



SLOVENSKI STANDARD
SIST EN 546-1:1998

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Aluminium and aluminium alloys - Foil - Part 1: Technical conditions for inspection and delivery

Aluminium und Aluminiumlegierungen - Folien - Teil 1: Technische Lieferbedingungen

Aluminium et alliages d'aluminium - Feuille mince - Partie 1: Conditions techniques de contrôle et de livraison

STANDARD PREVIEW

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SIST EN 546-1:1998

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EUROPEAN STANDARD

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English version

**Aluminium and aluminium alloys - Foil - Part 1:
Technical conditions for inspection and delivery**Aluminium et alliages d'aluminium - Feuille
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contrôle et de livraisonAluminium und Aluminiumlegierungen - Folien -
Teil 1: Technische Lieferbedingungen**(standards.iteh.ai)**SIST EN 546-1:1998<https://standards.iteh.ai/catalog/standards/sist/28134c1c-014a-4610-b620-be29915b2d47/sist-en-546-1-1998>

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENEuropean Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 132 "Aluminium and aluminium alloys", the Secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 1996, and conflicting national standards shall be withdrawn at the latest by December 1996.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 6 "Foil and finstock" to prepare the following document for publication as a European Standard :

EN 546-1 Aluminium and aluminium alloys - Foil - Part 1 : Technical conditions for inspection and delivery

This standard is part of a set of four standards. The other standards deal with :

EN 546-2 Aluminium and aluminium alloys - Foil - Part 2 : Mechanical properties

EN 546-3 Aluminium and aluminium alloys - Foil - Part 3 : Tolerances on dimensions

EN 546-4 Aluminium and aluminium alloys - Foil - Part 4 : Special property requirements

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard : Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This Part of EN 546 specifies the technical conditions for inspection and delivery of wrought aluminium and aluminium alloy foil. It does not apply to lacquered, painted, embossed or laminated products.

The gauge range covered is 6 μm to 200 μm .

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 515 Aluminium and aluminium alloys - Wrought products - Temper designations

EN 546-2 Aluminium and aluminium alloys - Foil - Part 2 : Mechanical properties

EN 546-3 Aluminium and aluminium alloys - Foil - Part 3 : Tolerances on dimensions

EN 546-4 Aluminium and aluminium alloys - Foil - Part 4 : Special property requirements

EN 573-3 Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3 : Chemical composition

3 Definitions

For the purpose of this standard, the following definitions apply :

3.1 foil

Flat, cold rolled product of rectangular cross section and thickness not greater than 200 μm .

3.2 inspection lot or batch

Consignment or a part thereof, submitted for inspection comprising products of the same grade or alloy, the same form, temper, thickness and cross section, processed in the same way and where applicable, submitted to a final heat treatment in the same furnace load.

3.3 sample

One or more products taken from an inspection lot.

3.4 specimen

One or more pieces taken from each product in a sample for the purpose of producing test pieces.

3.5 test piece

Piece taken from each specimen and suitably prepared for the test.

3.6 test

Operation to which the test piece is subjected in order to measure or classify a property.

4 Orders or tenders

The order or tender shall specify the product required and shall contain the following information :

a) Description of the product :

- product group, i.e. light gauge converter foil, heavy gauge converter foil, consumer foil or container foil ;

- alloy designation ;

- form of the product, i.e. single-rolled or double-rolled ;

b) metallurgical temper of the material to be delivered as specified in EN 515 ;

c) number of this European Standard (EN 546-1) ;

d) dimensions of the product :

- thickness ;

- width and type of specified tolerance on width as defined in EN 546-3 (symmetrical, only plus, only minus) ;

- internal and external diameter of the coil/reel ;

- core size and type ;

e) mass and number of coils / reels ;

f) any special requirements agreed between purchaser and supplier, e.g. :

- test certificates and inspection reports ;

- marking of the products, e.g. identification, flagging of joints, etc. ;

- reference to drawings, e.g. for packaging, cores, etc. ;

- lubrication to be used ;
- bright or matt outer surface of coil / reel (where double rolled).

Where special requirements are specified, the application shall be stated.

5 Requirements

5.1 Production and manufacturing processes

Unless otherwise specified in the order, the production and manufacturing processes shall be left to the discretion of the supplier. Unless it is explicitly stated in the order, no obligation shall be placed on the supplier to use the same process for subsequent and similar orders.

5.2 Quality control

The supplier shall be responsible for the performance of all inspection and tests required by the relevant standard and / or the particular specification prior to the shipment of the product.

5.3 Chemical composition

The chemical composition shall be in conformity with the requirements specified in EN 573-3.

5.4 Mechanical properties

The mechanical properties shall be in conformity with EN 546-2.

5.5 Freedom from defects

The product shall be free from defects prejudicial to its suitable and proper use.

5.6 Tolerances on dimensions

The tolerances on dimensions shall be in conformity with EN 546-3.

5.7 Special properties

Special property requirements shall be agreed between purchaser and supplier.

6 Test procedure

6.1 Sampling

6.1.1 Specimens for chemical analysis

The specimens for chemical analysis shall be taken at the time of casting. Their shape and method of production (mould design, cooling rate, mass etc.) shall be so designed that their composition is homogeneous and be adapted to the method of analysis.

6.1.2 Specimens for mechanical testing

6.1.2.1 Location and size

Specimens shall be taken from samples in such a way that it is possible to orientate the test pieces in relation to the product, as specified in 6.1.2.2. The specimens shall be large enough to allow manufacture of the test pieces necessary to carry out the required tests and shall include sufficient metal to allow manufacture of test pieces for any retests required.

6.1.2.2 Orientation

Specimens shall be taken in such a manner that the test pieces can be prepared in the longitudinal direction.

6.1.2.3 Identification

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Each specimen shall be identified in such a way that after removal, it is still possible to identify the product from which it was taken and its location and orientation. If during the course of subsequent operations removal of the markings cannot be avoided, new markings shall be made before the originals are removed.

6.1.2.4 Preparation

Specimens shall be taken from the sample after completion of all the mechanical and heat treatment operations that the product has to undergo before delivery and which can influence the mechanical properties of the metal. In cases where this is not possible, the sample or specimens may be taken at an earlier stage, but they shall be subjected to the same treatment as that to which it is intended to submit the product concerned.

Cutting shall be carried out in such a manner that it does not change the characteristics of the part of the specimen from which the test pieces are to be prepared. Thus, the dimensions of the specimens shall provide an adequate allowance to permit removal of the zone affected by cutting.

Specimens shall not be treated in any way that alters their mechanical properties.