

This specification describes the requirements that suppliers of ERNI Production GmbH & Co. KG are expected to meet concerning identification of products in order to have their deliveries accepted.

By consistently fulfilling this specification the processing time within the supply chain can be significantly reduced, and the cooperation between ERNI Production GmbH & Co. KG and her partners further improved.

The specification consists of three sections:

| Section A | Label |
|-----------|-------|
|           |       |

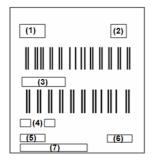
1. The supplier is generally free to choose the label to be utilized. The supplier may use proprietary labels or can buy the ERNI standard labels from ERNI at cost price.

The gumming of the labels must be permanently adherent. The only exception hereto is plastic tray packaging. With this form or packaging the supplier has to utilize removable labels.

- 2. The minimum size of the label must be at least 51 x 51 mm. The label has to be large enough that bar coded information can be printed with enough quiet space according to this specification, so that it remains readable.
- 3. Labels must generally have the following essential data for products <u>without</u> Underwriters Laboratories (UL) and/or Canadian Standards Association (CSA)-listing:

| • | (1) RoHS-identification mark (text)  | 04-digits | text only               |
|---|--------------------------------------|-----------|-------------------------|
| • | (2) Year                             | 02-digits | text only               |
| • | (3) ERNI identification no. or       | 10-digits | Barcode + text          |
| • | ERNI production order no. ("Charge") | 07-digits | Barcode + text          |
| • | (4) Quantity and unit of qty.        | 09-digits | Barcode + text          |
| • | (5) Datecode (date of production)    | 06-digits | text only               |
| • | (6) ERNI assigned vendor number      | 05-digits | text with preceding "L" |
| • | (7) Country of origin ("Made in")    |           | text only               |

Example of a label for a ERNI-product with ID-number:





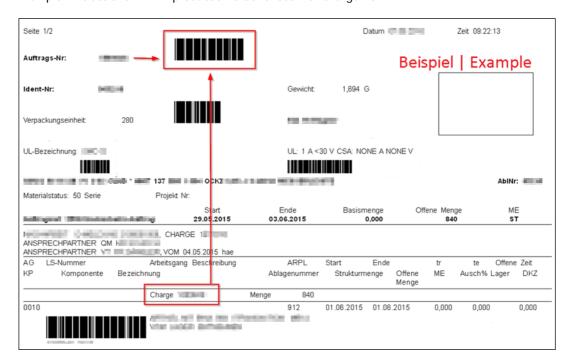
Note to position (3):

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If you see the ERNI production order ("Charge") on the production order sheet, then print the ERNI production order number on position (3). Otherwise please use the ERNI identification number. The required barcode (production order number or identification no.) is printed on top of the sheet.

Example: Extract of an ERNI-production order sheet with charge-no.

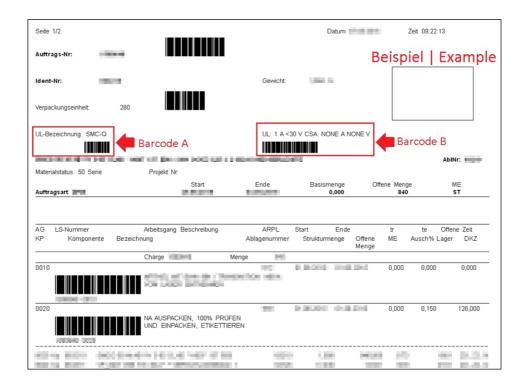


- 4. The RoHS identification marking (1) as stated on European Union directive EU 2002/95/EG (Restriction on Hazardous Substances) has to be applied when the parts are in accordance with this directive. Otherwise the marking can be omitted.
- 5. The current year is to be printed as a text in the upper right hand corner of the label.
- 6. If you are utilizing proprietary labels these have to be <u>white</u> and neutral. Neutral in this context means that <u>no company name of the vendor</u> is to be printed on the label. The text and barcode on the label has to be in black color.
- 7. The vendor should create a label and submit this label to ERNI for official approval. The following additional specifications concern suppliers, who conduct several manufacturing processes to produce finished goods for ERNI, based on ERNI's production orders.
- 8. The UL/CSA-marking on the label has to be applied when the products are finished goods with Underwriters Laboratories (UL) and/or Canadian Standards Association (CSA)-listing. In this case, the production order shows two additional barcodes: barcode A and barcode B.

Example of a production order of finished goods with UL/CSA-listing:

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9. Labels for finished goods with UL/CSA-listing have to contain the following information additional to these stated in A No. 3 ff. The UL/CSA-label consists of two parts. The top part (8) is identical as described in A No. 3. The lower part (9), which consists of a schedule, symbols and texts, could be printed as an image file. The structure of this image file is described in the following section (A No. 8).

