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Carbon steel tubes for machine structure

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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 Iron and Steel Federation (JISF) 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 G 3445:2010** is replaced with this Standard.

However, **JIS G 3445:2010** may be applied in the **JIS** mark certification based on the relevant provisions of Article 19 Clause 1, etc. of the Industrial Standardization Law until March 21, 2017.

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Carbon steel tubes for machine structure

1 Scope

This Japanese Industrial Standard specifies the carbon steel tubes (hereafter referred to as “tubes”) used for machinery, automobiles, bicycles, furniture, appliances and other machine parts.

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 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 3302 *Hot-dip zinc-coated steel sheet and strip*
- JIS G 3313 *Electrolytic zinc-coated steel sheet and strip*
- JIS G 3314 *Hot-dip aluminium-coated steel sheet and strip*
- JIS G 3317 *Hot-dip zinc — 5 % aluminium alloy-coated steel sheet and strip*
- JIS G 3321 *Hot-dip 55 % aluminium-zinc alloy-coated steel sheet and strip*
- JIS Z 2241 *Metallic materials — Tensile testing — Method of test at room temperature*
- JIS Z 8401 *Guide to the rounding of numbers*

3 Classification and symbols

The tubes shall be classified into 22 grades, and symbols of grade and manufacturing method shall be as given in Table 1.

4 Manufacturing method

The manufacturing method shall be as follows.

- a) The 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 an appropriate heat treatment.
- b) The tubes may be manufactured using coated steel sheet and coated steel strip, if so requested by the purchaser.