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**Alloy steel bolting materials for high
temperature service**

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by The Japan Iron and Steel Federation (JISF), an accredited standards development organization. This edition replaces the previous edition (**JIS G 4107** : 2010), which has been technically revised.

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Alloy steel bolting materials for high temperature service

1 Scope

This Japanese Industrial Standard specifies the requirements for alloy steel bolting materials to be used mainly for pressure vessels, valves, flanges and joints used for high temperature services (hereafter referred to as bolting materials).

Bolting materials herein means steel bars, wire rods, wires and semi-finished bolts.

2 Normative references

Part or all of the provisions of the following standards, 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 G 0201 *Glossary of terms used in iron and steel (Heat treatment)*
JIS G 0202 *Glossary of terms used in iron and steel (Testing)*
JIS G 0203 *Glossary of terms used in iron and steel (Products and quality)*
JIS G 0320 *Standard test method for heat analysis of steel products*
JIS G 0321 *Product analysis and its tolerance for wrought steel*
JIS G 0404 *Steel and steel products — General technical delivery requirements*
JIS G 0415 *Steel and steel products — Inspection documents*
JIS G 3191 *Dimensions, mass, shape and permissible variations of hot rolled steel bars and bar in coil*
JIS Z 2241 *Metallic materials — Tensile testing — Method of test at room temperature*

3 Terms and definitions

For the purposes of this Standard, the following terms and definitions, and those given in JIS G 0201, JIS G 0202 and JIS G 0203 apply.

3.1

steel bar

steel product manufactured by hot rolling steel into bar

Note 1 to entry A steel bar is manufactured with a round (3.2), square (3.3) or hexagonal (3.4) cross-section.

Note 2 to entry A steel bar includes a bar in coil (3.5).

Note 3 to entry This Standard covers the hot forged steel bars.

3.2