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(JAPA/JSA)

**Anodizing of aluminium and its  
alloys—Determination of electric  
strength**

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Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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In the event of any doubts arising as to the contents,  
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## Contents

|                                                                                                       | Page |
|-------------------------------------------------------------------------------------------------------|------|
| Introduction.....                                                                                     | 1    |
| 1 Scope.....                                                                                          | 1    |
| 2 Normative references .....                                                                          | 1    |
| 3 Terms and definitions .....                                                                         | 1    |
| 4 Breakdown test method.....                                                                          | 2    |
| 4.1 Principle .....                                                                                   | 2    |
| 4.2 Apparatus .....                                                                                   | 2    |
| 4.3 Test specimen .....                                                                               | 3    |
| 4.4 Test conditions .....                                                                             | 4    |
| 4.5 Procedure .....                                                                                   | 4    |
| 4.6 Expression of test results .....                                                                  | 4    |
| 4.7 Test report .....                                                                                 | 4    |
| 5 Withstand voltage test.....                                                                         | 5    |
| 5.1 Principle .....                                                                                   | 5    |
| 5.2 Apparatus .....                                                                                   | 5    |
| 5.3 Test specimen .....                                                                               | 5    |
| 5.4 Test conditions .....                                                                             | 5    |
| 5.5 Procedure .....                                                                                   | 5    |
| 5.6 Expression of test results .....                                                                  | 6    |
| 5.7 Test report .....                                                                                 | 6    |
| Annex JA (informative) Comparison table between JIS and corresponding<br>International Standard ..... | 7    |

## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Aluminium Products Association (JAPA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS H 8687:1996** is replaced with this Standard.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

# Anodizing of aluminium and its alloys— Determination of electric strength

## Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 2376** published in 2010 with some modifications of the technical contents.

The portions with continuous sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with explanations is given in Annex JA.

## 1 Scope

This Standard specifies the breakdown test and the withstand voltage test of sealed anodic oxidation coatings (hereafter referred to as “coatings”) on aluminium and aluminium alloy products (hereafter referred to as “products”).

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

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 2376:2010 *Anodizing of aluminium and its alloys—Determination of electric breakdown potential* (MOD)

The symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS H 0201 *Glossary of terms used in the surface treatment of aluminium*

JIS Z 8401 *Guide to the rounding of numbers*

## 3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in the following and in **JIS H 0201** apply.

### 3.1 electric strength

general term for ability of an insulated material to withstand voltage, expressed by breakdown voltage, breakdown strength, and withstand voltage

### 3.2 breakdown voltage

minimum voltage (kV) that causes the coating to break down, when the voltage is applied at a constant voltage increase rate