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Iron and steel — Determination of copper — Spectrophotometric methods

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Contents

Page

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 1219** : 1997), which has been technically revised.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister is not responsible for identifying any of such patent rights, published patent application or utility model rights.

Iron and steel — Determination of copper — Spectrophotometric methods

Introduction

This Japanese Industrial Standard has been prepared based on ISO 4946 : 2016, Edition 2, with some modifications of the technical contents.

Specific procedures of the determination method specified in the corresponding International Standard are given in Annex A. The vertical lines on both sides and dotted underlines shown in Clause 1 to Clause 5 and Annex A indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the methods for determination of copper contained in iron and steel.

These methods are applicable to copper content (mass fraction) of 0.002 % or over up to and including 5 %. The test method in the main body applies to the determination of copper content (mass fraction) in the range of 0.002 % or over up to and including 1.0 %, and the method in Annex A, to the determination of copper content (mass fraction) in the range of 0.02% or over up to and including 5 %.

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

ISO 4946 : 2016 *Steel and cast iron — Determination of copper — 2,2'-Biquinoline spectrophotometric method* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21-1.

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 1201 *Iron and steel — General rules for analytical methods*

JIS K 8005 *Reference materials for volumetric analysis*

JIS R 3503 *Glass apparatus for chemical analysis*

JIS Z 8402-6 *Accuracy (trueness and precision) of measurement methods and results — Part 6: Use in practice of accuracy values*