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**Hexagon head bolts and hexagon
head screws**

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In the event of any doubts arising as to the contents,
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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)/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 1180:2009** is replaced with this Standard.

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Hexagon head bolts and hexagon head screws

Introduction

This Japanese Industrial Standard has been prepared based on the fourth edition of **ISO 4014** published in 2011, first edition of **ISO 4015** published in 1979, the fourth editions of **ISO 4016**, **ISO 4017** and **ISO 4018** published in 2011, and the third editions of **ISO 8676** and **ISO 8765** published in 2011 by integrating them into one standard without modifying the technical contents for corresponding parts (shapes and dimensions, product specifications and example of product designation). Annex JA contains specifications of characteristics of hexagon head bolts and screws that are not given in **ISO** standards, to reflect the actualities of the production and application of bolts and screws that are unique to Japan.

The portions given sidelines or dotted underlines are the matters in which the contents of the original International Standards have been modified. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard specifies hexagon head bolts and hexagon head screws (hereafter generically referred to as “hexagon head bolts”) made of steel, stainless steel and non-ferrous metals.

If, in special cases, dimensions and product specifications other than those listed in this Standard are required, they shall be selected from existing Japanese Industrial Standards, for example **JIS B 0205-4**, **JIS B 0209-1**, **JIS B 1003**, **JIS B 1009**, **JIS B 1021**, **JIS B 1051** and **JIS B 1054-1** upon agreement between the purchaser and the manufacturer.

Annex JA gives specifications of hexagon head bolts not given in **ISO 4014** to **ISO 4018**, **ISO 8676** and **ISO 8765**.

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

ISO 4014:2011 *Hexagon head bolts—Product grades A and B*

ISO 4015:1979 *Hexagon head bolts—Product grade B—Reduced shank (shank diameter approximately equal to pitch diameter)*

ISO 4016:2011 *Hexagon head bolts—Product grade C*

ISO 4017:2011 *Hexagon head screws—Product grades A and B*

ISO 4018:2011 *Hexagon head screws—Product grade C*

ISO 8676:2011 *Hexagon head screws with metric fine pitch thread—Product grades A and B*

ISO 8765:2011 *Hexagon head bolts with metric fine pitch thread—Product grades A and B (Overall evaluation: MOD)*