

IRISH STANDARD

I.S. EN 12373-10:1999

ICS 25.220.20 77.120.10

ALUMINIUM AND ALUMINIUM ALLOYS ANODIZING - PART 10: MEASUREMENT OF
MEAN SPECIFIC ABRASION RESISTANCE OF
ANODIC OXIDATION COATINGS USING AN
ABRASIVE JET TEST APPARATUS

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This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on:

May 7, 1999

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 12373-10

November 1998

ICS

Descriptors: surface treatment, anodizing, aluminium, aluminium alloys, abrasion tests, determination, abrasion resistance

### English version

## Aluminium and aluminium alloys - Anodizing - Part 10: Measurement of mean specific abrasion resistance of anodic oxidation coatings using an abrasive jet test apparatus

Aluminium et alliages d'aluminium - Anodisation - Partie 10: Détermination de la résistance spécifique moyenne des couches d'oxyde anodiques à l'abrasion par essai au jet abrasif Aluminium und Aluminiumlegierungen - Anodisieren - Teil 10: Messung der mittleren spezifischen Abriebfestigkeit von anodisch erzeugten Oxidschichten durch Abriebprüfung mit einem Schleifmittelstrahl-Prüfgerät

This European Standard was approved by CEN on 14 November 1998.

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 Central Secretariat or to any CEN member.

This European Standard exists 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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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 May 1999, and conflicting national standards shall be withdrawn at the latest by May 1999.

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

It is based upon ISO 8252: 1987.

In this standard, annexes A and B are informative and annex C is normative.

EN 12373, Aluminium and aluminium alloys – Anodizing, comprises the following parts:

- Part 1: Method for specifying decorative and protective anodic oxidation coatings on aluminium
- Part 2: Determination of mass per unit area (surface density) of anodic oxidation coatings

   Gravimetric method
- Part 3: Determination of thickness of anodic oxidation coatings Non-destructive measurement by split beam microscope
- Part 4: Estimation of loss of absorptive power of anodic oxidation coatings after sealing by dye spot test with prior acid treatment
- Part 5: Assessment of quality of sealed anodic oxidation coatings by measurement of admittance
- Part 6: Assessment of quality of sealed anodic oxidation coatings by measurement of the loss of mass after immersion in phosphoric acid/chromic acid solution without prior acid treatment
- Part 7: Assessment of quality of sealed anodic oxidation coatings by measurement of the loss of mass after immersion in phosphoric acid/chromic acid solution with prior acid treatment
- Part 8: Determination of the comparative fastness to ultra-violet light and heat of coloured anodic oxidation coatings

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- Part 9. Measurement of wear resistance and wear index of anodic oxidation coatings using an abrasive wheel wear test apparatus

  Part 10 Measurement of mean specific abrasion resistance of anodic oxidation coatings using an abrasive jet test apparatus
- Part 11: Measurement of specular reflectance and specular gloss of anodic oxidation coatings at angles of 20°, 45°, 60° or 85°
- Part 12: Measurement of reflectance characteristics of aluminium surfaces using integrating-sphere instruments
- Part 13: Measurement of reflectivity characteristics of aluminium surfaces using a goniophotometer or an abridged goniophotometer
- Part 14 Visual determination of image clarity of anodic oxidation coatings Chart scale method
- Part 15 Assessment of resistance of anodic oxidation coatings to cracking by deformation
- Part 16: Check for continuity of thin anodic oxidation coatings Copper sulfate test
- Part 17 Determination of electric breakdown potential
- Part 18 Rating system for the evaluation of pitting corrosion Chart method
- Part 19 Rating system for the evaluation of pitting corrosion Grid method



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