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**Tolerances for fasteners—
Part 1 : Bolts, screws, studs and
nuts—Product grades A, B and C**

ICS 21.060.10; 21.060.20

Reference number : JIS B 1021 : 2003 (E)

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 The Japan Research Institute for Screw Threads and Fasteners (JFRI)/ the 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 B 1021 : 1985** is replaced with this Standard.

This revision has been made based on **ISO 4759-1 : 2000 Tolerances for fasteners—Part 1 : Bolts, screws, studs and nuts—Product grades A, B and C** for the purposes of making easy to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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Tolerances for fasteners— Part 1 : Bolts, screws, studs and nuts— Product grades A, B and C

Introduction This Japanese Industrial Standard has been prepared based on the second edition of **ISO 4759-1 : 2000** *Tolerances for fasteners—Part 1 : Bolts, screws, studs and nuts—Product grades A, B and C* published in 2000 without modifying the technical contents.

1 Scope This Standard specifies a selection of tolerances for bolts, screws, studs and nuts with **ISO** metric threads and with product grades A, B and C and for tapping screws with product grade A.

NOTE 1 The product grades refer to the size of the tolerances where grade A is the most precise and grade C is the least precise.

NOTE 2 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 4759-1 : 2000 *Tolerances for fasteners—Part 1 : Bolts, screws, studs and nuts—Product grades A, B and C* (**IDT**)

The tolerances, except tolerances for threads, are selected from the system of limits and fits specified in **JIS B 0401-1** and **JIS B 0401-2**. The tolerances for metric threads are taken from the series of tolerance classes specified in **JIS B 0209-3**. The tolerances for tapping screw threads are covered in **JIS B 1007**.

The tolerances of form and position are specified and indicated in accordance with **JIS B 0021**, **JIS B 0023** and **JIS B 0024**.

The tolerances specified in this Standard apply to fasteners prior to coating unless otherwise specified. See also **JIS B 1044**.

Deviations from the tolerances specified in this Standard are only permitted in product standards where there are valid technical reasons. In cases where there is a difference between the tolerance requirements in this Standard and the product standard, the product standard takes precedence.

It is recommended that these tolerances also be used for non-standard fasteners.

Dimensions and tolerances given in this Standard are in millimetres.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0021 *Geometrical product specification (GPS)—Geometrical tolerancing—Tolerancing of form, orientation, location and run-out*