### **DIN 17611**



ICS 25.220.20; 77.150.10

Supersedes DIN 17611:2007-11

# Anodized products of aluminium and wrought aluminium alloys -Technical conditions of delivery, English translation of DIN 17611:2011-11

Anodisch oxidierte Erzeugnisse aus Aluminium und Aluminium-Knetlegierungen -Technische Lieferbedingungen,

Englische Übersetzung von DIN 17611:2011-11

Produits anodisés en aluminium et en alliages d'aluminium corroyé – Conditions techniques de livraison,

Traduction anglaise de DIN 17611:2011-11

Document comprises 11 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.



### A comma is used as the decimal marker.

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#### **Foreword**

This standard has been prepared by Technical Committee NA 066-01-09 AA *Oberflächenbehandlung von Aluminium* of the *Normenausschuss Nichteisenmetalle* (Nonferrous Metals Standards Committee) of DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. DIN [and/or die DKE] shall not be held responsible for identifying any or all such patent rights.

#### **Amendments**

The standard differs from DIN 17611:2007-11 as follows:

- a) In 7.2.1: Normative references to DIN EN 12373-5 have been changed to DIN EN ISO 2931;
- b) In 7.2.2: Normative references to DIN EN 12373-4 have been changed to DIN EN ISO 2143;
- c) In 7.2.3: Normative references to DIN EN 12373-7 have been changed to DIN EN ISO 3210.

#### **Previous editions**

DIN 17611: 1964-05, 1969-06, 1981-12, 1985-06, 2000-12, 2007-11

DIN 17612: 1969-06

#### 1 Scope

This standard specifies the technical delivery conditions for anodized aluminium and wrought aluminium alloy products which are widely used in the metalworking industry. Anodic oxidation generates an oxide coating on the surface of aluminium, which results in an increased resistance to corrosion. Furthermore, for certain suitable alloys anodizing preserves the decorative appearance obtained through pretreatment as in Table 1.

For the purposes of this standard, semi-finished aluminium products are:

- sheet, strip and plate as in DIN EN 485-1;
- cold drawn rod, bars and tube as in DIN EN 754-1;
- extruded rod, bars, tube and profiles as in DIN EN 755-1;
- extruded precision profiles as in DIN EN 12020-1.

This standard does not cover:

- products with oxide coatings produced by hard anodizing for technical purposes;
- products with oxide coatings produced by coil anodizing;
- products worked after anodizing.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

DIN EN 485-1, Aluminium and aluminium alloys — Sheet, strip and plate — Part 1: Technical conditions for inspection and delivery

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

DIN EN 754-1, Aluminium and aluminium alloys — Cold drawn rod/bar and tube — Part 1: Technical conditions for inspection and delivery

DIN EN 755-1, Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 1: Technical conditions for inspection and delivery

DIN EN 12020-1, Aluminium and aluminium alloys — Extruded precision profiles in alloys

DIN EN ISO 1463, Metallic and oxide coatings — Measurement of coating thickness — Microscopical method

DIN EN ISO 2143, Anodizing of aluminium and its alloys — Estimation of loss of absorptive power of anodic oxidation coatings after sealing — Dye-spot test with prior acid treatment

DIN EN ISO 2360, Non-conductive coatings on non-magnetic electrically conductive basis materials — Measurement of coating thickness — Amplitude-sensitive eddy current method

DIN EN ISO 2931, Anodizing of aluminium and its alloys — Assessment of quality of sealed anodic oxidation coatings by measurement of admittance

DIN EN ISO 3210, Anodizing of aluminium and its alloys — Assessment of quality of sealed anodic oxidation coatings by measurement of the loss of mass after immersion in phosphoric acid/chromic acid solution