

AA 031 Technical Delivery Conditions for Semi-Finished Metal Products

TLH 010:

This "Technical Delivery Conditions" (TL) serves to ensure quality when purchasing semi-finished metal products. This is intended to optimize processes and avoid complaints.

1. Scope of Application

The validity of this TL extends to all services requested and/or ordered by hapema GmbH from manufacturers and dealers of metallic semi-finished products - hereinafter referred to as contractors. (Metal semi-finished products of all kinds and in different shapes, sizes and dimensions). If the order specifications contain instructions that differ from this TL, they are valid. The following process has priority of validity: Drawing -> Order text -> AA 031 (Technical delivery condition for semi-finished products). The remaining provisions of this instruction are not affected.

2. Applicable standards (in current version)

Unless otherwise specified in the respective order text or drawing, the standards listed in the appendix to these technical terms and conditions of delivery shall apply with regard to dimensions, material properties, composition, surface, shape, structure and formability.

3. Packaging, logistics

- Strips up to 0.5 mm material thickness without galvanic coating and without plating are to be wound on a stable core without intermediate layer paper. The ring must be tied at least 3 times.
- When using cores, the inner end of the tape must not be attached to the core.
- Belts must be able to be unwound clockwise.
- The cores are to be arranged centrally on top of each other.
- Rings up to 70 kg must be supplied with intermediate layer cardboard with core hole, rings over 70 kg must also be supplied with intermediate layer timber (all rings on top); between the rings, 4 spacers are to be arranged in a star shape; Attention: Only use real wood or plastic for spacers, no pressboard!
- Care must be taken to ensure that the lowest ring cannot become wedged in the pallet during unwinding.
- All rings must be able to be uncovered horizontally from the pallet after removing the moisture protection (shrink or stretch film made of PE film).
- There must not be 2 rings next to each other on a pallet.
- Transport must be secured with steel straps and edge protection.
- The diagonal dimension of the pallet must not exceed 1,500 mm

4. Marking

The packaging units must be marked by the contractor as follows:

- Labels must be attached to each ring with:
 - > Name and address of the contractor
 - > Batch No.
 - > hapema article no.
 - > Order number

-> Ring weight

The gross and net weight must be affixed to each pallet of a delivery.

In the case of partial deliveries for a specific order no. this partial delivery must be clearly marked.

5. Documentation requirements

For each delivery, the Contractor must enclose a target/actual statement in the form of an acceptance test certificate 3.1 in accordance with DIN EN 10204:2004 with the following minimum content:

- > Bandwidth and thickness
- > Strength and/or hardness
- > Chemical composition
- > Sabre shape

Additional requirements can be found in the order text.

Other requirements for the contractor's documentation:

- For traceability, hapema GmbH requires the following information, both on the acceptance test certificate and on the delivery note:
 - > Part designation
 - > Article number
 - > Order number
 - > Order number
 - > Batch number
- In the event of complaints, an initial statement must be submitted within 24 hours.
- A complete 8D report must be received by hapema GmbH within 72 hours.
- The contractor must enter the semi-finished metal products into the IMDS database in accordance with the specifications of the IATF (International Automotive Task Force). You can find information on this under www.mdssystem.com.

6. otherwise

- 6.1 Interruptions
No interruptions within a ring are permitted.
- 6.2 Ring diameter
The following ring diameters are permitted:
Inside: min. 400 mm to max. 450mm, outside min. 1200mm to max. 1,500 mm; in exceptional cases (e.g. requirement of the spring bending limit) the inner diameter can be up to 500 mm.
Further exceptions only for small quantities and after consultation.
- 6.3 Pallet weight
As large as possible depending on the order quantity; otherwise max. 1,500 kg.
- 6.4 Ring weight
As large as possible depending on the order quantity; otherwise as described in the order text.
- 6.5 Sample sections
At least every second ring must be accompanied by a sample section of at least 300 mm in length.

6.6 Initial sampling

The Contractor must submit an initial sample of the products to be delivered to hapema GmbH in accordance with VDA (PPF) or QS 9000 (PPAP). Alternatively, the Contractor shall confirm in writing that the respective product is manufactured under series conditions.

6.7 Order confirmation

If the information in the Contractor's order confirmation deviates from the requirements of the order, the Contractor must immediately inform the hapema purchasing department in writing before processing the order. If this is not done, the goods are to be regarded as returns. hapema GmbH must be informed in advance of any process changes at the contractor and written approval must be obtained. If this does not happen, the Contractor shall be liable for all resulting damages.

6.8 Pallet height

The total height of the pallets (pallet including material) must not exceed 800mm.

6.9 Miscellaneous

Order deviations (including partial deliveries) must be approved by hapema GmbH's purchasing department in each case. Strip goods are only accepted in a stretch/bending condition; this must be confirmed on the respective factory test certificate.

8. Annex: applicable standards

Normenbezeichnung	Titel
DIN EN 1652	Copper and copper alloys – strips for general use
DIN EN 1654	Copper and copper alloys – spring strips for leaf springs and connectors
DIN EN 1655	Copper and copper alloys – Declarations of conformity
DIN EN 1658	Copper and copper alloys – strips for system carriers
DIN EN 10139	Cold strip without coating made of soft steels for cold forming
DIN EN 10204	Metallic products – types of test certificates
DIN EN 12166	Copper and Copper Alloys – Wires for General Use
DIN EN 12384	Copper and copper alloys – determination of the spring bending limit of strips
DIN EN 13148	Copper and copper alloys – Hot-dip tinned strip
DIN 32506 Teil 1	Solderability test – wetting test
DIN 32506 Teil 2	Solderability – immersion testing for copper alloy specimens
DIN 32506 Teil 3	Solderability – immersion test for pre-tinned specimens
DIN 32506 Teil 1, 2, 3	Solderability – testing with wetting balance
DIN IEC 68 2-20	Copper and copper alloys – strips for general use
DIN IEC 68 2-54	Basic Environmental Assessment Methods – Part 2: Testing; Test Group T: Soldering Basic Environmental Assessment Methods – Part 2: Testing; Test Group T: Soldering; Test Ta: Test of solderability with the wetting balance
DIN EN 10 027-1 & -2	Designation systems for steels