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Product analysis and its tolerance for wrought steel

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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 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 0321**:2015 is replaced with this Standard.

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.

Product analysis and its tolerance for wrought steel

1 Scope

This Japanese Industrial Standard specifies the product analysis and the tolerance for killed steel products, such as rolled or forged carbon steel, alloy steel, stainless steel and heat resisting steel (hereafter referred to as wrought steel).

2 Normative references

The standards shown in Table 1 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.

3 Terms and definitions

For the purposes of this Standard, the terms and definitions given in **JIS G 0417**, **JIS G 1201**, and the following apply.

3.1 heat analysis

analysis of chemical composition performed by the manufacturer according to Japanese Industrial Standard or other certain documented procedure, for determining the representative values of molten steel

This analysis is generally carried out on analytical samples [1)] taken during a series of processes in which the molten steel is poured into a mould from a ladle and then solidified.

Note [1)] Where it is not feasible to obtain analytical samples from molten steel e.g. by vacuum arc remelting method (VAR) or by electro-slag remelting method (ESR), the analysis is carried out on analytical samples taken from ingot, billet, or steel product, and the results are applied to heat analysis.

3.2 product analysis

analysis of chemical composition carried out on analytical samples taken from wrought steel

NOTE The values obtained by a product analysis can differ from those obtained by a heat analysis due to segregation, and can also show variation between different analytical samples.

3.3 tolerances for product analysis

permissible deviation of the individual value of product analysis from the upper limit value and/or the lower limit value of heat analysis specified in a standard of wrought steels

NOTE : For example, when the upper limit value of heat analysis of carbon (C) specified in a standard of wrought steel is 0.25 %, and the tolerance for product analysis on the plus side designated in a standard of wrought