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(JAPA/JSA)

**Anodizing of aluminium and its alloys—  
Measurement of abrasion resistance  
of anodic oxidation coatings—Part 1:  
Abrasive-wheel-wear abrasion  
resistance test**

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In the event of any doubts arising as to the contents,  
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## 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 8682-1:1999** is replaced with this Standard.

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**JIS H 8682** series consists of the following 3 parts under the general title “*Anodizing of aluminium and its alloys—Measurement of abrasion resistance of anodic oxidation coatings*”:

*Part 1: Abrasive-wheel-wear abrasion resistance test*

*Part 2: Abrasive jet abrasion resistance test*

*Part 3: Falling sand abrasion resistance test*

# Anodizing of aluminium and its alloys— Measurement of abrasion resistance of anodic oxidation coatings— Part 1: Abrasive-wheel-wear abrasion resistance test

## Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 8251** published in 2011 with some modifications of the technical contents.

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

## 1 Scope

This Standard specifies the method for testing the wear characteristics such as wear resistance by abrading (reciprocal motion) the surface of flat and smooth anodic oxidation coatings exceeding 5 µm in thickness (hereafter referred to as “coatings”) applied to the products manufactured from aluminium and aluminium alloys (hereafter referred to as “products”) with abrasive paper.

NOTE 1 There are an abrasive-wheel-wear abrasion resistance test, abrasive jet abrasion resistance test and falling sand abrasion resistance test in the test methods. In this Standard, an abrasive-wheel-wear abrasion resistance test method is specified.

NOTE 2 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 8251:2011 *Anodizing of aluminium and its alloys—Measurement of abrasion resistance of anodic oxidation coatings* (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 H 8680-2 *Test methods for thickness of anodic oxide coatings on aluminium and aluminium alloys—Part 2: Eddy current method*

JIS R 6252 *Abrasive papers*

JIS Z 8401 *Guide to the rounding of numbers*