Logistics Guideline ZEISS

Module Marking/Labelling

Version 0.1



Document revisions

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1 Purpose of the module

In this module of the Logistics Guideline the specifications for marking goods and their accompanying documents will be described. The specifications are necessary to ensure an efficient goods receipt process at ZEISS.

All deliveries to ZEISS and, in particular, to the logistics centres operated by CZAG must always be marked in such a way that all products can be clearly identified. It is important to ensure that the shipment reference (ASN and/or purchase order number) is clearly visible on the outer packaging.

Special handling instructions (e.g. "protect from moisture", "do not drop") must also be attached in the form of symbols. Notes on stackability are required.

The required documents are described in this module:

- ZEISS shipping label
- Delivery note
- Supplement sheet for serial numbers

Note on the implementation/creation of the documents:

Basically, there are three ways to create the required documents:

- (1) Use of the ZEISS supplier portal (Jaggaer) for ASN and printing of the delivery note

 If the supplier operates within the web interface of the supplier portal and processes the ASN, the delivery note provided there can be fully used. In this case, the requirements are met automatically.
- (2) Generation of the delivery note in the supplier's ERP system with ASN

 If ZEISS is notified of the delivery from the supplier's ERP system, the corresponding delivery note must also be generated from the supplier's system. The ASN number must be printed on the delivery note and transmitted to ZEISS via ASN. The ASN number is the combination of the supplier number and delivery note number.
- (3) Generation of the delivery note in the supplier's ERP system without ASN

 In this case, the supplier is responsible for generating ZEISS-compliant delivery documents from his ERP system.

In cases (2) and (3) the acceptance of the documents is carried out by the business unit to which the supplier must deliver.

2 Shipping label

2.1 Purpose and scope of application

The ZEISS shipment label is used to identify the shipment at goods receipt. The shipment label must be attached in a way that it is clearly visible from the outside and must not exceed the dimensions of the outer packaging. It must be ensured that the barcode remains perfectly legible, i.e. no sticking over, bending or writing on the barcode.

A sample label is shown below:



Figure 1: Sample shipping label

2.2 Format and structure

The shipping label is to be prepared in landscape format in the size 102 x 152 mm. In the following graphic the dimensions of the label are defined. The dimensions are measured in mm, starting from the upper left corner of the data field. The font used is "Arial" (or similar). Headings are in size 8pt, field contents in size 12 pt and the title in size 18 pt bold.



Figure 2: Layout specifications for shipping label

The ZEISS shipping label contains 7 data elements, which are described in more detail in Table 1. Attention should be paid to optional and mandatory contents. Furthermore, the contents are provided with barcode identifiers, which must be encoded in the 2D-barcode, if available.

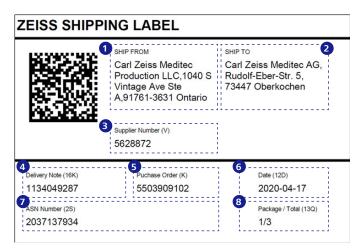


Figure 3: Data fields of the shipping label

No.	Must/optional	Data field	Identifier	Length	Format ¹	Example
1	Must	Sender		Max.100 with max. 5 lines		Carl Zeiss Meditec Production 1040 S Vintage Ave Ste A 91761-3631 Ontario
2	Must	Recipient		Max.100 with max. 5 lines		Carl Zeiss Meditec AG Rudolf-Eber-Str. 5 73447 Oberkochen
3	Must	Supplier No.	V	Max. 10	N	5628872
4	Must	Delivery note	16K	Max. 25	A/N	1134049287
5	Must	Order No.	K	10	N	5503909102
6	Must	Shipping date	12D	8	YYYYMMDD in barcode	2020-04-17 (YYYY-MM-DD) on label
7	Optional	ASN No.	25	Max. 35	A/N	2037137934
8	Must	Piece/in Total	13Q		N (n/x)	1/3

 $^{^{1}}$ N = numeric, A/N = alphanumeric, Y = year, M = month, D = day

Table 1: Information fields and barcode identifier shipping label

2.3 Details of the 2D-Barcode

The shipment label contains a Data Matrix code only. This is to prevent the wrong data being scanned when several 1D barcodes are printed. The reading of the correct information from the Data Matrix Code is controlled by the system based on the identifiers.

