

SCHAEFFLER



Schaeffler Global Transport Label

Implementation guideline for suppliers

Version 1.3



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List of abbreviations and glossary

(5pt)	Point: Specifying the font point size (here 5 point)
AIAG	Automotive Industry Action Group: North American organization for developing standards and guidelines throughout the supply chain
ASN	Advanced Shipping Notification
Batch	A batch describes an entity of units which were produced within a batch process or as part of a lot size production. These units have been produced or packed under the same conditions or with the same parameters.
Block	Defined area on the label, which can contain several information / fields (A1, A2, ..., E2)
Data-Matrix	two-dimensional matrix barcode according to ISO/IEC 16022
DI	Data identifier according to ISO/IEC 15418
DUNS number	Numbering system to assign a unique numeric identifier to a single business entity (Developed and regulated by Dun & Bradstreet)
EDIFACT Message DELFOR	International Standard for the format for the exchange of electronic data in commerce: DELFOR = delivery forecast
EDIFACT Message DESADV	International Standard for the format for the exchange of electronic data in commerce: DESADV = dispatch advice message
EDIFACT Message ORDERS	International Standard for the format for the exchange of electronic data in commerce: ORDERS = purchase order message
GTL	Global Transport Label: label or insert card according to ISO 15394
IAC	Issuing Agency Code: registered for DUN & BRADSTREET as "UN" (according to ISO/IEC 15459)
JAIF	Joint Automotive Industry Forum: Joint associations from the automotive producing regions of the world; was formed to mutually carry out global activities that achieve common objectives
Material number	Synonym for the item number or part number
Odette	Organization for Data Exchange, that represents the interests of the automotive industry in Europe
VDA	German Association of automotive manufactures and automotive component suppliers

1 Introduction

This guideline describes the standard for the Schaeffler transport label, the Global Transport Label (GTL). This guideline includes all technical specifications regarding the dimensions of the label and the content of fields, text and barcodes, which are required for the implementation of the GTL. This specification is based on the Global Transport Label standard (Version 3) which was developed and issued by the Joint Automotive Industry Forum (JAIF) and which is reflected in the VDA 4994 recommendation for the use of Global Transport Label.¹

The GTL is the physical information carrier on the packing piece. It is designed for electronic data communication as well as manual operation and includes barcodes for an automated compilation with scanners.

Targets of a unified Schaeffler transport label:

- Global unification of all supplier transport labels for automotive and industrial business,
- Simplification of data communication,
- Reduction of manual handling in goods receipt,
- Non-ambiguous labeling and identification of separate packing pieces,
- Tracking and tracing of goods in the whole Supply Chain between Schaeffler and its suppliers.

Field of application:

This document specifies the implementation and the set-up of the Schaeffler GTL and is effective as of now. This document describes the rules for labels for logistics packages or handling units. It does not include rules for labels on product packages. The changeover to the GTL as well as the replacement of the hitherto valid VDA-/Odette labels has to be aligned with each Schaeffler site individually and has to be set out in the local logistics agreement.

Before the changeover to the Schaeffler GTL, a sample print has to be sent by the supplier to the receiving Schaeffler plant for testing of the content and to ensure the adherence of the barcode specifications according to ISO/IEC 15415, 15416, 15417 and 16022. In case of a positive test, the receiving plant will do the approval for the changeover to the Schaeffler GTL.

Exceptions on this regulation require a separate agreement.

¹ JAIF: Global Transport Label Standard for the Automotive Industry. Version 3 dated 17NOV2010; ISBN: 978-1-160534-216-0

2 Schaeffler GTL Label

2.1 Basic definitions

The Schaeffler GTL transport label has to be used for all packing pieces (pallets, containers or shipping cartons). Packing pieces and containers without a fill quantity as well as auxiliary packaging like cover plates or packaging materials will not be labeled.

Existing marking areas or insert pockets have to be used if no other regulations are violated. If dedicated areas are not available, the labels have to be attached with cardboard or with residue-free glue dots onto the handling unit. Additional regulations for special handling unit types have to be fulfilled. GTL labels have to be applied secure and save from loss. Weatherproof and removable adhesive dots (max. Ø 30mm) have to be used, if necessary. The adhesive dots may not conceal any label information.

The labeling has to be clear and distinct while old labels have to be removed. The usage of self-adhesive labels of any kind onto the reusable packaging materials is prohibited.

Empty small containers and empty boxes have to be labeled as such with informal information content and with the format of the Single GTL. Each primary packaging (e.g. bag in the small container or box) has to be labeled at least with a supplier-label. This label must include material number Schaeffler, material description, quantity, drawing index, and batch number. In some cases, for defined materials a Schaeffler defined mini-label is given in alignment with the receiving Schaeffler plant.

Schaeffler will use the GTL label with the following variants:

1. SINGLE label for all part carrying containers/packing pieces without leading MASTER/MIXED LOAD label
2. SINGLE label for all part carrying containers/packing pieces with a leading MASTER/MIXED LOAD label (lowest packaging unit)
3. MASTER label for the main packaging unit (outer packaging) of homogeneous unmixed transportation units with identical material numbers in all sub-packages
4. MIXED LOAD label for the main packaging unit (outer packaging) of mixed transportation units with different material numbers in the sub-packages

Master- and Mixed load labels have to be applied to the loading unit in format 1200x800 on the short side and in format 800x600 on the long side of the unit.

The application of KLT Single labels has to be done as follows:

Format 600x400, 400x300: small side. Format 300x200: long side

The single labels of the outlying KLT have to be visible from outside.

Security straps for load security of the loading unit may not run across or conceal a Master- or Mixed load GTL If handling units are stretched for load security, the Master- or Mixed load GTL have to be applied above the stretching material.

