

<b>STN</b>	<b>Anodická oxidácia hliníka a jeho zliatin</b> <b>Stanovenie pierazného napätia a výdržného</b> <b>napätia (ISO 2376: 2019)</b>	<b>STN</b> <b>EN ISO 2376</b>  42 4302
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Anodizing of aluminium and its alloys - Determination of breakdown voltage and withstand voltage (ISO 2376:2019)

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. 09/19

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EUROPEAN STANDARD

**EN ISO 2376**

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EUROPÄISCHE NORM

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Supersedes EN ISO 2376:2010

English Version

## Anodizing of aluminium and its alloys - Determination of breakdown voltage and withstand voltage (ISO 2376:2019)

Anodisation de l'aluminium et de ses alliages -  
Détermination de la tension de claquage et tension de  
tenue (ISO 2376:2019)

Anodisieren von Aluminium und  
Aluminiumlegierungen - Bestimmung der elektrischen  
Durchschlagspannung (ISO 2376:2019)

This European Standard was approved by CEN on 19 March 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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**EN ISO 2376:2019 (E)**

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## **European foreword**

This document (EN ISO 2376:2019) 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of an identical text or by endorsement, at the latest by October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.

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.

This document supersedes EN ISO 2376:2010.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Endorsement notice**

The text of ISO 2376:2019 has been approved by CEN as EN ISO 2376:2019 without any modification.

# INTERNATIONAL STANDARD

# ISO 2376

Third edition  
2019-03

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## **Anodizing of aluminium and its alloys — Determination of breakdown voltage and withstand voltage**

*Anodisation de l'aluminium et de ses alliages — Détermination de la  
tension de claquage et de la tension de tenue*



Reference number  
ISO 2376:2019(E)

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## ISO 2376:2019(E)

### 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](http://www.iso.org/directives)).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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](http://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 third edition cancels and replaces the second edition (ISO 2376:2010), which has been technically revised. The main changes compared with the previous edition are as follows:

- the information of the test specimen has been added;
- a withstand voltage test has been added.

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](http://www.iso.org/members.html).



# Anodizing of aluminium and its alloys — Determination of breakdown voltage and withstand voltage

## 1 Scope

This document specifies test methods for the determination of the breakdown voltage and withstand voltage of anodic oxidation coatings on aluminium and its alloys, on flat or near-flat surfaces and on round wire. The methods are applicable to anodic oxidation coatings used primarily as electrical insulators.

The methods are not applicable to coatings in the vicinity of cut edges, the edges of holes, or sharp changes of angle on, for example, extruded shapes.

NOTE 1 Breakdown voltage and withstand voltage are affected by relative humidity.

NOTE 2 The methods described do not give satisfactory results for unsealed coatings because they are affected by the humidity in particular.

## 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*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**