Details of the Data Matrix code:

- Print resolution: at least 200 dpi
- Code resolution: 0.75 to 1 mm (size of a matrix cell) (1 mm x 26 modules = 26mm)
- Rest area: min. 2 modules (2 mm)
- Data syntax according to ISO/IEC 15434
 - Symbol Type: Data Matrix ECC 200 (according to ISO/IEC 16022)
 - Prefix: <Makro 06>
- <Makro 06> defines a data structure according to ANSI MH 10.8.2 and represents the following syntax: [)>RS06 GS
 - R_s: Record Seperator identifies the start of a new record
 - G: Group Separator identifies the start of a new data element
 - The message type (data record) is finished with ${}^{R}{}_{S}{}^{E}O_{T}$
- Identifiers according to List of ASC-Data Identifiers according to ISO/IEC 15418 are used

The Data Matrix code from the sample shipping label is structured as follows: [)> R s06 G s2S2037137934 G s **K**5503909102 G s **V**5628872 G s 16K1134049287 G s 12D2020041713Q1/3 R sEO_T



Figure 4: 2D-Data Matrix Code shipping label

The following information must be coded in the Data Matrix Code to ensure efficient goods receipt at ZEISS:

- ASN No. (2S)
- Order No.(K)
- Supplier No.(V)
- Delivery note(16K)
- Shipping date(12D)
- Package/Total (13Q)

3 Delivery note

3.1 Purpose and scope of application

In order to process the inbound deliveries correctly, ZEISS requires a delivery note, which clearly describes the delivery. In addition to the legal provisions, the following requirements apply to the delivery note:

- The delivery note must be attached to the outside of the load/package in a visible and protected manner.
- The delivery note must be issued in accordance with DIN 4991.
- A separate delivery note must be created for each order number.
- Deliveries of first samples or deliveries for quality control tests must be clearly marked.
- The following criteria must be met for each delivery note item. If one of these criteria is not met, a new delivery note item must be created:
 - Same material number
 - Same supplier batch number (if required by ZEISS)
- If parts with a serial number are delivered, the information must be displayed in plaintext as well as in barcode on an additional sheet (see section 4).
- The supplier can choose from two options of the delivery note
 - With 1D-Barcodes
 - With 2D-Barcodes

Important: Only the delivery note with the 2D barcode should be used for delivery to the site logistics centres. In the case of direct deliveries to the Business Units' goods receiving departments, the delivery note with 1D barcode can also be used after consultation with the Business Unit contact person.

Example of a two-sided delivery note for direct deliveries to the business units

Carl Zeiss Meditec Production LL, 1040 S Vintage Ave Ste A, 91761-3631 Ontario

Carl Zeiss Meditec AG Rudolf-Eber-Str. 11

73447 Oberkochen

Delivery Note

Delivery Number:

346487

Date:

2020-04-17

Your Contact:

Name: Max Mustermann Phone: +49 7364 200

Fax: +49 7364 200

E-Mail: max.mustermann@zeiss.com

Page: 1 of 2

Forwarder: Dachser SE
Incoterm: DAP Oberkochen
Tracking ID: 7873827274859

Delivery Number

Order Number

Supplier Number

ASN Number

346487

4540152062

469834

5597190346487







ltem	Product ID / Product Description	Quantity	Packed in CZ Code
0010	304534-6000-595	2 PC	PAL-BOX
	Radiation Sheet Flat 12x17		10900872
	Batch: 0519-02AN		
	Commodity Code: 90229020		
	SLED/BBD: 15/11/2022		

Figure 5: Sample 1D-Barcode delivery note 1/2

			Page:	2 of 2
Delivery Number	Order Number	Supplier Number	ASN Number	
346487	4540152062	469834	55971903464	187

ltem	Product ID /	Quantity	Packed in
	Product Description		CZ Code
0020	304534-6000-595	28 PC	PAL-BOX
	Radiation Sheet Flat 12x17		10900872
	Batch: 0919-01P		
	Commodity Code: 90229020		
	SLED/BBD: 10/01/2023		
0030	00000-2175-372	1 PC	PAL-BOX
	VISUSCOUT 100 portable retina camera system		10900872
	Commodity Code: 85235190		