2.2 Types of labels

SINGLE label:

- For homogeneous, unmixed transportation units (e.g. packages, meshed containers, small load carriers, etc.)
- Contains NO sub-packages with separate SINGLE label

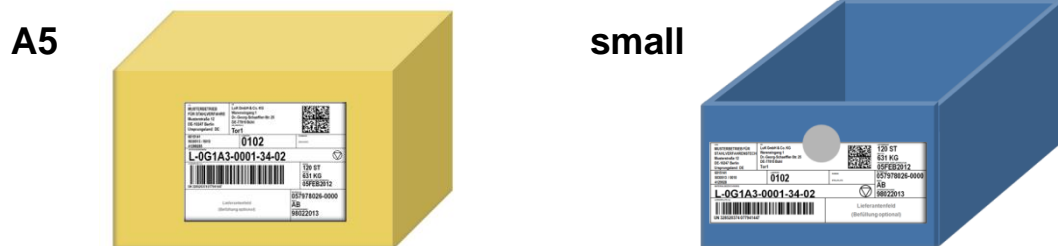


Fig.1 Example for the use of the SINGLE label on the package (A5) or small container (small)

MASTER-Label:

- For homogeneous, unmixed HU (same material number)
- Contains sub-packages with separate SINGLE-Label



Fig.2 Example usage of the MASTER label on a homogeneous pallet (1200x800)

MIXED LOAD-Label:

- For NON homogeneous, mixed HU
- Contains sub-packages with separate SINGLE-Label



Fig.3 Example usage of the MIXED LOAD label on a non-homogeneous pallet (1200x800)

The exact specification for the attachment of the labels to the containers is described in the packaging handbook INA/FAG and packaging handbook LuK.

2.3 Handling unit structure

The physical allocation of the SINGLE labels to the MASTER/MIXED labels on the handling unit based on the individual license plate numbers has to match the handling unit structure in the electronic communication via EDI (chapter 3.5). Important is the right match between each SINGLE label to the leading MASTER/MIXED label number of the handling unit. This has to be ensured by the supplier when attaching the labels to each container in the delivery process.

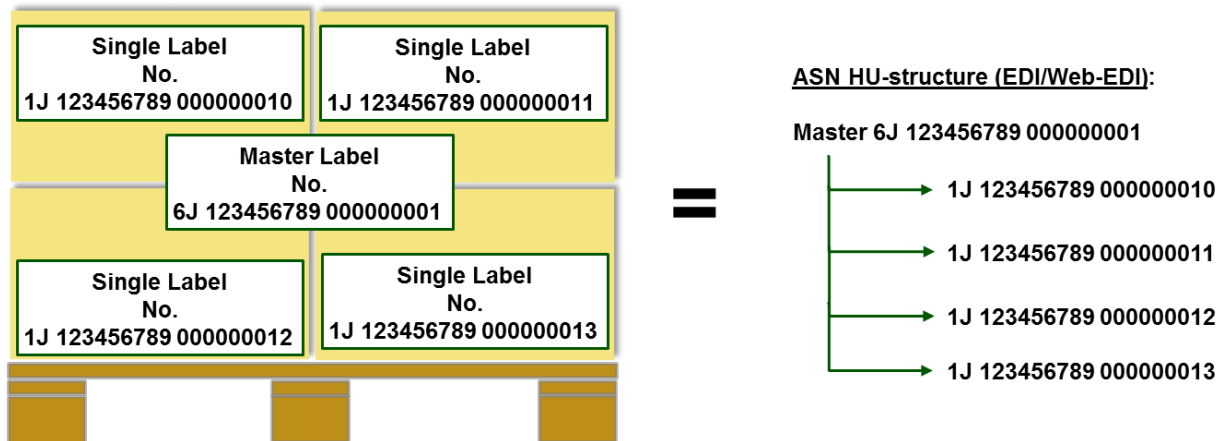


Fig. 4 Example for HU structure

2.4 Examples

The following figures show examples of the four different label types. The examples are not true to scale.

SHIP FROM: SAMPLE Inc. FOR STEEL PROCESSING Any Street 12 DE-10247 Berlin Ursprungsland: DE		SHIP TO: LuK GmbH & Co. KG Wareneingang 1 Dr.-Georg-Schaeffler-Str. 25 DE-77815 Bühl UNLOADING POINT: Tor1		
6015141 5030513 / 0010 41299285		STORAGE LOCATION: 0102		KANBAN ID: STORING POSITION:
MATERIAL DESCRIPTION: L-0G1A3-0001-34-02 				
LICENCEPLATE (1J):  UN 328520374 077941446			QUANTITY: 120 ST GROSS WEIGHT: 631 KG PRODUCTION- OR DELIVERY DATE: 05FEB2012	
Supplier Area			MATERIAL-NO: 057978026-0000 INDEX: AB SUPPLIER BATCHNO: 98022013	

Fig.5 Example – SINGLE label (A5)

SHIP FROM: SAMPLE Inc. FOR STEEL PROCESSING Any Street 12 DE-10247 Berlin Ursprungsland: DE		SHIP TO: LuK GmbH & Co. KG Wareneingang 1 Dr.-Georg-Schaeffler-Str. 25 DE-77815 Bühl Tor1			QUANTITY: 120 ST GROSS WEIGHT: 631 KG PRODUCTION- OR DELIVERY DATE: 05FEB2012
6015141 5030513 / 0010 4129928		STORAGE LOCATION: 0102		KANBAN ID: STORING POSITION:	MATERIAL-NO: 057978026-0000 INDEX: AB SUPPLIER BATCH NO: 98022013
MATERIAL DESCRIPTION: L-0G1A3-0001-34-02 					
LICENCEPLATE (1J):  UN 328520374 077941448			Supplier Area		

Fig.6 Example – SINGLE label (small)

