ICS 25.220.20 SLOVENSKÁ TECHNICKÁ NORMA Júl 2020

STN	**Anodická oxidácia hliníka a jeho zliatin Stanovenie hmotnosti anodických oxidových povlakov na jednotku plochy (plošná hustota) Gravimetrická metóda (ISO 2106: 2019)**	**STN EN ISO 2106** 42 4301

Anodizing of aluminium and its alloys - Determination of mass per unit area (surface density) of anodic oxidation coatings - Gravimetric method (ISO 2106:2019)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/20

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EN ISO 2106

January 2020

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English Version

Anodizing of aluminium and its alloys - Determination of mass per unit area (surface density) of anodic oxidation coatings - Gravimetric method (ISO 2106:2019)

Anodisation de l'aluminium et de ses alliages - Détermination de la masse surfacique (masse par unité de superficie) des couches d'oxydation anodique - Méthode gravimétrique (ISO 2106:2019)

Anodisieren von Aluminium und Aluminiumlegierungen - Bestimmung der Masse je Flächeneinheit (flächenbezogene Masse) von anodisch erzeugten Oxidschichten - Gravimetrisches Verfahren (ISO 2106:2019)

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European foreword

This document (EN ISO 2106:2020) has been prepared by Technical Committee ISO/TC 79 "Light metals and their alloys" in collaboration with 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of an identical text or by endorsement, at the latest by July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 2106:2019 has been approved by CEN as EN ISO 2106:2020 without any modification.

INTERNATIONAL STANDARD

ISO 2106

Fourth edition
2019-11

Anodizing of aluminium and its alloys — Determination of mass per unit area (surface density) of anodic oxidation coatings — Gravimetric method

Anodisation de l'aluminium et de ses alliages — Détermination de la masse par unité de surface (masse surfacique) des couches d'oxydation anodique — Méthode gravimétrique

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*, Subcommittee SC 2, *Organic and anodic oxidation coatings on aluminium*.

This fourth edition cancels and replaces the third edition (ISO 2106:2011), which has been technically revised. The main changes compared with the previous edition are as follows:

— phosphoric acid/sodium molybdate solution has been added as a test solution;

— the information of the test specimen has been added;

— Formula (2) has been corrected.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

INTERNATIONAL STANDARD **ISO 2106:2019(E)**

Anodizing of aluminium and its alloys — Determination of mass per unit area (surface density) of anodic oxidation coatings — Gravimetric method

1 Scope

This document specifies a gravimetric method for determining the mass per unit area (surface density) of anodic oxidation coatings on aluminium and its alloys.

The method is applicable to all oxidation coatings formed by anodizing aluminium and its alloys, either cast or wrought, and is suitable for most aluminium alloys, except those in which the mass fraction of copper is greater than 6 %.

NOTE 1 A high content of copper in the alloy can lead to increased dissolution of the substrate aluminium.

NOTE 2 If the thickness is known with sufficient precision (for example, using the method specified in ISO 2128), the determination of the mass per unit area (surface density) of the coatings will enable its apparent density to be calculated. Conversely, if the conditions of application of the coating and its density are known, the determination of its mass per unit area (surface density) can permit the calculation of the average mass and an approximate evaluation of the thickness (see Clause 9).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 7583, *Anodizing of aluminium and its alloys — Terms and definitions*