JIS

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JIS B 0002-1 : 1998

(ISO 6410-1 : 1993)

Technical drawings— Screw threads and threaded parts— Part 1 : General conventions

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Descriptors : threaded components, threads, specifications, technical drawing, engineering drawings, threaded fasteners

Reference number : **JIS B 0002-1 : 1998 (E)**

B 0002-1 : 1998 (ISO 6410-1 : 1993)

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS B 0002** : 1982 is replaced with **JIS B 0002-1** : 1998 and **JIS B 0002-3** : 1998.

JIS B 0002-1 consists of the following Annex:

Annex A (informative): Bibliography

JIS B 0002 consists of the following parts, under the general title *Technical drawings—Screw threads and threaded parts* :

Part 1 : *General conventions*

Part 2 : *Screw thread inserts*

Part 3 : *Simplified representation*

Date of Establishment: 1998-01-20

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In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

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JIS B 0002-1 : 1998
(ISO 6410-1 : 1993)

Technical drawings— Screw threads and threaded parts— Part 1 : General conventions

Introduction This part of **JIS B 0002** has been prepared on the basis of **ISO 6410-1**, *Technical drawings—Screw threads and threaded parts—Part 1 : General conventions* without modifying its technical content.

The "Remarks" and "Informative reference" underlined with dots in this Standard are not included in the original international standard.

JIS B 0002 has been devised to provide a universal means of communication among the various interests involved in the design, manufacture and installation of fasteners.

1 Scope This part of **JIS B 0002** specifies methods for representing screw threads and threaded parts on technical drawings.

2 Normative references The following standards contain provisions which, through reference in this text, constitute provisions of this part of **JIS B 0002**. The most recent editions of the standards indicated below shall be applied.

JIS B 0002-3 *Technical drawings—Screw threads and threaded parts—Part 3 : Simplified representation*

Remarks : **ISO 6410-3** : 1993, *Technical drawings—Screw threads and threaded parts—Part 3 : Simplified representation* is identical with **JIS B 0002-3**, excepting some portion.

JIS B 0143 *Symbols and designations of dimensions for threaded fasteners*

Remarks : Cited items from **ISO 225** : 1983, *Fasteners—Bolts, screws, studs and nuts—Symbols and designations of dimensions* are equivalent to the corresponding items of **JIS B 0143**.

JIS B 1003 *Ends of parts with external metric screw thread*

Remarks : Cited items from **ISO 4753** : 1983, *Fasteners—Ends of parts with external metric ISO thread* are equivalent to the corresponding items of **JIS B 1003**.

JIS Z 8312 *Technical drawing—Line conventions*

Remarks : Cited items from **ISO 128** : 1982, *Technical drawings—General principles of presentation* are equivalent to the corresponding items of **JIS Z 8312**.

JIS Z 8317 *Technical drawing—Dimensioning*

Remarks : Cited items from **ISO 129** : 1985, *Technical drawings—Dimensioning—General principles, definitions, methods of execution and special indications* are equivalent to the corresponding items of **JIS Z 8317**.

3 Representation

3.1 Detailed representation of threads In certain types of technical product documentation (e.g. publications, user manuals, etc.) the detailed representation of

a thread either in a side view(1) or in a section (see Figs. 1 to 3) may be needed to illustrate single or assembled parts. Neither pitch nor profile of the threads need usually be drawn exactly to scale.

In technical drawings, the detailed representation of threads (see Figs. 1 to 3) should only be used if absolutely necessary and whenever possible the helix should be represented by straight lines (see Fig. 2).

Note (1) The representation of threads seen from the direction vertical to the axed of threads.

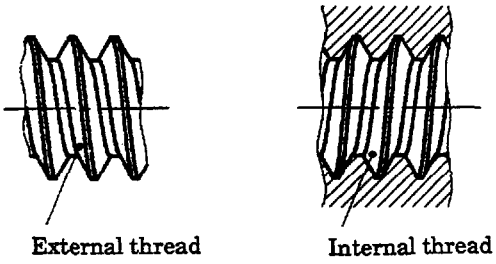

Fig. 1

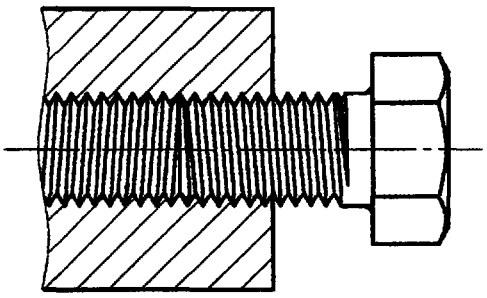

Fig. 2

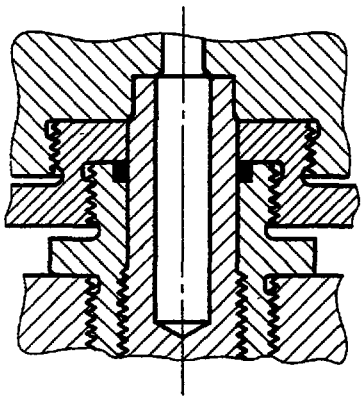

Fig. 3

3.2 Conventional representation Normally, by convention, the representation of threads and threaded parts in all types of technical drawings is simplified as shown in Figs. 4 to 7.

3.2.1 Views and sections of screw threads For visible screw threads in side views and sections, the crests[1)] of threads shall be defined by a continuous thick line (in accordance with **JIS Z 8312**), and the roots[2)] of threads by a continuous thin line (in accordance with **JIS Z 8312**), as shown in Figs. 4 to 13.

Informative reference : A thick line and a thin line in accordance with **JIS Z 8312** are equivalent to type A and type B of **ISO 128** respectively.

Notes 1) "Crest" normally refers to the major diameter for external threads and to the minor diameter for internal threads.

2) "Root" normally refers to the minor diameter for external threads and to the major diameter for internal threads.