SHIP FROM: SAMPLE Inc. FOR STEEL PROCESSING Any Street 12 DE-10247 Berlin Ursprungsland: DE		SHIP TO: LuK GmbH & Co. KG Wareneingang 1 Dr.-Georg-Schaeffler-Str. 25 DE-77815 Bühl UNLOADING POINT: Tor1		<h1>MASTER LABEL</h1>	
6015141 5030513 / 0010 41299285		STORAGE LOCATION: <h2>0102</h2>		KANBAN ID: STORING POSITION:	
MATERIAL DESCRIPTION: <h1>L-0G1A3-0001-34-02</h1> 					
LICENCEPLATE (6J):  UN 328520374 077941447				QUANTITY: 600 ST GROSS WEIGHT: 631 KG PRODUCTION- OR DELIVERY DATE: 05FEB2012	
 Supplier Area				MATERIAL-NO: 057978026-0000 INDEX: AB SUPPLIER BATCHNO: 98022013 NUMBER OF SUBPACKAGES: 10	

Fig.7 Example – MASTER label (A5)

SHIP FROM: SAMPLE Inc. FOR STEEL PROCESSING Any Street 12 DE-10247 Berlin Ursprungsland: DE		SHIP TO: LuK GmbH & Co. KG Wareneingang 1 Dr.-Georg-Schaeffler-Str. 25 DE-77815 Bühl UNLOADING POINT: Tor1		<h1>MIXED LOAD</h1>	
6015141		STORAGE LOCATION: <h2>0102</h2>			
LICENCEPLATE (5J):  UN 328520374 077941450				GROSS WEIGHT: 631 KG DELIVERY DATE: 05FEB2012	
 Supplier Area				NUMBER OF SUBPACKAGES: 10	

Fig.8 Example – MIXED LOAD label (A5)

3 Specifications and further information

Format:

- The format of the Schaeffler Global Transport Label is A5-landscape (210 mm x 148 mm).
- The transport label for small load carriers is half the height of the A5 (210 mm x 74 mm).
- In agreement with the local receiving plant the format AIAG B10 (6 inch x 4 inch) can be used too.

Languages:

- For transports within the German-speaking area, all block and field titles have to be displayed in German language.
- For cross-boarder transports outside the German-speaking area all block and field titles have to be displayed in English language.
- If sender and receiving plant are within the same language area but outside the German- or English-speaking areas, the shared common language can be used for block and field titles by special agreement.

Font:

- For all block and field titles only the characters of the ASCII-character set may be used.
- Only for transports within a country (outside of the German- or English-speaking areas), country-specific characters may be used by special agreement.
- The fonts Arial Narrow, Helvetica Condensed or a familiar font type may be used.
- Font size for field and line titles: 6 point (pt), max. height 1,5mm.
- Font size for field data: Highest possible for best readability within the defined field size.

Printing and paper quality:

Quality level B according to ISO/IEC 15415 und 15416 is required to guarantee the readability of the barcodes. Paper quality should guarantee a minimum weight of 160 g/qm. As alternative, labels with less weight can be used when applied to carton cut-outs or within an insert pocket.

Supplier Area:

The „supplier field“ (E1) can be defined and used by the supplier for own purposes. Language and symbols are free of choice by the supplier. If own barcodes are used the following restrictions apply: If identical identifiers are used – as described for the Schaeffler-defined barcodes – these have to contain the same data and information.

Safety symbol:

For security relevant materials or components the following safety symbol has to be printed in field C aligned to right side:



