JIS

JAPANESE INDUSTRIAL STANDARD

Translated and Published by
Japanese Standards Association

JIS G 1219 : 1997

Iron and steel—Methods for determination of copper content

ICS 77.080.01

Descriptors : iron, transition metals, steels, ferrous metals, ferrous alloys, copper, non-ferrous metals, determination of content, chemical analysis and testing

Reference number : **JIS G 1219 : 1997 (E)**

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently, JIS G 1219:1981 (former edition) is replaced with this Standard.
In this revision, the relevant ISO Standard is laid down as Annex 1 in order to harmonize with International Standard, while "Sodium thiosulfate titration method" being not used is abolished.
JIS G 1219:1997 contains Annexes as under;

Annex 1 2,2′-Diquinolyl spectrophotometric method (ISO 4946)
Annex 2 Neocuproine extraction spectrophotometric method

Date of Establishment: 1954-03-29

Date of Revision: 1997-04-20

Date of Public Notice in Official Gazette: 1997-04-21

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Iron and Steel

JIS G 1219:1997, First English edition published in 1997-11

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107 JAPAN

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

Iron and steel—Methods for determination of copper content

Introduction This Japanese Industrial Standard has been prepared on the basis of **ISO 4946**, *Steel and cast iron—Determination of copper content—2,2′-Diquinolyl spectrophotometric method* published in 1984 which are edited in Annex 1, without any modification in technical content and style thereof, but some additional requirements not specified in the corresponding International Standard are given as a part of the Japanese Industrial Standard.

Further, in this Standard, the underlined portions with dotted line are the matters not specified in the original International Standard.

1 Scope This Japanese Industrial Standard specifies the methods for determination of copper in iron and steel.

2 Normative references The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. As to those normative references, the most recent editions thereof shall be applied.

JIS G 1201 *General rules for chemical analysis of iron and steel*

JIS K 8005 *Reference materials for volumetric analysis*

JIS Z 8402 *General rules for permissible tolerance of chemical analyses and physical tests*

ISO 4946 *Steel and cast iron—Determination of copper content—2,2′-Diquinolyl spectrophotometric method*

3 General requirements General requirements common to methods for determination shall be in accordance with **JIS G 1201**, provided that this does not cover Annex 1.

4 Division of determination methods The method for determination of copper content shall be in accordance with either of the following:

(1) **2,2′-Diquinolyl spectrophotometric method (ISO 4946)** This method is applicable to the sample of copper contents between 0.02 % (*m*/*m*) and 5 % (*m*/*m*), and the method for determination shall be in accordance with Annex 1.

(2) **Neocuproine extraction spectrophotometric method** This method is applicable to the sample of copper contents between 0.002 % (*m*/*m*) and 1.0 % (*m*/*m*), and the method for determination shall be in accordance with Annex 2.