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Ball screws—Part 3: Acceptance conditions and test method

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Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Machine Accessory Association (JMAA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

Consequently **JIS B 1192**:2013 has been withdrawn and partially replaced with this Standard.

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Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

JIS B 1192 series consists of the following parts under the general title "Ball screws":

JIS B 1192-1 Part 1: Vocabulary and designation

JIS B 1192-2 Part 2: Nominal diameters and nominal leads

JIS B 1192-3 Part 3: Acceptance conditions and test method

JIS B 1192-4 Part 4: Static axial rigidity

JIS B 1192-5 Part 5: Static and dynamic axial load ratings and operational life

Ball screws—Part 3: Acceptance conditions and test method

JIS B 1192-3:2018

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 3408-3**:2006, Edition 2 with some modifications of the technical contents, resulting from addition of accuracy grades (C-series) specified in the Japanese Industrial Standard but not in the International Standard.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies accuracy measurement method, measurement conditions and tolerances for ball screws.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 3408-3:2006 Ball screws—Part 3: Acceptance conditions and acceptance tests (MOD)

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 21-1**.

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 1192-1 Ball screws—Part 1: Vocabulary and designation

NOTE Corresponding International Standard: ISO 3408-1:2006 Ball screws— Part 1: Vocabulary and designation (MOD)

JIS K 2001 Industrial liquid lubricants—ISO viscosity classification

JIS Z 8703 Standard atmospheric conditions for testing

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS B 1192-1** apply.

4 Type and grade

Ball screws are classified into C-series and Cp-series for positioning ball screws and Ct-series for transport ball screws.

Grades of each series corresponding to type are given in Table 1.