3.1 Dimensions, classification of data blocks and titles

3.1.1 Single/Master/Mixed label – A5 (210 X 148 mm)

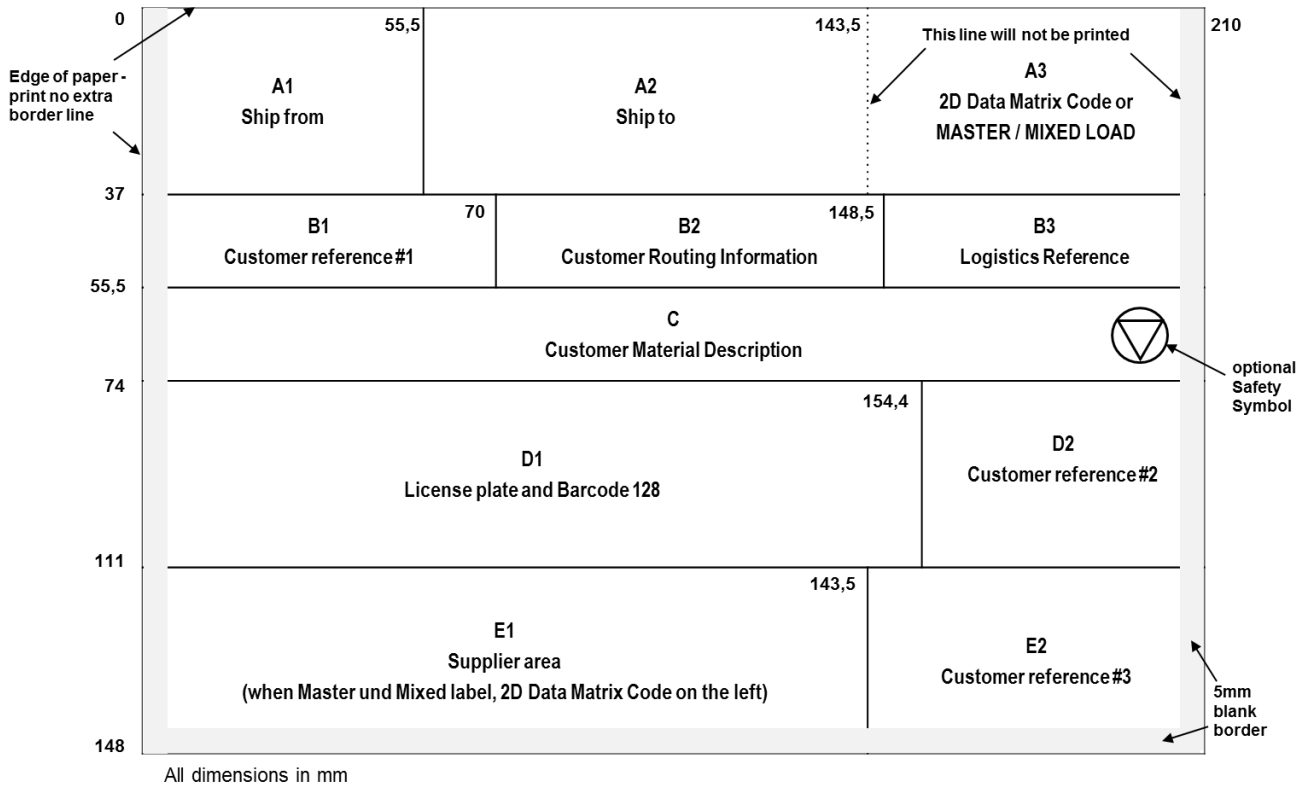


Fig.9 Dimensions and classification of blocks – Single/Master/Mixed label (A5)

SHIP FROM:		SHIP TO:		
		UNLOADING POINT:		
		STORAGE LOCATION:	KANBAN ID:	
				STORING POSITION:
MATERIAL DESCRIPTION:				
LICENCEPLATE (XJ):			QUANTITY:	
<div style="border: 1px dashed black; padding: 5px;"> 1J for SINGLE 5J for MIXED LOAD 6J for MASTER </div>			GROSS WEIGHT:	
			PRODUCTION- OR DELIVERY DATE:	
			MATERIAL-NO:	
			INDEX:	
			SUPPLIER BATCHNO:	
			NUMBER OF SUBPACKAGES:	
			<div style="border: 1px dashed black; padding: 5px;"> Indication only for MASTER and MIXED LOAD </div>	

Fig.10 Data titles – Single/Master/Mixed label (A5)

3.1.2 Single label – small (210 X 74 mm)

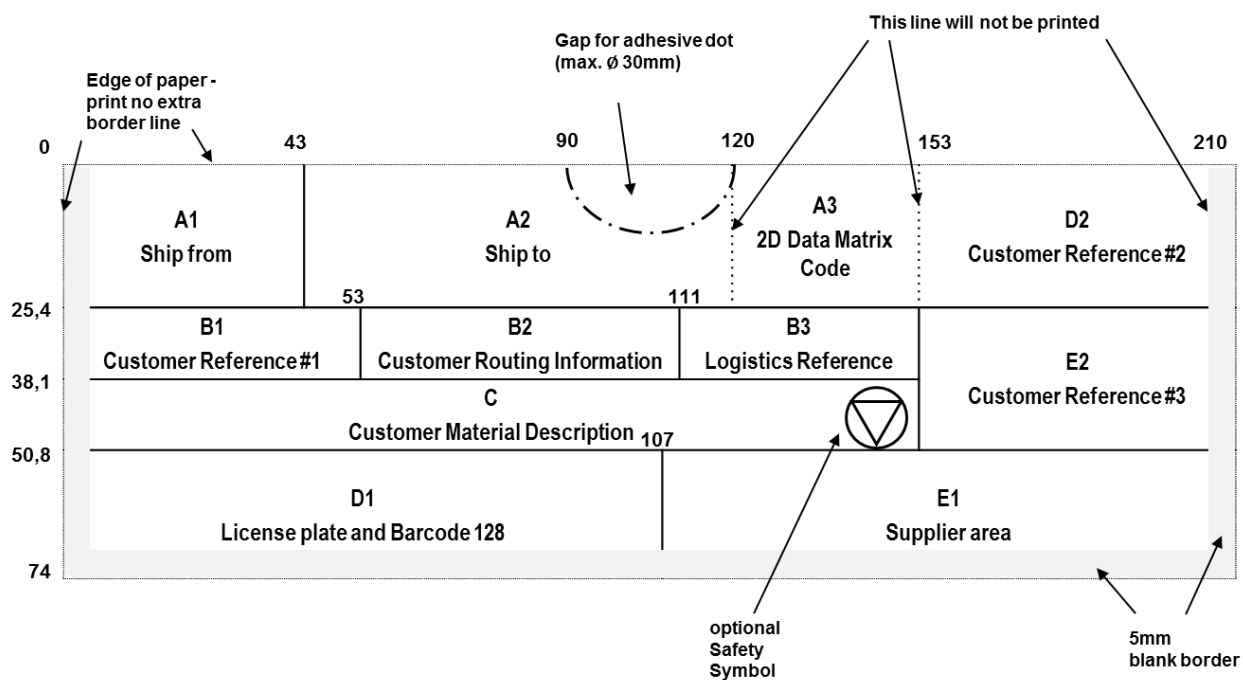


Fig.11 Dimensions and classification of blocks – SINGLE label (small)

SHIP TO:		SHIP TO:		DELIVERY QUANTITY:	
				GROSS WEIGHT:	
				PRODUCTION- OR DELIVERY DATE:	
		STORAGE LOCATION:	KANBAN ID:	MATERIAL-NO:	
			STORING POSITION:	INDEX:	
MATERIAL DESCRIPTION:				SUPPLIER BATCH NO:	
LICENCEPLATE (1-1):					

Fig.12 Data titles – SINGLE label (small)