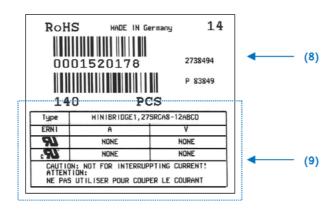
(8) Label as mentioned in A No. 3 description above

(9) Schedule, text and symbols image file

Example of a label for finished goods with UL/CSA-listing:

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10. The schedule in the lower part of the label for finished goods with UL/CSA-listing has to be constructed as follows with the stated information. It is recommended to freeze the structure of the schedule (image file).

#### Structure of the schedule (9):

| (10) | (14) |      |
|------|------|------|
| (11) | (15) | (16) |
| (12) | (17) | (18) |
| (13) | (19) | (20) |
|      | (21) |      |

Data of the schedule (9):

• (21) "CAUTION: ..."

| • (10) "Type"                     | text froze in image file                  |
|-----------------------------------|---|
| • (11) "ERNI"                     | text froze in image file                  |
| • (12) UL-symbol                  | symbol froze in image file                |
| <ul><li>(13) CSA-symbol</li></ul> | symbol froze in image file                |
| • (14) type-term                  | UL-type-term; data contained in barcode A |
| • (15) "A"                        | letter "A" froze in image file            |
| ■ (16) "V"                        | letter "V" froze in image file            |
| • (17) field 1                    | UL-data 1 contained in barcode B          |
| • (18) field 2                    | UL-data 2 contained in barcode B          |
| • (19) field 3                    | CSA-data 3 contained in barcode B         |
| • (20) field 4                    | CSA-data 4 contained in barcode B         |
|                                   |   |

The type-term (10) is contained in barcode A. The cell (10) should be able to be filled up to 30 figures. The cells (17), (18), (19) and (20) of the schedule describe the UL/CSA-data of the finished goods.

text froze in image file.

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These four UL/CSA-data are contained in barcode B and are separated with a <u>comma</u>. These cells should be able to be filled up to 4 figures.

Example of barcode B with the assumed UL/CSA-data 17, 18, 19 and 20.



It is recommended to use a barcode scanner to feed the cells with the UL/CSA-data.

Example of a schedule (9) for finished goods with UL/CSA-listing:

| Туре  | MINIBRIDGE1,27 | SRCA8-12ABCD |  |
|---|----------------|--------------|--|
| ERNI  | ERNI A V       |              |  |
| 27  | NONE           | NONE         |  |
| . <b>9</b> 1  | NONE           | NONE         |  |
| CAUTION: NOT FOR INTERRUPPTING CURRENT!<br>ATTENTION:<br>NE PAS UTILISER POUR COUPER LE COURANT |                |              |  |

| Section B | Barcode |
|-----------|---------|
|           |         |

- 1. It is allowed to use <u>only</u> the barcode of type "**code 128**". The specifications of barcode 128 are described in the international standard ISO/IEC 15417.
- 2. Encoding of ERNI identification number (part no.) and quantity is compulsory. Products with UL/CSA-listing have to be labelled besides the barcode with the schedule (see A No. 7 ff.). In general the vendor has to adhere to the following rules:
  - No alphanumeric or special characters are to be encoded!
  - No blanks are to be used within the characters to be encoded.
  - Do not enclose the barcode with borders, lines or related characters. This leads to problems during the scanning process.
  - There has to be sufficient free space (quiet zone) surrounding the barcode. Before the first bar and after the last bar at least 10 times the width of the thinnest bar or minimum 6 mm.

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- It is not permitted to print barcode with a dot matrix printer. Printing with such a printer leads to poor readability during scanning. The quality of the printed information has to comply with the testing standard according to ISO/IEC 15416 or ANSI.X3.182-1990.
- 3. Regarding ERNI-specific data the following conventions apply:
  - The ERNI identification numbers (part number) format is six-digit numeric. Preceding zeros have to be encoded.
  - The identification number barcode has to be 10 digit left-aligned. Take note to fill up the barcode with zeros after the sixth digit.

Example for ERNI-part ID 224199 (use Code 128):

2241990000

10 digit left-aligned



The quantity has to be encoded 9 digit, right-aligned. The unit of quantity must <u>not</u> be included in the barcode! It is to be added solely as text information.

Example quantity 45 pieces (use Code 128):

000000045 pc 9

9-digit right-aligned; leading zeros

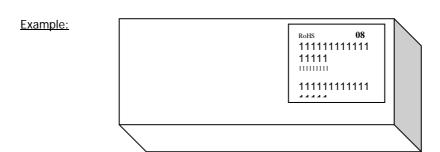


| Section C | Location and application |  |
|-----------|--------------------------|--|
|           |                          |  |

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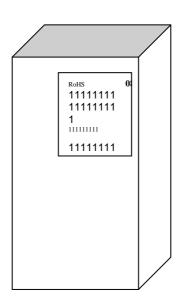


1. The labels are generally to be applied on the smallest packaging at the upper right hand side.



2. The labels on the outer boxes are generally to be applied on the narrow side at the outside front of the box.

# Example:



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