Figure 6: Sample 1D-Barcode delivery note page 2/2

Example of a two-page delivery note for a delivery to the site logistics centre

Carl Zeiss Meditec Production LL, 1040 S Vintage Ave Ste A, 91761-3631 Ontario

Carl Zeiss Meditec AG Logistikzentrum Rudolf-Eber-Straße 5

73447 Oberkochen



Delivery Note

Delivery Number:

346487

Date:

2020-04-17

Your Contact:

Name: Max Mustermann Phone: +49 7364 200 Fax: +49 7364 200

E-Mail: max.mustermann@zeiss.com

1 of 2 Page:

Dachser SE Forwarder: Incoterm: DAP Oberkochen Tracking ID: 7873827274859

Delivery Number	Order Number	Supplier Number	ASN Number
346487	4540152062	469834	5597190346487

ltem	Product ID / Product Description		Quantity	Packed in CZ Code
0010	304534-6000-595		2 PC	PAL-BOX
	Radiation Sheet Flat 12x17	52000		10900872
	Batch: 0519-02AN			
	Commodity Code: 90229020			
	SLED/BBD: 15/11/2022			

Figure 7: Sample 2D-Barcode delivery note 1/2

			Page:	2 of 2
Delivery Number	Order Number	Supplier Number	ASN Number	
346487	4540152062	469834	5597190346487	

ltem	Product ID / Product Description		Quantity	Packed in CZ Code
0020	304534-6000-595		28 PC	PAL-BOX
	Radiation Sheet Flat 12x17	20000000		10900872
	Batch: 0919-01P			
	Commodity Code: 90229020			
	SLED/BBD: 10/01/2023			
0030	00000-2175-372	S23C32	1 PC	PAL-BOX
	VISUSCOUT 100 portable retina camera system			10900872
	Commodity Code: 85235190	**************************************		

Figure 8: Sample 2D-Barcode delivery note 2/2

3.2 Format and structure

The delivery note is divided into header data and item data.

The following diagram shows the information content, which is divided into 9 blocks. These blocks serve as orientation for the content and do not represent an explicit layout specification. A second page always starts with information block 8, followed by further delivery items. The page break must not occur within a delivery note item.