3.2 Data fields per block – SINGLE label (A5/small)

Block	Title (German / English)	Content of the individual lines	Example	DI	Remarks
A1	Von / From	Vendor Address Line 1, Company Name	SAMPLE Inc. FOR		Cutting allowed
		Vendor Address Line 2	STEEL PROCESSING		Optional (if available); Cutting allowed
		Vendor Address Line 3, Street, Number	Any Street 12		Cutting allowed
		Vendor Address Line 4, Country code, Postal code, City	DE-10247 Berlin		Cutting allowed
		"Country of origin:" + 2 digit ISO country code	Ursprungsland: DE		
A2	An / To	Customer Address Line 1, Company Name	LuK GmbH & Co. KG		Cutting allowed; optional field in case of sub-packages
		Customer Address Line 2	Wareneingang 1		Optional (if available); Cutting allowed; optional field in case of sub-packages
		Customer Address Line 3, Street, Number	Georg-Schaeffer-Str. 25		Cutting allowed; optional field in case of sub-packages
		Customer Address Line 4, Country code, Postal code, City	DE-71815 Bülh		Cutting allowed; optional field in case of sub-packages
	Abladestelle / Unloading Point	Delivery for truck	Tor 1		Select font size about 70% larger than customer address; optional field in case of sub-packages
A3		2D Data Matrix code (contents of the code are all fields that list a Data Identifier in the DI column)			Details in the chapter about Data Matrix code; Quiet zone 2 mm around the code
B1		SAP Supplier number at Schaeffler	6123456	V	
		SAP order number + "/" + order item at Schaeffler	51234567 / 0010	K and 4K	Optional field in case of sub-packages
		Delivery note number of the supplier	41299285	16K	Optional field in case of sub-packages
B2	Lagerort / Storage Location	Storage location at Schaeffler	0102		Optional field in case of sub-packages
B3	Kanban ID / Kanban ID	Kanban-Number	1347	15K	Optional when Kanban is realized
	Stellplatz / Storing Position	Storing position Kanban	02-03		Optional when Kanban is realized
C1	Materialbezeichnung / Material Description	Material description Schaeffler (Maximize size, leave room for safety symbol)	L-0G1A3-0001-34-02		
		Safety symbol aligned to right side			Optional for safety-sensitive material
D1	Licence plate (1J) / Licence plate (1J)	Barcode 128: <Data Identifier 1J><Issuing Agency Code UN>< 9-character DUNS No.> <max. 9-character number>			Scanned data chain: 1JUN123456789123456789 Quiet zone around Barcode: left min. 6mm + quiet zone corr. to ISO-N.; right: quiet zone corr. to ISO-Norm; top and bottom min. 1mm
		<Issuing Agency Code UN><Blank><DUNS No.><Blank><max. 9-character number>	UN 123456789 123456789	1J	<Blank> only when printing in plain writing
D2	Liefermenge / Delivery Quantity	Quantity in the container	120	Q	optional with unit of quantity, for steal coils net weight in unit of weight KG
	Brutto / Gross	Gross weight of the marked container in KG	631 KG	7Q...GT	
	Produktions- oder Lieferdatum / Production- or Delivery Date	Date of production or delivery in the dimensions: DDDMMYYYY	05FEB2012		
E1		Supplier area, definable by Supplier			<u>Supplier systems:</u> freely definable, it is recommended to print the forwarder code and carrier. <u>Schaeffler systems:</u> 1 Line with currently valid <carrier code> <BLANK> <carrier>
E2	Material-Nr. / Material-No.	Material number Schaeffler	057978026-0000	P	In plain text printing fit in a hyphen after 9-digit number; when a 15-digit material number is used, a additional hyphen after the 13-digit number; in the 2D code without hyphens
	Index / Index	Drawing revision index Schaeffler	AB	2P	For materials with mandatory index-specification The actually delivered index must be specified
	Lieferantencharge / Supplier Batch	Batch number of the supplier	98022013	1T	<u>Supplier systems:</u> LuK plants optional, else one uniform batch per SINGLE level <u>Schaeffler SAP systems:</u> SAP batch if material with the obligation for a batch is contained

3.3 Data fields per block – MASTER label

Block	Title (German / English)	Content of the individual lines	Example	DI	Remarks
A1	Von / From	Vendor Address Line 1, Company Name	SAMPLE Inc. FOR		Cutting allowed
		Vendor Address Line 2	STEEL PROCESSING		Optional (if available); Cutting allowed
		Vendor Address Line 3, Street, Number	Any Street 12		Cutting allowed
		Vendor Address Line 4, Country code, Postal code, City	DE-10247 Berlin		Cutting allowed
		"Country of origin:" + 2 digit ISO country code	Ursprungsland: DE		
A2	An / To	Customer Address Line 1, Company Name	LuK GmbH & Co. KG		Cutting allowed
		Customer Address Line 2	Wareneingang 1		Optional (if available); Cutting allowed
		Customer Address Line 3, Street, Number	Georg-Schaeffler-Str. 25		Cutting allowed
		Customer Address Line 4, Country code, Postal code, City	DE-71815 Bühl		Cutting allowed
	Abladestelle / Unloading Point	Delivery for truck	Tor 1		Select font size about 70% larger than customer address
A3		MASTER Label Text	MASTER LABEL		2 lines
B1		SAP Supplier number at Schaeffler	6123456	V	
		SAP order number + "/" + order item at Schaeffler	51234567 / 0010	K and 4K	
B2	Lagerort / Storage Location	Delivery note number of the supplier	41299285	16K	
B3	Kanban ID / Kanban ID	Storage location at Schaeffler	0102		
C1	Materialbezeichnung / Material Description	Kanban-Number	1347	15K	Optional when Kanban is realized
		Storing position Kanban	02-03		Optional when Kanban is realized
D1	Licence plate (6J) / Licence plate (6J)	Material description Schaeffler (Maximize size, leave room for safety symbol)	L-0G1A3-0001-34-02		
		Safety symbol aligned to right side			Optional for security-sensitive material
		Barcode 128: <Data Identifier 6J><Issuing Agency Code UN>< 9-character DUNS No.> <max. 9-character number>			Scanned data chain: 6JUN123456789123456789 Quiet zone around Barcode: left min. 6mm + quiet zone corr. to ISO-N.; right: quiet zone corr. to ISO-Norm; top and bottom min. 1mm
D2	Liefermenge / Delivery Quantity	<Issuing Agency Code UN><Blank><DUNS No.><Blank><max. 9-character number>	UN 123456789 123456789	6J	
	Brutto / Gross	Quantity in the container	120	Q	optional with unit of quantity, for steal coils net weight in unit of weight KG
	Produktions- oder Lieferdatum / Production- or Delivery Date	Gross weight of the marked container in KG	631 KG	7Q...GT	
E1		Date of production or delivery in the dimensions: DDMMYYYY	05FEB2012		
		2D Data Matrix code (contents of the code are all fields that have listed a Data Identifier in the DI column)			Details in the chapter about Data Matrix code; Quiet zone 2 mm around the code
E2	Material-Nr. / Material-No.	Optional Supplier Area, Restricted definable by supplier. Starting 5mm right of the 2D Code			Supplier systems: right of the 2D Code freely definable, it is recommended to print the forwarder code and carrier. Schaeffler systems: 1 Line with currently valid <carrier code> <BLANK> <carrier>
	Index / Index	Material number Schaeffler	057978026-0000	P	In plain text printing fit in a hyphen after 9-digit number; when a 15-digit material number is used, a additional hyphen after the 13-digit number; in the 2D code without hyphens
	Lieferantencharge / Supplier Batch	Drawing revision index Schaeffler	AB	2P	For materials with mandatory index-specification The actually delivered index must be specified
	Anzahl Unterpackstücke / Number of Packages	Batch number of the supplier	98022013	1T	Supplier systems: LuK plants optional, else print of batch no. if identical for all sub-packages. For mixed batches on MASTER-level print of text: #MIXED BATCH# Schaeffler SAP systems: SAP batch if material with the obligation for a batch is contained
		Number of sub-packages	10		

