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Fasteners—Acceptance inspection

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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)/ 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 1091 : 1991** is replaced with this Standard.

This revision has been prepared to conform to **ISO 3269 : 2000** *Fasteners—Acceptance inspection*.

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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the original JIS is to be the final authority.

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Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	2
3 Terms and definitions	4
4 General principles and requirements	5
5 Acceptance inspection procedure for fastener characteristics	6
Annex A (informative) Recommendations for acceptance-inspection procedures (for example, for dimensional characteristics)	14
Annex B (informative) Guidance and explanation concerning the principles of this Standard	16

Fasteners—Acceptance inspection

Introduction This Japanese Industrial Standard has been prepared based on the third edition of **ISO 3269 : 2000** *Fasteners—Acceptance inspection* published in 2000 without modifying the technical contents.

Although every fastener should meet all the requirements of the standard to which it is specified, in mass production this is not always possible. The manufacturer is expected to take due care during all stages of production so that the risk of parts that do not satisfy requirements is minimized. Nevertheless, the control processes used for that purpose are not the subject of this Standard.

The purchaser may wish to confirm whether, considering the limitations of inspection by attributes of a fastener lot, it is reasonable to assume that the delivered fasteners were made to specification. In any case, it must be recognised that quality assessment of this sort cannot provide complete confidence that nonconforming fasteners do not exist within a production lot.

It is desirable that both supplier and purchaser possess a clear understanding of the quality-assessment processes to be used by the purchaser. Consequently, this Standard defines those requirements to be applied by the purchaser where no other prior agreement exists. However, specification of acceptable quality level (AQL) values does not imply the supplier's right to knowingly supply a nonconforming unit.

NOTE : A new **ISO** International Standard is to be developed to take into account fasteners produced under in-process control and a certified quality assurance system operated by the manufacturer. The new standard will also cover special agreements for selected characteristics.

1 Scope

1.1 This Standard specifies the acceptance inspection procedure that the purchaser of fasteners must follow in order to determine whether a lot of fasteners will be accepted or rejected in cases where no other such procedure was agreed with the supplier at the time the fasteners were ordered. Additional requirements for acceptance may be included in a specific product standard (for example, one on prevailing torque-type nuts). The same procedure is also to be applied in cases where conformance to specification is disputed.

1.2 This Standard is applicable to bolts, screws, studs, nuts, pins, washers, blind rivets and other related fasteners not intended for high volume machine assembly, special-purpose applications or specially engineered applications requiring greater in-process control and lot traceability (see the note in the introduction). The procedure for these products shall be agreed upon by the supplier and the purchaser prior to the confirmation of the order.

1.3 This Standard is applicable only to fully manufactured products; it neither implies nor includes any particular in-process control procedure or inspection during production.

1.4 The production of accessories, services and partially fabricated parts (for example, washers, nuts, plating, heat treatment and blanks) for use in the manufacture of fasteners may be subcontracted to other suppliers by the fastener supplier. Nevertheless, the supplier of the final, finished product shall be solely responsible for the fastener's quality.

The requirements of this Standard apply only to the condition of fasteners at the time of delivery. Any process carried out after receipt (for example, plating) will invalidate the requirements of this Standard.

1.5 Annex B (informative) offers guidance to, and an explanation of, the principles upon which this Standard is based.

Remarks : 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 3269 : 2000 *Fasteners—Acceptance inspection* (IDT)

2 Normative references The following normative documents contain provisions which, through reference in this text, constitute provisions of this Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the normative document (including amendments) referred to applies.

JIS B 0251 *Limit gauges for metric screw threads*

NOTE : **ISO 1502** : 1998 *ISO general-purpose metric screw threads—Gauges and gauging* is equivalent to the said standard.

JIS B 1007 *Threads and thread ends for tapping screws*

NOTE : **ISO 1478** : 1999 *Tapping screws thread* is identical with the said standard.

JIS B 1021 *Tolerances for fasteners—Part 1 : Bolts, screws, studs and nuts—Product grades A, B and C*

NOTE : **ISO 4759-1** : 2000 *Tolerances for fasteners—Part 1 : Bolts, screws, studs and nuts—Product grades A, B and C* is identical with the said standard.

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

NOTE : **ISO 4759-3** : 1991 *Tolerances for fasteners—Part 3 : Plain washers for bolts, screws and nuts—Product grades A and C* is identical with the said standard.

JIS B 1041 *Fasteners—Surface discontinuities—Part 1 : Bolts, screws and studs for general requirements*

NOTE : **ISO 6157-1** : 1988 *Fasteners—Surface discontinuities—Part 1 : Bolts, screws and studs for general requirements* is identical with the said standard.

JIS B 1042 *Fasteners—Surface discontinuities—Part 2 : Nuts*

NOTE : **ISO 6157-2** : 1995 *Fasteners—Surface discontinuities—Part 2 : Nuts* is identical with the said standard.