First page

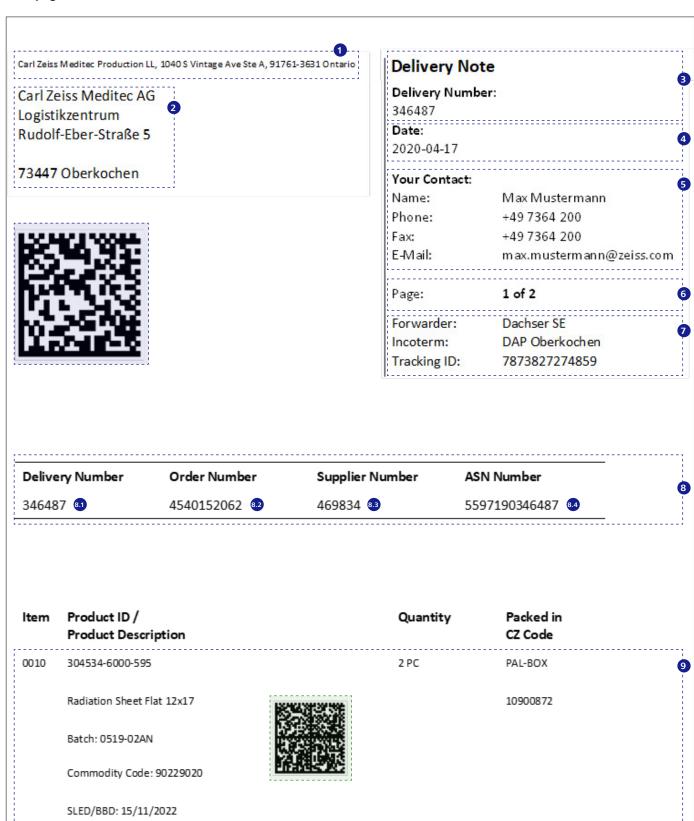


Figure 9: Information blocks delivery note 1/2

Second page

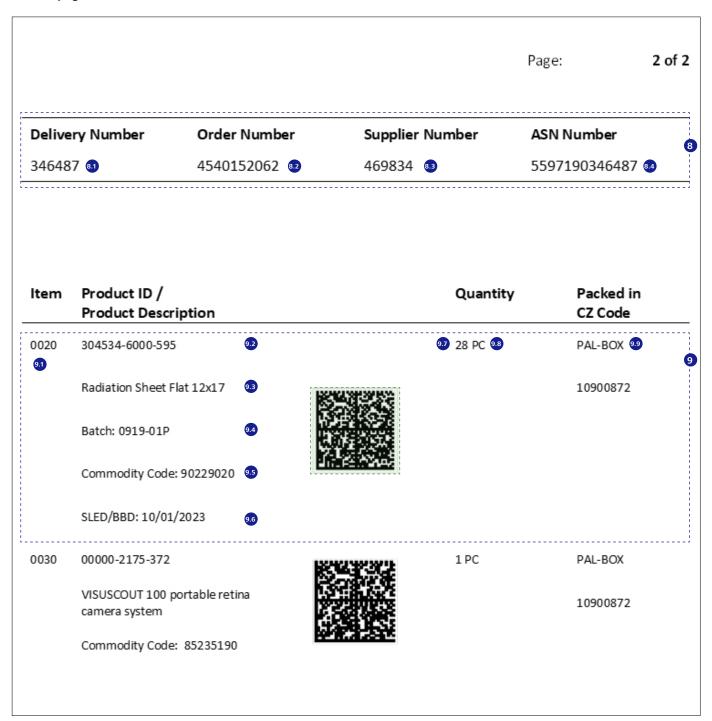


Figure 10: Information blocks delivery note 2/2

The following table shows the essential information of the delivery note. The data fields are described with the identifiers required for the 2D barcode. However, if only 1D barcodes are used, their necessity can be read in column Code 128. The preceding number in the table identifies the corresponding data block from Figure 9 and Figure 10.

		Code 128 Data matrix code				
No	Must/optional	Data field	printed	Identifier	Format ¹	Example
	<u> </u>		printeu	identinei	Tormat	Lxample
	very note header o					C 17: M III D 1 II
1	Must	Sender				Carl Zeiss Meditec Production 1040 S Vintage Ave Ste A 91761-3631 Ontario
2	Must	Recipient				Carl Zeiss Meditec AG Rudolf-Eber-Str. 5 73447 Oberkochen
3	Must	Delivery note (supplier)				346487
4	Must	Shipping date		12D	YYYYMMDD in barcode	2020-04-17(YYYY-MM-DD) in plaintext
5	Must	Contact details (supplier)				Max Mustermann +49 7364 200 +49 7364 200 max.mustermann@zeiss.com
6	Must	Page indicator				1 of 2
7	Optional	Shipping information				Dachser SE DAP Oberkochen 7873827274859
8.1	Must	Delivery note (supplier)	Yes	16K	A/N	346487
8.2	Must	Order No. (ZEISS)	Yes	K	N	4540152062
8.3	Must	Supplier No. (at ZEISS)	Yes	V	N	469834
8.4	Optional	ASN No.	Yes	25	A/N	5597190346487
Deliv	very note item dat	ta				
9.1	Must	Delivery item		4K	N	0010
9.2	Must	Material number (ZEISS)	Yes	Р	A/N	304534-6000-595
9.3	Must	Material short text (ZEISS)				Radiation Sheet Flat 12x17
9.4	(Must)	Batch	Yes	1T	A/N	0519-02AN
9.5	Must	Commodity code/Country of origin				Commodity code: 90229020 Country of origin: US
9.6	(Must)	Best-before date (BBD)	Yes	15D	DDMMYYYY in barcode	15-11-2022 (DD-MM-YYYYY) in plaintext
9.7	Must	Quantity		Q	N	2
9.8	Must	Unit				PC
9.9	Optional	Packaging				PAL BOX10900872

 $^{^{1}}$ N = numeric, A/N = alphanumeric, Y = year, M = month, D = day

Table 2: Information fields and barcode identifier delivery note

3.3 Details about the 2D-Barcodes

If the 2D – barcodes are used, the details of print resolution, data syntax, macro etc. described in section 2.2 are also applicable to the delivery note. Deviating features are marked below.

