be communicated to the carrier by the supplier on the delivery documents and explicitly noted in the TMS. Loading equipment that is not exchanged directly in the course of delivery can only be reclaimed on presentation of an original Stadler loading equipment receipt. The collection of this loading equipment shall be at the supplier's expense.

For enquiries about MWLT that are returned to the supplier, please contact the relevant office at Stadler Rheintal AG in accordance with section 1.2.

3 Load unit, load carrier and packaging

The respective load units, load carriers and packaging must fulfil the following properties and requirements before they can be used. Exceptions to this must be agreed in writing with Stadler Rheintal AG in advance.

3.1 Load unit

All load units must be constructed in such a way that they have a stable shape and optimally utilise the volume. If possible, the load units should be designed in such a way that they can be stacked. Load units must not exceed the basic dimensions of the load carrier and the maximum height of 1.75 m.

CORRECT



Figure 2 Example of a correct load unit

INCORRECT



Figure 3 Example of an incorrect load unit

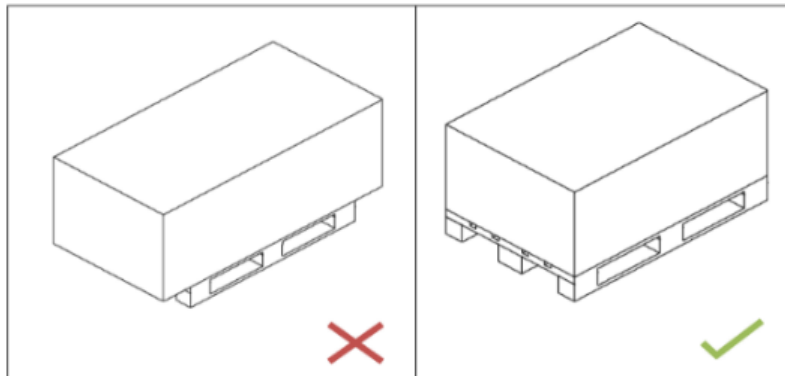


Figure 4 Basic dimensions of the load unit (no protrusion)

The load units must be secured in accordance with the legislation on load securing. Securing against slipping during transport is essential (e.g. by strapping, shrink-wrapping or stretch-wrapping with the load carrier). When strapping the load unit, use plastic strapping and edge protector strips. In addition, the load unit must be strapped at least once each from the long and end sides. Furthermore, the load units should be stackable at least double-height.

3.2 Load carriers and packaging

Load carriers and packaging fulfil a protective, storage and transport function. They serve as information carriers and also combine the packages into load units.

3.2.1 General requirement

The load carriers and the packaging material must generally be designed in such a way that the occurrence of defects of any kind (qualitative and quantitative) in the goods during transport, storage and handling is excluded. All load carriers and packaging must be able to withstand the dynamic and static forces during transport and storage.

In addition, load carriers and packaging must fulfil the following requirements:

- Dimensionally stable design
- Compliance with safety regulations
- Protection against slipping during transport and stacking
- Injury-proof design (e.g. no sharp edges, shatter protection)
- Opening and closing must be possible without tools and by one person
- Needs-based and installation-friendly (observance of ergonomic and practical principles)
- Screw connections and nailing inside the load carrier or the cover must be avoided

3.2.2 Protection of materials in load carriers and packaging

All materials must be protected from short-term exposure to the weather (loading and unloading) and from moisture, dust and dirt. In addition, the load carriers and packaging must be designed in such a way that the material cannot be damaged during proper transport or storage (e.g. by impact, friction, etc.). As a general rule, the parts must be firmly seated in the load carriers or packaging (except for bulk goods).

The following additional protective measures must be taken for sensitive parts:

Surface-treated and glazed parts

- Pack individually
- Packaging in call-off batches possible after release by STAR
- Special labelling on outer packaging (see Chapter 4.1.2)

Sensitive electrical parts

- ESD packaging must be used
- No metal clips permitted for closing the packaging

3.2.3 Specific requirements for load carriers and packaging

Packaging must be filled according to type (one STAR article number per package), unless an alternative procedure has been agreed in writing. Furthermore, all line items for one purchase order must be packed individually. This applies in particular to sensitive parts. Each package must be labelled with the side from which it can be opened.

