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**JIS B 1057** : 2001

## **Mechanical properties of non-ferrous metal fasteners**

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**Descriptors** : threaded components, fasteners, copper alloys, aluminium alloys, copper, strength of materials, mechanical behaviour of materials

**Reference number** : JIS B 1057 : 2001 (E)

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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 in accordance with the Industrial Standardization Law. Consequently **JIS B 1057 : 1994** is replaced with **JIS B 1057 : 2001**.

In this revision, this Standard has been subjected to the formal revision that the new specification is added to **JIS B 1181 : 1993** as Annex 2, following the revision of **JIS B 1052** on January 20, 1998 and the withdrawal of Annex 3 to **JIS B 1052** dated on December 31, 2000.

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## Mechanical properties of non-ferrous metal fasteners

**Introduction** This Japanese Industrial Standard has been made based on **ISO 8839** *Mechanical properties of fasteners—Bolts, screws, studs and nuts made of non-ferrous metals* published in 1986 as the first edition, without changing the technical contents and adding some items not specified in the corresponding International Standard. The revision at this time has been made for the sake of formality as a result of the revision of **JIS B 1052** on January 20, 1998 and the withdrawal of Annex 3 (Nuts for property classes 4T to 12T) to **JIS B 1052** on December 31, 2000 followed by the development of a new standard as Annex 2 to **JIS B 1181**.

The parts covered by half tone dot mesh (■) in this Standard are the matters not specified in the corresponding International Standard.

**1 Scope** This Japanese Industrial Standard specifies the mechanical properties of bolts (including studs), machine screws and nuts made of non-ferrous metals such as copper, copper alloys and aluminium alloys and conforming to the requirements for application given in Table 1<sup>(1)</sup> and the test and inspection methods and the marking of them.

Note <sup>(1)</sup> The bolts, machine screws and nuts made of non-ferrous metals which apply in this Standard are referred to hereafter as “bolts, machine screws and nuts” and a generic term of them as “non-ferrous metal fasteners”.

**Table 1 Requirements for application of non-ferrous metal fasteners**

Items (to be) applied	Requirements for application
Type of threads	In accordance with <b>JIS B 0205</b> .
Range of nominal thread diameter	M1.6 to M39.
Material	Copper, copper alloys and aluminium alloys

Remarks 1 The International Standard corresponding to this Standard is as follows.

In addition, 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**.

ISO 8839 : 1986 *Mechanical properties of fasteners—Bolts, screws, studs and nuts made of non-ferrous metals* (MOD)

2 This Standard which specifies the mechanical properties at ordinary temperature of the non-ferrous metal fasteners for general use does not apply to those with special property requirements such as corrosion resistance and electrical conductivity.