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Anodizing of aluminium and its alloys—Rating system for the evaluation of pitting corrosion—Part 1: Rating number method

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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 8679-1:1999 is replaced with this Standard.

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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.

**JIS H 8679** consists of the following 2 parts under the general title "Anodizing of aluminium and its alloys—Rating system for the evaluation of pitting corrosion":

Part 1: Rating number method

Part 2: Grid method

# Anodizing of aluminium and its alloys— Rating system for the evaluation of pitting corrosion—Part 1: Rating number method

JIS H 8679-1:2013

#### Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 8993** 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 rating number method for evaluation of pitting corrosion of anodic oxide coatings (hereafter referred to as "coatings") on the products of aluminium or aluminium alloy (hereafter referred to as "products").

The rating number method evaluates the degree of pitting corrosion on the test pieces subjected to corrosion tests and outdoor exposure tests, and on products subjected to practical service tests, based on the rating number standard charts, and/or percentage area of corrosion pits (%).

This Standard takes into account only pitting corrosion resulting from penetration of the coating.

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

ISO 8993:2010 Anodizing aluminium and its alloys—Rating system for the evaluation of pitting corrosion—Chart method (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 8688 Anodizing of aluminium and its alloys—Determination of mass per unit area (surface density) of anodic oxidation coatings

JIS K 8180 Hydrochloric acid (Reagent)

JIS K 8541 Nitric acid (Reagent)