



National Standards Authority of Ireland

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**

National Standards  
Authority of Ireland  
Glasnevin, Dublin 9  
Ireland

Tel: +353 1 807 3800  
Fax: +353 1 807 3838  
<http://www.nsai.ie>

**Sales**  
<http://www.standards.ie>

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

*May 7, 1999*

**NO COPYING WITHOUT NSAI  
PERMISSION EXCEPT AS  
PERMITTED BY COPYRIGHT  
LAW**

© NSAI 1999

**Price Code H**

Údarás um Chaighdeán Náisiúnta na hÉireann



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  
EUROPAISCHES KOMITEE FÜR NORMUNG

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

Page 2  
EN 12373-10:1998

<b>Contents</b>	<b>Page</b>
Foreword	3
Introduction	5
1 Scope	5
2 Normative references	5
3 Definitions	5
4 Principle	6
5 Apparatus	6
6 Procedure	7
7 Expression of results	9
8 Test report	10
Annex A (informative) Design of abrasive jet test apparatus	11
Annex B (informative) Depth survey of abrasion resistance	15
Annex C (normative) Preparation of standard specimen	17

## 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

Page 4

EN 12373-10:1998

- 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

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-