3.4 Data fields per block – MIXED LOAD label

Block	Title (German / English)	Content of the individual lines	Example	DI	Remarks
A1	Von / From	Vendor Address Line 1, Company Name	SAMPLE Inc. FOR		Cutting allowed
		Vendor Address Line 2	STEEL PROCESSING		Optional (if available); Cutting allowed
		Vendor Address Line 3, Street, Number	Any Street 12		Cutting allowed
		Vendor Address Line 4, Country code, Postal code, City	DE-10247 Berlin		Cutting allowed
		"Country of origin:" + 2 digit ISO country code	Ursprungsland: DE		When all materials have the same country of origin, then publish ISO country code, otherwise <Blank>
A2	An / To	Customer Address Line 1, Company Name	LuK GmbH & Co. KG		Cutting allowed
		Customer Address Line 2	Wareneingang 1		Optional (if available); Cutting allowed
		Customer Address Line 3, Street, Number	Georg-Schaffler-Str. 25		Cutting allowed
		Customer Address Line 4, Country code, Postal code, City	DE-71815 Bühl		Cutting allowed
	Abladestelle / Unloading Point	Delivery for truck	Tor 1		Select font size about 70% larger than customer address
A3		MIXED Label Text	MIXED LOAD		2 lines
B1		SAP Supplier number at Schaeffler	6123456	V	
		<Blank>			
B2	Lagerort / Storage Location	Storage location at Schaeffler	0102		If homogeneous for all materials, else no data entry
B3		<Blank>			
		<Blank>			
C1	Materialbezeichnung / Material Description	<Blank>			
		Safety symbol aligned to right side			Optional for security-sensitive material
D1	Licence plate (5J) / Licence plate (5J)	Barcode 128: <Data Identifier 5J><Issuing Agency Code UN><9-character DUNS No.> <max. 9-character number>			Scanned data chain: 5JUN123456789123456789 Quiet zone around Barcode: left min. 6mm + quiet zone corr. to ISO-N.; right: quiet zone corr. to ISO-Norm; top and bottom min. 1mm
		<Issuing Agency Code UN><Blank><DUNS No.><Blank><max. 9-character number>	UN 123456789 123456789	5J	
D2	Brutto / Gross	<Blank>			
		Gross weight of the marked container in KG	631 KG	7Q...GT	
E1	Produktions- oder Lieferdatum / Production- or Delivery Date	Date of delivery in the dimensions: DDMMYYYY	05FEB2012		
		2D Data Matrix code (contents of the code are all fields that have listed a Data Identifier in the DI column)			
E2		Optional Supplier Area, Restricted definable by supplier. Starting 5mm right of the 2D Code			Supplier systems: right of the 2D Code freely definable, it is recommended to print the forwarder code and carrier. Schaeffler systems: 1 Line with currently valid <carrier code> <BLANK> <carrier>
		<Blank>			
E2		<Blank>			
		<Blank>			
E2	Anzahl Unterpackstücke / Number of Packages	Number of sub-packages	10		

