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testing**

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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 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 applicable to the case of revision by the provision of Article 14.

Consequently **JIS B 1084** : 1990 is replaced with this Standard.

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Fasteners—Torque/clamp force testing

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 16047** published in 2005 without modifying the technical contents of the original International Standard.

1 Scope

This Standard specifies the conditions for carrying out torque/clamp force tests on threaded fasteners and related parts.

It is applicable, basically, to bolts, screws, studs (hereafter referred to as “bolts”) and nuts made of carbon steel and alloy steel, whose mechanical properties are specified in **JIS B 1051** or **JIS B 1052**, having **ISO** metric threads with nominal diameters d 3 mm to 39 mm. It is also applicable to the combination of other externally and internally threaded fasteners with a triangular **ISO** thread according to **JIS B 0205-1**.

It is not applicable to set screws and similar threaded fasteners that are not under tensile stresses, nor to screws which form their own mating thread or threaded fasteners having additional self-locking features.

Unless otherwise agreed, the tests are carried out at room temperature. However, tests carried out under standard conditions are made at a temperature of 10 °C to 35 °C.

This method allows determination of the tightening characteristics of threaded fasteners and related parts.

NOTE : The International Standard corresponding to this Standard is as follows.
ISO 16047 : 2005 *Fasteners—Torque/clamp force testing* (IDT)

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**.

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 0205-1 *ISO general purpose metric screw threads—Part 1: Basic profile*

NOTE : Corresponding International Standard: **ISO 68-1**:1998 *ISO general purpose screw threads—Basic profile—Part 1: Metric screw threads* (IDT)

JIS B 1001 *Diameter of clearance holes and counterbores for bolts and screws*

NOTE : Corresponding International Standard: **ISO 273**:1979 *Fasteners—Clearance holes for bolts and screws* (MOD)

JIS B 1022 *Tolerances for fasteners—Part 3: Plain washers for bolts, screws and nuts—Product grades A and C*