3.2.4 Packaging of set items or kits

In principle, all parts that belong to a set/kit (an order item consisting of several articles) must also be physically assigned to this set. This refers to all parts of the kit including add-on parts, mounting material or C material (complete assembly kit). In addition, a table of contents must be enclosed in which the parts of a set are listed. Separate deliveries of materials belonging to this set are only permitted in consultation with the purchasing department and must be clearly indicated on the delivery.

Example: Assembly kit



Figure 5 Example of packaging for an assembly kit

3.3 Classification of delivery variants (load carriers)

At Stadler Rheintal AG, a distinction is made between standard and non-standard load carriers. The non-standard load carriers are further divided into non-standard load carriers with and without standard release.

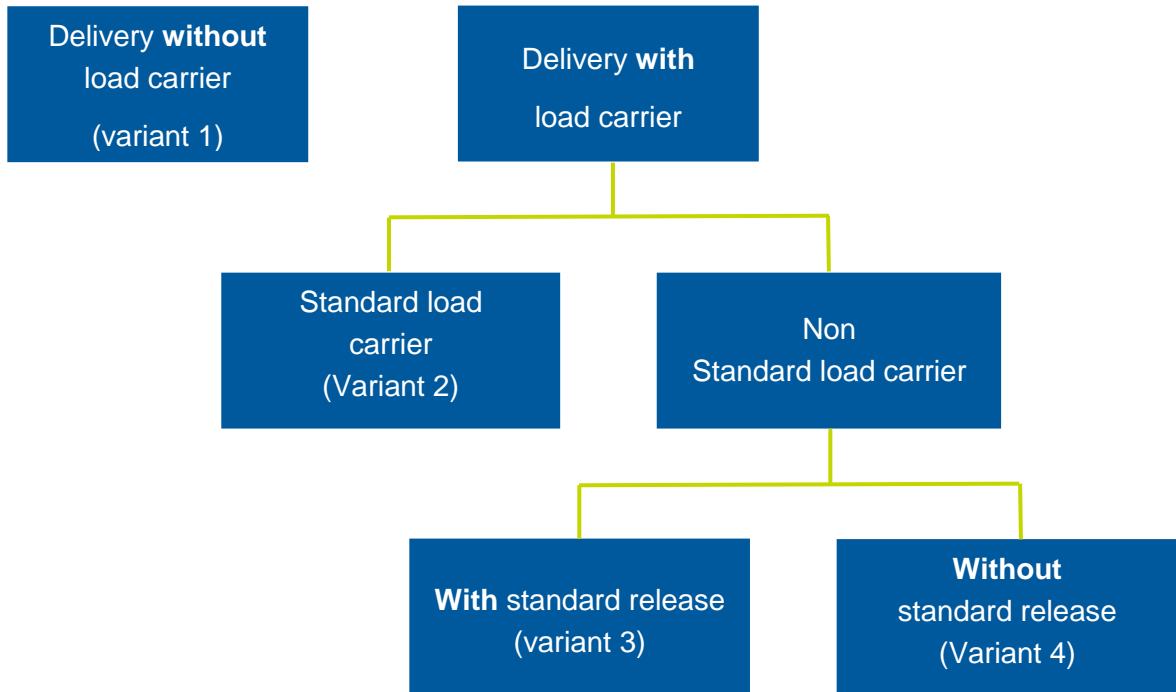


Figure 6 Allocation of the load carriers to the four specified variants

3.4 Creation and description of delivery variants

There are four different delivery variants, which are shown in Table 1. Sample images of the delivery variants are shown in Appendix 1.

