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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by the Japan Research Institute for Screw Threads and Fasteners (JFRI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

Consequently **JIS B 1052**: 1998 has been withdrawn and a part of the standard is replaced with this Standard.

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JIS B 1052 series consists of the following 2 parts under the general title "*Mechanical properties of fasteners*":

Part 2: Nuts with specified proof load values—Coarse thread

Part 6: Nuts with specified proof load values—Fine pitch thread

Mechanical properties of fasteners— Part 6: Nuts with specified proof load values—Fine pitch thread

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 898-6** published in 1994 without any modifications of the technical contents or the structure.

The portions underlined with dots are the matters not given in the corresponding International Standard.

1 Scope

This Standard specifies the mechanical properties of nuts with specified proof load values when tested at an ambient temperature range of +10 °C to +35 °C. Mechanical and physical properties will vary with respect to temperature and property class.

Products conforming to the requirements of this Standard are evaluated only at the ambient temperature range and may not retain the specified physical properties at higher and lower temperatures.

At temperatures higher or lower than the ambient temperature range, a significant change in properties may occur. When fasteners are to be used above or below the ambient temperature range, it is the responsibility of the user to ensure that the mechanical and physical properties are suitable for his particular service conditions.

This Standard applies to nuts

- with nominal thread diameters, d , from 8 mm up to and including 39 mm (fine pitch thread);
- with diameter/pitch combinations in accordance with **JIS B 0205-2** (fine pitch thread);
- with thread tolerances 6H in accordance with **JIS B 0209-1** and **JIS B 0209-2**;
- with specific mechanical requirements;
- with widths across flats as specified in **JIS B 1002** (shaded values are excluded);
- with nominal heights greater than or equal to $0.5d$;
- made of carbon steel or low alloy steel (see NOTE 1).

It does not apply to nuts requiring special properties such as

- prevailing torque performance (see **JIS B 1056**);
- weldability;
- corrosion resistance (see **JIS B 1054-2**);
- ability to withstand temperatures above +300 °C or below -50 °C. (However, see NOTE 1.)

NOTE 1 Nuts made from free-cutting steel should not be used above +250 °C.

NOTE 2 With thread tolerances other or larger than 6H, a decrease in the stripping strength should be considered (see table 1).

Table 1 Reduction in thread strength

Nominal thread diameter d mm	Test load %		
	Thread tolerances		
	6H	7H	6G
$8 \leq d \leq 16$	100	96	97.5
$16 < d \leq 39$	100	98	98.5

NOTE 3 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 898-6:1994 *Mechanical properties of fasteners — Part 6: Nuts with specified proof load values — Fine pitch thread* (IDT)

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 B 0205-2 *ISO general purpose metric screw threads — Part 2: General plan*

NOTE : Corresponding International Standard: ISO 261:1998 *ISO general purpose metric screw threads — General plan* (IDT)

JIS B 0205-4 *ISO general purpose metric screw threads — Part 4: Basic dimensions*

NOTE : Corresponding International Standard: ISO 724:1993 *ISO general purpose metric screw threads — Basic dimensions* (IDT)

JIS B 0209-1 *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

NOTE : Corresponding International Standard: ISO 965-1:1998 *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data* (IDT)

JIS B 0209-2 *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality*

NOTE : Corresponding International Standard: ISO 965-2:1998 *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality* (IDT)

JIS B 0209-3 *ISO general purpose metric screw threads — Tolerances — Part 3: Deviations for constructional screw threads*