The Data Matrix code from the exemplary delivery note header (marked blue in Figure 9) is structured as follows:

- Code resolution: 0,75 to 1 mm (size of a matrix cell) (1 mm x 26 modules = 26 mm)
- Rest area: min. 2 modules

 $[)>^{R}_{S}06 \, ^{G}_{S} \, \mathbf{2S}5597190356487 \, ^{G}_{S} \, \mathbf{K}4540152062 \, ^{G}_{S} \, \mathbf{V}469834 \, ^{G}_{S} \, \mathbf{16K}346487 \, ^{G}_{S} \, \mathbf{12D}20200303 \, ^{R}_{S} \, ^{E}O_{T}$



Figure 11: 2D-Data Matrix Code delivery note header

The following information must be coded in the Data Matrix code at delivery note header level:

- ASN No. (2S)
- Order No. (K)
- Supplier No. (V)
- Delivery note (16K)
- Shipping date (12D)

The Data Matrix code from the first exemplary delivery note item (marked green in Figure 9) is structured as follows:

- Code resolution: 0.25 to 0.5 mm (size of a matrix cell) (0.25 mm x 36 modules = 9 mm)
- Rest area: min. 2 modules

[)> $^{R}_{s}$ 06 $^{G}_{s}$ **4K**0010 $^{G}_{s}$ **K**4540152062 $^{G}_{s}$ **16K**346487 $^{G}_{s}$ **V**469834 $^{G}_{s}$ **2S**5597190356487 $^{G}_{s}$ **12D**20200303 $^{G}_{s}$ **P**304534-6000-595 $^{G}_{s}$ **1T**0519-02AN $^{G}_{s}$ **15D**15112022 $^{G}_{s}$ **Q**2 $^{R}_{s}$ ^EO_T



Figure 12: 2D-Data Matrix Code delivery note item

The following information must be coded in the Data Matrix code at delivery note item level:

- ASN No. (2S)
- Order No. (K)
- Order item (4K)
- Supplier No. (V)
- Delivery note (16K)
- Shipping date (12D)
- Material number (P)
- Batch (1T)
- Best-before date (15D)
- Quantity (Q)

4 Supplement sheet for serial numbers

4.1 Purpose and scope of application

The supplement sheet for serial numbers is an additional document which must be attached to the delivery note if:

■ At least one delivery item contains a material that requires a serial number.

The document will be used in the goods receipt to record the serial numbers in a process-reliable manner.

Important: Only the delivery note with the 2D barcode should be used for delivery to the site logistics centres. In the case of direct deliveries to the Business Units' goods receiving departments, the delivery note with 1D barcodes can also be used after consultation with the Business Unit contact person.

First page

Carl Zeiss Meditec Production LL, 1040 S Vintage Ave Ste A, 91761-3631 Ontario

Supplement Sheet for Serial No.

Delivery Number:

346487

Page: 1 of 3

Delivery Number	Order Number	Supplier Number	ASN Number
346487	4540152062	469834	5597190346487

Order Item	ZEISS Product ID	Serial Number	Barcode
0010	304534-6000-595	ASX12345	
0010	304534-6000-595	ABD78739	
0020	304534-6000-595	CDF87450	
0020	304534-6000-595	SXZ7839800	
0020	304534-6000-595	8989382CCG	
0020	304534-6000-595	9026743758	
0020	304534-6000-595	77878348392	
0020	304534-6000-595	CGF6754658	差
0020	304534-6000-595	AAA8796033	

Figure 13: Sample supplement sheet for serial numbers 1/2

Page:	2 of 3

Delivery Number	Order Number	Supplier Number	ASN Number
346487	4540152062	469834	5597190346487

Order Item	ZEISS Product ID	Serial Number	Barcode
0020	304534-6000-595	34367658976	
0020	304534-6000-595	FRD48375436	
0020	304534-6000-595	SSG 754 759 490	
0020	304534-6000-595	ABD78740	
0020	304534-6000-595	1606401	Wa OE
0020	304534-6000-595	SXZ724196	
0020	304534-6000-595	4124141CCG	
0020	304534-6000-595	D191070414	
0020	304534-6000-595	DOITEHS14	
0020	304534-6000-595	AED17015	
0020	304534-6000-595	AAA8796034	

4.2 Format and structure

The supplementary sheet is divided into header data and item data.

