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**Carbon steel tubes for general machine
structural purposes**

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Foreword

This Japanese Industrial Standard has been 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 Iron and Steel Federation (JISF) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS G 3478: 2016**), which has been technically revised.

However, **JIS G 3478: 2016** may be applied in the **JIS** mark certification based on the relevant provisions of Article 30, paragraph (1), etc. of the Industrial Standardization Act until 19 May 2022.

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Carbon steel tubes for general machine structural purposes

1 Scope

This Japanese Industrial Standard specifies the requirements for the carbon steel tubes mainly used for machine parts (hereafter referred to as tubes).

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 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*

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS G 0202** and **JIS G 0203** apply.

4 Symbol of grade

The tubes shall be classified into 23 grades, and their symbols shall be as given in Table 1.

5 Manufacturing method

The manufacturing method shall be as follows.

- a) Tubes shall be manufactured by combination of the tube manufacturing method and the finishing method which are indicated in Table 1. If required, tubes may be subjected to the appropriate heat treatment. The symbols of manufacturing method shall be as given in Table 1.
- b) If required, the purchaser may specify the heat treatment.
- c) Tubes shall be finished with plain ends unless otherwise specified.