3.5 Relevant EDIFACT subsets

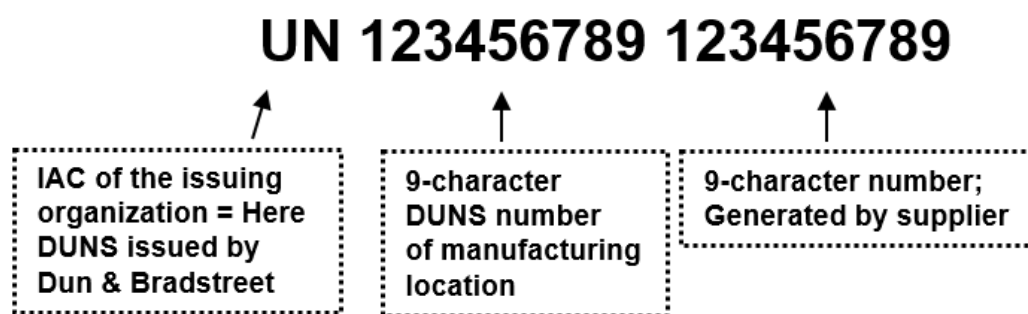
Field	Line	Field titel or -term	Content	Format DELFOR D99B v1-11 (alt)	Format DELFOR D10A v1-4	DESADV D 07A	Example
A1		From	Supplier address line 1	NAD+SU / C080 / 3036 an 35	NAD+SU / C080 / 3036 an 35	NAD+SE / C058 / 3036 an 35	Sample Inc. for
	2		Supplier address line 2		NAD+SU / C080 / 3036 an 35		Steel Processing
	3		Supplier address line 3	NAD+SU / C059 / 3042 an 35	NAD+ SU / C059 / 3042 an 35	NAD+SE / C059 / 3042 an 35	Main Street 12
	4		Supplier address line 4	NAD+SU / C819 / 3207 an 3 CTRY Code NAD+SU / C819 / 3251 an 17 ZIP NAD+SU / C059 / 3164 an 35 City	NAD+SU / C819 / 3207 an 3 CTRY Code NAD+SU / C819 / 3251 an 17 ZIP NAD+SU / C059 / 3164 an 35 City	NAD+SE / C819 / 3207 an 3 CTRY Code NAD+SE / C819 / 3251 an 17 ZIP NAD+SE / C059 / 3064 an 35 City	DE-10247 Berlin
	5	Country of origin	2 digit ISO country code			ALI+ / 3239 a 2 9213 an 3 (N)	DE
A2	1	To	Customer address line 1	NAD+CN / C058 / 3124 an 35	NAD+CN / C058 / 3124 an 35	NAD+ST / C058 / 3124 an 35	LuK GmbH & Co. KG
	2		Customer address line 2	NAD+CN / C080 / 3036 an 35	NAD+CN / C080 / 3036 an 35	NAD+ST / C058 / 3036 an 35	Goods receipt 1
	3		Customer address line 3	NAD+CN / C059 / 3042 an 35	NAD+CN / C059 / 3042 an 35	NAD+ST / C059 / 3042 an 35	Georg-Schaeffler-Str. 25
	4		Customer address line 4	NAD+CN / C819 / 3207 an 3 CTRY Code NAD+CN / C819 / 3251 an 17 ZIP NAD+CN / C059 / 3164 an 35 City	NAD+CN / C819 / 3207 an 3 CTRY Code NAD+CN / C819 / 3251 an 17 ZIP NAD+CN / C059 / 3164 an 35 City	NAD+ST / C819 / 3207 an 3 CTRY Code NAD+ST / C819 / 3251 an 17 ZIP NAD+ST / C059 / 3164 an 35 City	D-71815 Bühl
	5	Unloading point	delivery point for trucks	LOC+11 / C517 / 3225 an 20	LOC+11 / C517 / 3224 an 256	LOC+11 / C517 / 3225 an 20	Gate 1
A3	1	2D Code	Data Matrix Code				
B1	1	Supplier number	SAP (Buyer) supplier number	NAD+SU / C082 / 3039 an 20	NAD+SU / C082 / 3039 an 20	NAD+SE / C082 / 3039 an 20	6123456
	2	Order number / position	SAP (Buyer) order number / position	RFF+ON / C506 / 1154 an 12 RFF+ON C506 / 1156 an 6	RFF+ON / C506 / 1154 an 12 RFF+ON C506 / 1156 an 6	RFF+ON / C506 / 1154 an 12 RFF+ON / C506 / 1156 an 6	51234567 / 0010
	3	Delivery note number	(Seller) delivery note number			BGM+351 / C106 / 1004 an 35	41299285
B2	1	Storage location	(Buyer) storage location	LOC+18 / 3225 an 20	LOC+18 / 3224 an 256	LOC+13 / 3225 an 20	102
B3	1	Kanban ID	Kanban number	na	na	na	1347
	2	Pitch	Kanban pitch	na	na	na	02. Mrz
C1	1 (left)	Material name	Material short text	IMD+F / C273 / 7008 an 40	IMD+F / C273 / 7008 an 40	IMD++8 / C273 / 7008 an 40	L-0G1A3-0001-34-02
	1 (right)	Safety symbol	Symbol e.g. for dangerous goods			DGS++ / C205 / 8351 an 7 (Y oder N) C205 / 8078 an 7 (Y oder N)	
D1	1	License Plate (1J)	Barcode 128				
	2	License Plate	Identification number			GIR+3+ LICPLATENUM:ML an 35	UN32852037400077941447
D2	1	Quantity	Quantity in the container + unit	QTY+52 / C186 / 6060 n 17 QTY+52 / C186 / 6411 an 3	QTY+52 / C186 / 6060 n 17 QTY+52 / C186 / 6411 an 3	QTY+52 / C186 / 6060 n 17 QTY+52 / C186 / 6411 an 3	120 ST
	2	Brutto	Gross weight in Kg			MEA+AAX+AAD+KGM / C174 / 6314 an 10	631 KG
	3	Production - or delivery date	Delivery date			DTM+94 DTM+132 / C507 / 2380 an 12	05. Feb 12
E1	1	Supplier Area	Supplier content freely definable				
E2	1	Material number	SAP material number	LIN+1+...:BP / C212 / 7140 an 22	LIN+1+...:BP / C212 / 7140 an 22	LIN+++ / C212 / 7140 / an22 :IN	057978026-0000
	2	Index	Drawing revision index	PIA+1+ ... :EC / C212 / 7140 an 35	PIA+1+ ... :EC / C212 / 7140 an 35	PIA+1+ ... :EC / C212 / 7140 an 35	AB
	3	Supplier charge	Charge number of supplier			PIA+1+ ... :NB/ C212 / 7140 an 35	98022013

4 License plate, barcode 128 and 2D data matrix code

4.1 License plate

- The term "License plate" is a synonym for a global unique identification number for packing pieces of any kind. The license plate number (ISO/IEC 15459) which has to be generated for use in the Schaeffler GTL, is based on the DUNS number. The DUNS number is issued by the company Dun & Bradstreet (e.g. application on the internet platform Upik) and is free of charge.
- The data identifier of the license plate (e.g. 1J) will only be displayed in the header of the data field of the label. In the data matrix code, it has to be precede the license plate number.
- The uniqueness of the issued license plate number for a packing piece has to be ensured for at least two years.

