

# JIS

**JAPANESE INDUSTRIAL STANDARD**

**Methods of Wear Resistance  
Test for Metallic Coatings**

**JIS H 8503**—1989

**Translated and Published**

**by**

**Japanese Standards Association**

In the event of any doubt arising,  
the original Standard in Japanese is to be final authority.

## 1. Scope

This Japanese Industrial Standard specifies the methods of wear resistance test for electroplated coatings, hereinafter referred to as the "metallic coatings"<sup>(1)</sup>.

Note (1) This Standard may be applied to chemical plating (electroless plating).

Remark: The units and numerical values given in { } in this Standard are based on the International System of Units (SI) and are appended for informative reference.

Further, the traditional units and numerical values accompanied by the SI units and converted values in { } shall be replaced by the units and the numerical values given in the Appendix on January 1, 1991.

## 2. Definitions

For the main terms used in this Standard the definitions in JIS H 0400 apply, and the rest of the terms shall be as follows:

2.1 wear Wear means a phenomenon in which materials are gradually exfoliated starting from the uppermost layers by mechanical action such as friction, polishing, etc.

2.2 friction ring The friction ring means an object of circular ring shape used in combination with the sample to wear out metallic coatings. The friction ring has a variety of one with abrasive paper glued to its circumference and one made of various other materials. It is also called wear ring.

2.3 DS DS herein is the abbreviation for double stroke, hence one reciprocation of friction is termed 1 DS.

2.4 wear mass The wear mass herein means the mass (mg) of sample peeled off in a wear test.

## 3. Classification of Testing Methods

- (1) Sand-falling wear resistance test
- (2) Jet wear resistance test
- (3) Reciprocating motion wear resistance test

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### Applicable Standards:

JIS H 0400-Glossary of Terms Used in Electroplating

JIS K 6301-Physical Testing Methods for Vulcanized Rubber

JIS R 6111-Artificial Abrasives

JIS R 6252-Abrasive Papers