The following diagram shows the information content, which is divided into 5 blocks. These blocks serve as orientation for the content and do not represent an explicit layout specification. A second page always contains blocks 3 and 4 at the top of the page. Only then do the other positions follow.

Important: In order to maintain consistency, when using the delivery note with 1D barcodes, the supplement sheet for the serial numbers must also be equipped with 1D barcodes.



Delivery Number	Order Number	Supplier Number	ASN Number	
346487 4	4540152062 💿	469834 🔞	5597190346487 🐠	_

Order I tem ZEISS Product ID		Serial Number		
0010 😘	304534-6000-595	ASX12345 😘	3	5
	304534-6000-595	ABD78739		
0020	304534-6000-595	CDF87450		
0020	304534-6000-595	SXZ7839800		_ `
0020	304534-6000-595	8989382CCG		
0020	304534-6000-595	9026743758		_
0020	304534-6000-595	77878348392		_ `
0020	304534-6000-595	CGF6754658		
0020	304534-6000-595	AAA8796033		- ₂

Figure 15: Information blocks supplement sheet for serial numbers

			code 128	data matrix co	ode	
No.	Must/optional	Data field	printed	Identifier	Format ¹	Example
Sup	plement sheet hea	der-Data				
1	Must	Sender				Carl Zeiss Meditec Production 1040 S Vintage Ave Ste A 91761-3631 Ontario
2	Must	Delivery note (supplier)				469834
3	Must	Page indicator				1 of 3
4.1	Must	Delivery note (supplier)				346487
4.2	Must	Order No. (ZEISS)		K	N	4540152062
4.3	Must	Supplier No. (at ZEISS)				469834
4.4	Optional	ASN No.				5597190346487
Sup	plement sheet pos	sition data				
5.1	Must	Order item (ZEISS)		4K	N	0010
5.2	Must	Material number (ZEISS)		Р	A/N	304534-6000-595
5.3	Must	Serial number (plaintext)				ASX12345
5.4	Must	Serial number (barcode)	Yes	S	A/N	ASX12345

 $^{^{1}}$ N = numeric, A/N = alphanumeric, Y = year, M = month, D = day

Table 3: Information fields and barcode identifier supplement sheet for serial numbers

Important: One line must be used per individual piece of a serialized purchase order item. For example, 2 serial numbers for purchase order item 10 must be printed on 2 lines.

4.3 Details of the 2D-barcode

If 2D barcodes are used, the details of print resolution, data syntax, macro etc. described in section 2.2 are also applicable to the supplement. Differing features are indicated below.

- Code resolution: 0.25 to 0.5 mm (size of a matrix cell) (0.5 mm x 24 modules = 12 mm)
- Rest area: min. 2 modules

The Data Matrix code from the first exemplary position (marked green in Figure 13) is structured as follows: $[)>_{s}^{R}$ $06 \, ^{G}$ **K**4540152062 G $\mathbf{4}$ **K**0010 G \mathbf{P} 304534-6000-595 G \mathbf{S} \mathbf{A} SX12345 R \mathbf{S} \mathbf{E}



Figure 16: 2D-Data Matrix Code supplement sheet item

The following information must be coded in the Data Matrix Code at delivery note item level:

- Order No. (K)
- Order item (4K)
- Material number (P)
- Serial number (S)

Glossary

Term	Meaning
ASN	Alternatively, also known as advice note or Advanced shipping notice (ASN), describes the electronic transmission of delivery data to the ship-to party's system. The shipping notification is always sent before the actual physical delivery of the goods. Based on the shipping notifications, the recipient can carry out a simple collection and account assignment in goods receipt.
EDI	Within electronic data processing (EDP), Electronic Data Interchange is a collective term for data exchange using electronic transfer procedures
ANSI	American National Standards Institute
DIN	German Institute for Standardization
BBD	Best-before date
ECC	Error Correction Code
BU	Business Units
ISO	International Organization for Standardization

6 Applicable documents

Document	Description
ISO/IEC 15434	Information technology – Automatic identification and data capture techniques – Syntax for high-capacity ADC media (Automatic data capture)
ANSI MH 10.8.2	Data Identifier and Application Identifier Standard