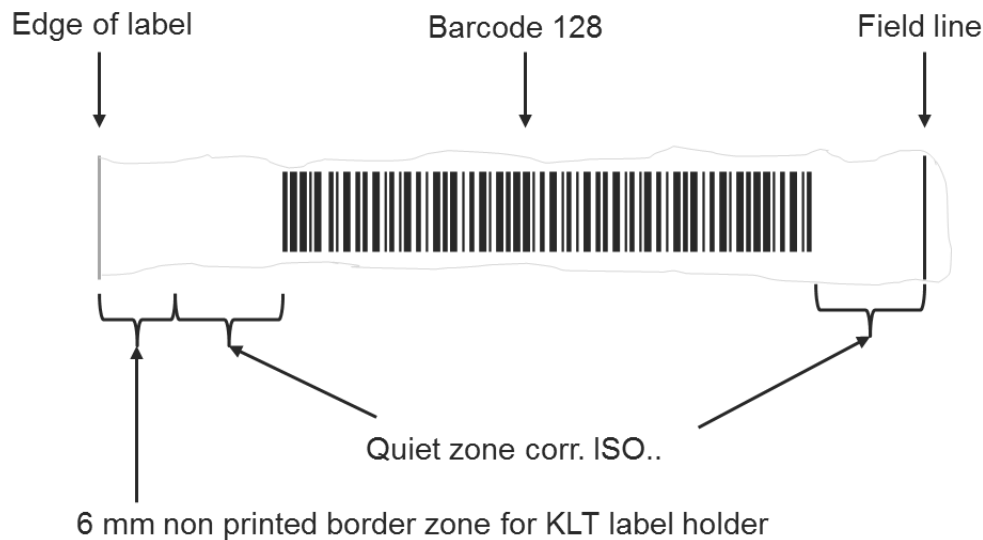
Configuration of the License plate:



4.2 Barcode 128

- The license plate has to be coded according to Code 128 (ISO/IEC 15417) with quality level B in block D1. The data information will be coded as Code 128 as a singular data element.
- The width of the barcode has to be between 60-90 mm for the small SINGLE label and at

Size of the barcodes	Height	Width incl. quiet zone	Quiet zone
A5 Labels	20mm	100-120mm	left min. 6mm + quiet zone corr. ISO-N.; right quiet zone corr. ISO-Norm top and bottom min. 1mm
SINGLE Label (small)	10-11mm	91-100mm	left min. 6mm + quiet zone corr. ISO-N.; right quiet zone corr. ISO-Norm top and bottom min. 1mm



4.3 Specifications, content of the 2D data matrix code and data identifiers

- The Schaeffler GTL will use a square data matrix code (ISO/IEC 16022) with longest applicable lateral length of 33 mm. The minimum size of the elements is $X = 0.33 \text{ mm}$ (13mil). The quiet zone around the code has to correspond to the ISO specification and should be at least 2 mm to each side.
- A corresponding data identifier (DI) has to precede each data element in the code. All data elements will be embedded according to the syntax ISO/IEC 15434. The format indicator "06" in the header of the syntax defines the usage of the ASC-data identifiers.
- The syntax ISO/IEC 15434 starts with the explicit identification sequence with compliance indicator and format trailer, followed by the format identifier for the DI's, the data field separators, the data elements and the closing sequence with format trailer and message trailer.
- The following characters and character strings will be used as control characters:

ASCII	Hex	Decimal	Description
[>	5B, 29, 3E	91, 41, 62	Compliance Indicator
R_S	1E	30	Format Trailer Character
06	30, 36	48, 54	Format identifier for „ASC DIs“
G_S	1D	29	Data Field Separator
E_{OT}	04	4	Message Trailer

- The user data will be included after the format identifier "06" and "GS" with preceding data identifier in the syntax, each separated with a separator "GS":

$[>^R s 06^G s \text{data element } 1^G s \text{data element } 2^G s \text{data element } n^R s^E o_T$

Sequence of data fields	Data Identifier	Mini	Single	Master	Mixed	Remarks
Licence plate	1J or 5J or 6J		X (1J)	X (6J)	X (5J)	
Material-No. Schaeffler	P	X	X	X		without hyphen
Index Schaeffler	2P	X	X	X ¹⁾		Only for material with mandatory index identification ¹⁾ Only if unique, else empty
Supplier batch number	1T	X	X	X ²⁾		If supplier uses batch numbers ²⁾ Only if unique, else empty
Quantity	Q	X	X	X		
Order-No. by Schaeffler	K		X	X		optional field in case of sub-packages on Single
Order-Position by Schaeffler	4K		X	X		optional field in case of sub-packages on Single
Delivery note number Supplier	16K		X	X		If not available, then usage of delivery date; optional field in case of sub-packages on Single
Kanban-ID Schaeffler	15K		X	X		Only within Kanban-Process
Supplier number at Schaeffler	V		X	X	X	
Gross Weight in kg	7Q...GT		X	X	X	
Shipment code/number by supplier	2K		X	X	X	Optional for deliveries of external suppliers
Expiry date	14D	X	X	X ³⁾		Only if expiry date exists; Format: CCYYMMDDHHMM ³⁾ Only if unique, else MIXED

Fig.13 Order and assignment of data elements in the 2D data matrix code

5 Usage with SupplyOn

Suppliers who are connected to the internet platform SupplyOn have the possibility to create and print the Schaeffler GTL label within the ASN process. Prerequisite is the usage of the SupplyOn ASN process module by the supplier and the established connection with the receiving Schaeffler plant.

This service can be used within the WebEDI solution by entering the required data on the internet based frontend portal of SupplyOn. While creating the advanced shipping notification (ASN) with his input data, the supplier can generate the Schaeffler GTL label and export a document for printing.

Additional information can be obtained via the company SupplyOn.

www.supplyon.com

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