JIS B 1043 *Fasteners—Surface discontinuities—Part 3 : Bolts, screws and studs for special requirements*

NOTE : **ISO 6157-3** : 1988 *Fasteners—Surface discontinuities—Part 3 : Bolts, screws and studs for special requirements* is identical with the said standard.

JIS B 1044 *Fasteners—Electroplated coatings*

NOTE : **ISO 4042** : 1999 *Fasteners—Electroplated coatings* is identical with the said standard.

JIS B 1051 *Mechanical properties of fasteners made of carbon steel and alloy steel—Part 1 : Bolts, screws and studs*

NOTE : **ISO 898-1** : 1999 *Mechanical properties of fasteners made of carbon steel and alloy steel—Part 1 : Bolts, screws and studs* is identical with the said standard.

JIS B 1052 *Mechanical properties of steel nuts*

NOTE : **ISO 898-2** : 1992 *Mechanical properties of fasteners—Part 2 : Nuts with specified proof load values—Coarse thread* and **ISO 898-6** : 1994 *Mechanical properties of fasteners—Part 6 : Nuts with specified proof load values—Fine pitch thread* are equivalent to the said standard.

JIS B 1053 *Mechanical properties of fasteners made of carbon steel and alloy steel—Part 5 : Set screws and similar threaded fasteners not under tensile stresses*

NOTE : **ISO 898-5** : 1998 *Mechanical properties of fasteners made of carbon steel and alloy steel—Part 5 : Set screws and similar threaded fasteners not under tensile stresses* is identical with the said standard.

JIS B 1054-1 *Mechanical properties of corrosion-resistant stainless-steel fasteners—Part 1 : Bolts, screw and studs*

NOTE : **ISO 3506-1** : 1997 *Mechanical properties of corrosion-resistant stainless-steel fasteners—Part 1 : Bolts, screws and studs* is identical with the said standard.

JIS B 1054-2 *Mechanical properties of corrosion-resistant stainless-steel fasteners—Part 2 : Nuts*

NOTE : **ISO 3506-2** : 1997 *Mechanical properties of corrosion-resistant stainless-steel fasteners—Part 2 : Nuts* is identical with the said standard.

JIS B 1054-3 *Mechanical properties of corrosion-resistant stainless-steel fasteners—Part 3 : Set screws and similar fasteners not under tensile stress*

NOTE : **ISO 3506-3** : 1997 *Mechanical properties of corrosion-resistant stainless-steel fasteners—Part 3 : Set screws and similar fasteners not under tensile stress* is identical with the said standard.

JIS B 1055 *Tapping screws—Mechanical properties*

NOTE : **ISO 2702** : 1992 *Heat-treated steel tapping screws—Mechanical properties* is identical with the said standard.

JIS B 1056 *Prevailing torque type steel hexagon nuts—Mechanical and performance properties*

NOTE : **ISO 2320** : 1997 *Prevailing torque type steel hexagon nuts—Mechanical and performance properties* is identical with the said standard.

JIS B 1057 *Mechanical properties of non-ferrous metal fasteners*

NOTE : **ISO 8839** : 1986 *Mechanical properties of fasteners—Bolts, screws, studs and nuts made of non-ferrous metals* is equivalent to the said standard.

JIS B 1060 *Mechanical and performance requirements of case hardened and tempered metric thread rolling screws*

NOTE : **ISO 7085** : 1999 *Mechanical and performance requirements of case hardened and tempered metric thread rolling screws* is identical with the standard.

JIS Z 8101-2 *Statistics—Vocabulary and symbols Part 2 : Statistical quality control terms*

NOTE : **ISO 3534-2** : 1993 *Statistics—Vocabulary and symbols—Part 2 : Statistical quality control* is equivalent to the said standard.

JIS Z 9015-1 *Sampling procedures for inspection by attributes—Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection*

NOTE : **ISO 2859-1** : 1999 *Sampling procedures for inspection by attributes—Part 1 : Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection* is identical with the said standard.

JIS Z 9900 *Quality management and quality assurance standards Part 1 : Guidelines for selection and use*

NOTE : **ISO 8402** : 1994 *Quality management and quality assurance—Vocabulary* is identical with “Informative reference” of the said standard.

ISO 10683 : 2000 *Fasteners—Non-electrolytically applied zinc flake coatings*

3 Terms and definitions For the purposes of this Standard, the following terms and definitions apply. They are based on the terms and definitions given in **JIS Z 8101-2** and **JIS Z 9900**.

3.1 acceptance inspection procedures such as sampling, gauging, measuring, comparing and testing to determine acceptance or rejection of a lot of fasteners.

3.2 supplier manufacturer, dealer or representative who supplies fasteners.

3.3 purchaser recipient or recipient’s representative who receives fasteners.

NOTE : The purchaser is not necessarily the user of the fasteners.