	Delivery variant 1 (see Appendix 1 Figure 13)	Delivery variant 2 (see Appendix 1 Figure 14)	Delivery variant 3 (see Appendix 1 Figure 15)	Delivery variant 4 (see Appendix 1 Figure 15)
Material	See purchase order			
Load unit				
Weight	≤30 kg	≤750 kg	Release granted by Stadler Rheintal AG ¹	Release by Stadler Rheintal AG required ²
Length	≤600 mm	≤1200 mm		
Width	≤600 mm	≤800 mm		
Height	≤600 mm	≤1750 mm		
Carrier	No load carrier required (e.g. parcel)	Standard load carrier (e.g. Euro pallet, mesh box pallet)	Non-standard load carriers with standard release (e.g. frame for front cabs)	Non-standard load carriers WITHOUT standard release
Packaging	E.g. cardboard box	E.g. cardboard box or stretch film, wooden frame	E.g. cardboard box, stretch film or sheets	
Identification	Material, packaging and load unit	Material and packaging	Material, packaging, load carrier and load unit	
Delivery documents	Delivery note, packing list, export, movement certificate, commercial invoice, certificate if applicable			
Transport and Dispatch	CEP or haulage company	Freight forwarder, freight company		
Packaging concept ³	No	No	Yes	Yes

¹ Maximum dimensions correspond to lorry dimensions (13,6 x 2,4 x 2,4 m)

² Maximum dimensions do not correspond to lorry dimensions

³ Packaging concept must be agreed with the respective purchaser, release by container management

3.4.1 Specific requirements for non-standard load carriers

In principle, all requirements of Chapter 3.2 apply. Additional requirements are:

- Material does not stick out
- Load carrier has maximum volume utilisation
- Load carriers must be picked up by the stacker truck from at least one long side and one end (Figure 7)
- Bracket is at least 100 mm (Figure 8)
- Load carriers should be stackable and collapsible
- Marking in accordance with Chapter 4.3
- Load carriers should not exceed lorry dimensions (13.6 x 2.4 x 2.4 m)

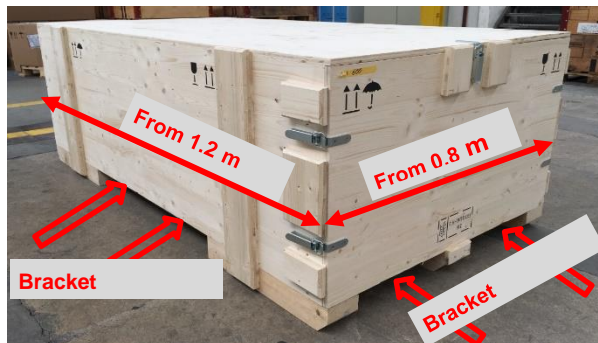


Figure 2 Illustration of the requirements for non-standard load carriers



Figure 1 Illustration of the requirements for non-standard load carriers

3.5 Release of non-standard load carriers

Release must be obtained from Stadler Rheintal AG for non-standard load carriers. The release form is made available to the supplier by the purchasing department. It is up to the supplier to present several variants if required. For release, the relevant documents must be sent by e-mail to gebindemanagement.star@stadlerrail.com.

Once release has been issued, the non-standard load carrier may be used until further notice.

Stadler Rheintal AG reserves the right to carry out an FAI for newly approved non-standard load carriers. If deviations and non-compliance with agreements are identified during the FAI, the supplier will be invoiced for the costs incurred.

4 Identification

This chapter deals with the labelling of load carriers, materials and load units. Exceptions to the requirements described in this chapter require the written release of Stadler Rheintal AG. Labelling is used to quickly identify and allocate deliveries, materials and load carriers.

4.1 Labelling of delivery parts and material

All materials must be labelled with the Stadler article number and, if applicable, the serial number. Labels are used for identification. The specifications are defined in more detail in this chapter.

4.1.1 General minimum requirements

The requirements for the article number and serial number labels are identical in terms of format and quality.

- Length: min. 30 mm
- Height: min. 10 mm
- Font size: min. Point 12
- Quality of the label: residue-free removal from the part
- Print quality: waterproof
- Bar code: code 125 (DIN EN 799-1995)
- Specification of the bar code: waterproof, lifespan at least >10 years, cannot be removed non-destructively

The labels must be affixed to the article or the article packaging so that they are clearly visible and cannot be lost. They must not be placed on visible surfaces or on connecting parts such as holes, bonding or welding points.

4.1.2 Labelling of material with article numbers

All materials must be labelled with the Stadler article number, identical to the purchase order. Parts smaller than 40 x 20 mm do not have to be labelled directly. In these cases, the direct packaging must be labelled.

