

Translated and Published by Japanese Standards Association

JIS B 1083:2008

(JFRI/JSA)

General rules for tightening of threaded fasteners

ICS 21.060.10

Reference number: JIS B 1083: 2008 (E)

B 1083:2008

Date of Establishment: 1990-01-01

Date of Revision: 2008-03-20

Date of Public Notice in Official Gazette: 2008-03-21

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Machine Elements

JIS B 1083:2008, First English edition published in 2008-10

Translated and published by: Japanese Standards Association 4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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Printed in Japan

NH/AT

Contents

		Page
Intr	oduction	1
1	Scope	
2	Normative references	
3	Terms and definitions	
4	Symbol and meaning thereof — 4 Base of tightening — 6	
5 5.1 5.2 5.3 5.4	Base of tightening 6 Relation between torque and clamp force 6 Relation between tightening angle and clamp force 6 Yield clamp force 6 Yield tightening torque 7	
6 6.1 6.2 6.3 6.4	Torque control method 7 Angle control method 11	
Ann	ex A (informative)	Calculation example of torque coefficient corresponding to coefficient of friction between thread surfaces and between bearing surfaces
Annex B (informative)		Theoretical value of yield clamp force corresponding to coefficient of friction between thread surfaces

B 1083:2008

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 1083: 1990 is replaced with this Standard.

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General rules for tightening of threaded fasteners

JIS B 1083: 2008

Introduction

This Japanese Industrial Standard was established in 1990 together with **JIS B 1084** as the original standard in Japan regarding the tightening method of threaded fasteners and became what to this day through thrice confirmation.

According to the publication of **ISO 16047** Fasteners—Torque/clamp force testing in 2005 based on **JIS B 1084**:1990, **JIS B 1084** was revised in 2007 as the identical standard with **ISO 16047**:2005, and the title was also altered to "Fasteners—Torque/clamp force testing".

The revision of this time is intended to conform with **JIS B 1084** revised in 2007.

The corresponding International Standard has not yet been established at this point.

1 Scope

This Standard specifies the determination method of the target values of tightening index for threaded fasteners in the representative tightening control method and the related matters to this.

This Standard shall apply to bolts, machine screws, studs (hereafter these are referred to as "bolts") and nuts made of carbon steel and alloy steel. This Standard is also applicable to other combination of external and internal thread parts having the general purpose metric screw threads of the basic profile based on **JIS B 0205-1**.

This Standard may not apply to the studded side of stud bolts, set screws and similar threaded fasteners not under tensile stresses, threaded fasteners forming profile of internal threads by external threads themselves and threaded fasteners having the additional whirl-stop function.

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 0101 Screw threads and fasteners—Vocabulary

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

JIS B 1084 Fasteners—Torque/clamp force testing

JIS B 4650 Torque wrenches

3 Terms and definitions

For the purposes of this Standard, the definitions given in **JIS B 0101** and the following definitions shall apply.