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JIS B 1059 : 2001

(ISO 10666 : 1999)

(JFRI/JSA)

**Drilling screws with tapping screw
thread—Mechanical and functional
properties**

ICS 21.060.10

Reference number : JIS B 1059 : 2001 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from The Japan Research Institute for Screw Threads and Fasteners (JFRI)/the Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on **ISO 10666 : 1999** *Drilling screws with tapping screw thread—Mechanical and functional properties* 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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the original JIS is to be the final authority.

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Drilling screws with tapping screw thread—Mechanical and functional properties

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 10666** *Drilling screws with tapping screw thread—Mechanical and functional properties* published in 1999 without modifying the technical contents.

1 Scope This Standard specifies the properties of heat treated screws with a tapping screw thread in accordance with **JIS B 1007**, and which are designed with a drilling point which automatically drills the core hole for the screw during assembly. Such screws then automatically form the mating screw thread, either in a non-cutting or in a cutting operation, with the aid of the threaded portion of the screw adjoining the drilling point.

The purpose of this Standard is to ensure that the screws are able to drill their core hole and form their mating screw thread without becoming distorted or fracturing in the process, provided that no overstressing has occurred. Consequently the following characteristics are regarded as representing the most important aspects for the assessment of the mechanical and operational characteristics of a drilling screw:

- surface hardness;
- capability of core hole drilling and forming of the mating female screw thread;
- torsional strength.

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 10666 : 1999 *Drilling screws with tapping screw thread—Mechanical and functional properties* (IDT)

2 Normative reference 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) shall be applied.

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

Remarks : The items cited from **ISO 1478** : 1983 *Tapping screws thread* are equivalent to the corresponding matters of the said standard.

JIS B 1044 *Fasteners—Electroplated coatings*

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