Mandatory content of the label:

- Stadler order number
- Stadler article number
- Article designation
- For rolling stock: Length (per roll)

Optional content (if available):

- Drawing number incl. index/version
- Batch number/lot number
- Expiry date/date of manufacture

4.1.3 Labelling of parts requiring serial numbers

Parts that are manufactured with a serial number because of supplier or customer specifications must also be labelled with this number. The serial number may consist of a maximum of 18 alphanumeric characters.

- Size: Depending on the space available on the article
- Material of the label: Inside assembly: Polycarbonate or aluminium
External assembly: Aluminium
- Attachment/readability: Min. 30-year life
Take weather and cleaning influences into account
- Temperature: -25°C to +45°C
- Moisture: 100 % internal and external
Mechanical attachment at the discretion of the manufacturer
- Placement: When installed, the sticker must be clearly visible and easy to read with a commercially available scanner (barcode format type 128).



4.2 Labelling of load units/packages

For all deliveries, each load unit must be labelled in duplicate, once on the front and once on the long side (see Figure 9).

If a loading unit consists of several packages, each package must be labelled in duplicate (on the front and on the long side) and provided with a packing list (see Chapter 5.1) (see Figure 10).

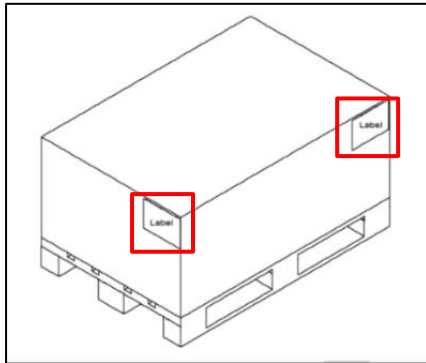


Figure 9 Labelling of a load unit

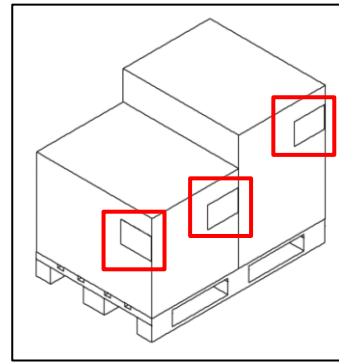


Figure 10 Labelling of different packages on one load unit

If the loading unit has a length of more than 1.5 m and a displaced centre of gravity (starting from the centre point), this must also be marked on the loading unit.

4.2.1 Minimum requirements for the label of the load unit/package

The label must be created in the following format:

- Format: Min. DIN A5 landscape
- Paper: White
- Font size: Min. point 16
- Bar code: Code 128 or ITF

4.2.2 Content of the labelling

The label must contain at least the following information, in the order given:

- Sender
- STAR order number (additionally as bar code)
- Delivery note number (additionally as bar code)
- Project name/number (e.g. L-4367 SPT Glasgow)
- Vehicle number (mandatory) and carriage number (if available)
- Article number
- Serial number (if available)

4.3 Labelling of non-standard load carriers

Non-standard load carriers only need to be labelled if they are also in circulation as returnable load carriers. The MWLT must be labelled as follows:

Information about the load carrier:

- Article number of the container (Stadler article number)
- Type of use: Returnable load carrier
- Weight of the load carrier (gross and net)
- Load capacity (e.g. as stacking factor)
- Outer dimensions
- Owner

Information about the contents:

- Supplier of the contents (for returns)
- Contents of the load carrier (Stadler article number)
- Project for which the load carrier is used (e.g. L-4367 SPT Glasgow)

4.4 Other labelling

The supplier must attach information on specific transport and storage conditions to the outside of the packing unit in a clearly visible location (e.g. temperature-sensitive goods). The purchaser must be notified promptly and in writing of these specific transport and storage conditions.

4.5 Stadler internal labelling (container label)

For traceability and container management, Stadler Rheintal AG container labels are attached to the first delivery of a MWLT (see Figure 11). GPS trackers are also fitted to defined returnable containers (see Figure 12). These labels and the GPS trackers may not be removed by the supplier, or only after consultation with Stadler Rheintal AG. If this is not possible (e.g. use of the containers for several customers or use for several projects), this can be reported in advance to container management at Stadler Rheintal AG.

