
	AA-ONM.011
	Packaging of rings and coils on delivery

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## History

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ATTENTION: This is an informal translation. Validity is proven only by the German version.			

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## Scope

To realise the service described in the offer, it must be ensured that the input material provided by the customer fulfils several conditions. These conditions are listed below but may not be exhaustive. Any exception to the elements described must necessarily be agreed in advance.

on Metall GmbH cannot be held liable for any defect caused by non-compliance with any of the elements described below.

## Surface condition of the bare precursor material

### Punching, cutting, or rolling oils

The quality and quantity of oil on the belt must be removable by a chemical or electrolytic degreasing process. The amount of grease on the surface must not exceed 0.2 g/m<sup>2</sup>.

### It is essential that the product supplied is free from

- Silicones
- Paraffins
- Solid residues from crude oil
- Adhesives
- Adhesive tape
- Inks
- Resin
- other solid elements made of paper, plastic, wood, etc.


### The surface must be free of the following defects:

- Oxidations
- Stains
- Detachable particles
- Scratches
- Mechanical defects
- Accumulations of oil or grease
- Rolling residues

### The time between cutting/rolling and treatment must not be greater than

- 3 months for pre-stamped material
- 6 months for full strip

Materials older than specified above may require an additional stripping phase, depending on the condition of the surface, which generates additional costs.

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## Winding/coil

To avoid problems in our process, the product received must:

- be packed on spools appropriate to the specific characteristics of the material.
- be wound on spools that allow horizontal or vertical unwinding without deformation.
- The space between the flanges must be wider than the belt so that the belt can run freely and without friction on the flanges.
- The winding tension must be selected so that the material is secured during transport and can still run off cleanly.
- In general, the coils should be wound without interruptions. In case of an interruption, it is essential to mark it clearly. The ends must not be connected. The interruption must be reported not only on the reel in question but also on the associated documentation.
  - Marking the interruption
    - Ideally, the cuts must be indicated and located with a sticker on the flange of the coil. This can be done, for example, with a line or arrow.
    - Example 1: (the blue lines on the tape indicate the position of the interruption)



- Example 2: (the arrowhead indicates the position of the interruption)



If the product is to be wound on a different type of coil than the one on which it is supplied as part of the processing at our company, then it is essential to supply coils in sufficient quantity together with the delivery of the raw material.

In any case, if we must wind on spool, at least one, better two empty bobbins must be provided in advance.

### Reservation on the quality of the input material

We do not check the material quality of the bare precursor material. Defects such as deformations, sabres, stains, or holes that can cause a defect on our equipment are evaluated separately after production and compensated for if necessary.

### Standard parameters

	Pre-stamped material	Full strip
Outer diameter	max. 1,200 mm	max. 1,200 (in exceptions max. 1,400 mm)
Coil weight (gross)	max. 80 / 250 / 500 kg (depending on the system - see offer)	max. 2,000 kg
Protruding circumambulations	max. 1 mm	max. 1 mm

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Sabre	1.5 mm/m	1.5 mm/m
Ripple		0,7 %
Pallet height	max. 850 mm	max. 850 mm
Pallet weight	max. 2,000 kg	max. 2,000 kg

## Packing

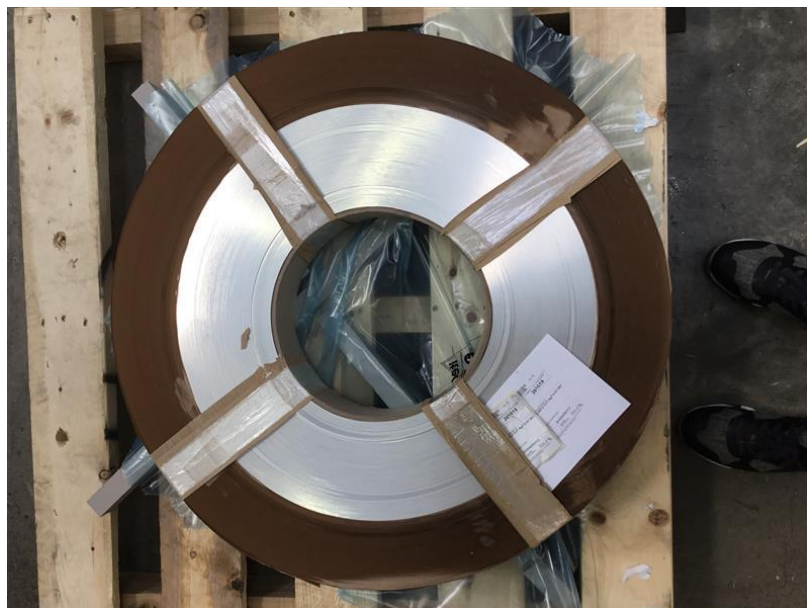
The following factors must be given for the packaging of the bare primary material:

### Above:

- Lid or wooden cross.


### Coils:

- Adhesives from the construction must not come into contact with the product.
- 3 to 6 plastic tyres for fastening. The tensile force must be selected so that the materials are securely fastened to the pallet, but the coils and packaging materials are not impaired or even damaged.
- 4-8 bindings are possible (see picture below), as well as with steel.



- Aligned centrally on the pallet.
- Protected from environmental influences.



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### Interlayers:

- Intermediate woods from a width of 15mm, made of dry or protected wood with a thickness of min. 40mm, below 0.15mm, however, made of cardboard. The rings with the intermediate layers made of cardboard, must be marked accordingly as non-stackable.
- - Stacking takes place from bottom to top, starting with the largest coil and ending with the smallest coil.



- The first layer must be between the first spool/coil and the pallet. If the weight is more than 40kg, the rings/coils must be further separated by appropriate intermediate layers.

### Palette:

- The pallets must always be larger than the maximum outer diameter of the rings/coils on it. (min. + 10 cm)
- Type: 2 entries.
- Only one type/batch may be transported on each pallet.
- The pallets must be robust and adapted to the weight of the spools/coils.

The pallets must be sufficiently enclosed (e.g., with stretch or shrink film) to ensure the stability of the package during transport and storage.



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## Storage


The material must be stored dry (40-70% humidity), temperature-stable (15-25°C) and without direct exposure to radiation (e.g., sunlight).

During storage and retrieval, always check the package for damage.

## Documents / Identification

To enable the unambiguous traceability of the product, it is necessary to mark the packages individually. The following documents must be enclosed with the delivery:



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- Packing list indicating the number and quantity of coils per pallet, as well as the gross and net weight of the pallet.
- Certificate of compliance
- Delivery notes with the following items:
  - Name of the customer
  - Order number
  - Description of goods (material, dimension and/or reference)
  - Specification number and revision
  - Weight and number of pallets
  - Weight and number of rings/coils per pallet
  - Weight and number of pieces per reel

### Change service

Revision	Date	Name	Content
01	08.10.2020	Oliver Brenscheidt	First edition
02	28.10.2020	Oliver Brenscheidt	Addition Chapter: Storage
02a	28.03.2023	Oliver Brenscheidt	Automatic translation
03	05.06.2023	Jasmin Lentzen	Addition Chapter: Pallet
04	18.07.2023	Jasmin Lentzen	Addition Chapter: Packing