STADLER	
SBB 4506.0001	
ARTNR. INHALT:	XXXXXXXX
EIGENTÜMER:	STADLER RHEINTAL AG
BEZEICHNUNG:	DACHPANEL
MASSE L X B X H:	270X130X110 CM
GEWICHT:	TARA 123KG
RÜCKLIEFERUNG AN:	LIEFERANT XY AG
GPS (ID-Nummer)	SPXXXXXXXXXX
ZUSATZ INFOS:	

Figure 11 Example of a container label



Figure 12 Example of a GPS tracker

5 Documentation

5.1 Attestations

The certificates (e.g. acceptance test certificates, material declarations, declarations of conformity, etc.) that are part of the purchase order must be delivered to Stadler Rheintal AG in accordance with the instructions noted in the order line items. Delivery is always electronic, mainly by e-mail.

5.2 Safety data sheets

The safety and product data sheets must be sent to the e-mail address sicherheitsdatenblatt.star@stadlerrail.com before the first delivery.

Furthermore, the safety data sheets must be physically attached to the goods with every delivery. Any changes to the documents must be reported to us immediately by e-mail without being requested to do so.

5.3 Package insert: Technical documents/advertising catalogues

No advertising material, brochures etc. may be enclosed. Technical documents, descriptions, drawings, operating and maintenance instructions may be enclosed, but must be listed separately on the delivery documents.

5.4 Shipping documents

The detailed requirements that must be complied with by the supplier are listed in the current version of the "Stadler Rail AG technical specifications for export control and customs". The document is available at <https://www.stadlerrail.com/en/supplier/>.

6 Appendix

6.1 Appendix 1 Creation of delivery variants

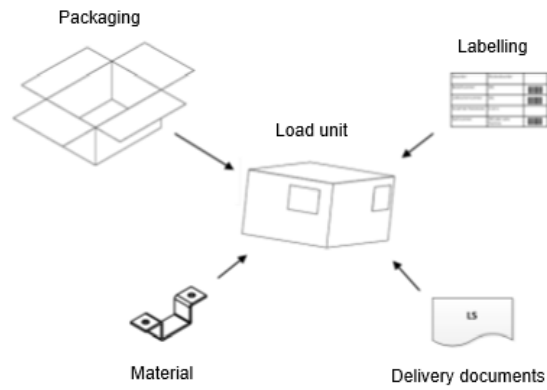


Figure 13 Formation of a load unit for delivery variant 1

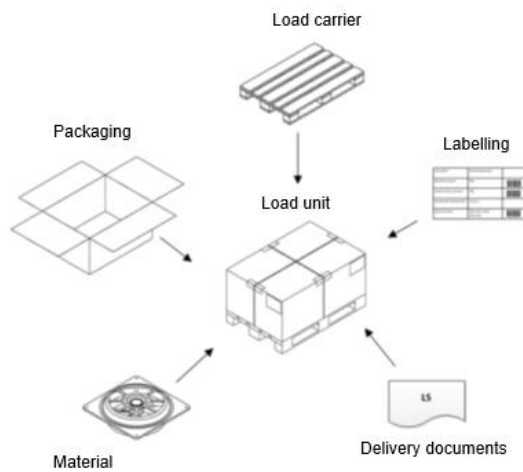


Figure 14 Formation of a load unit for delivery variant 2

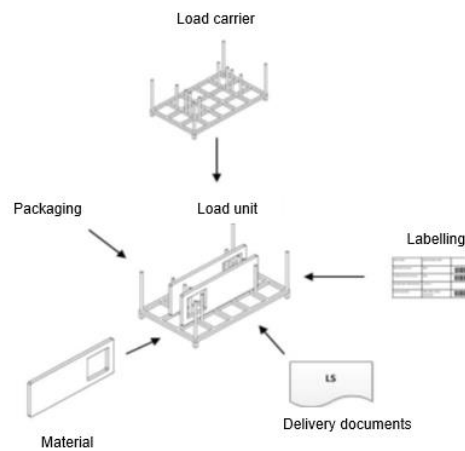


Figure 15 Formation of a load unit variant 3 and 4