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**Methods for determination of cadmium
in copper and copper alloys**

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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 Japan Copper and Brass Association (JCBA)/Japanese Standards Association (JSA) 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 H 1069**:1997 is replaced with this Standard.

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Methods for determination of cadmium in copper and copper alloys

Introduction This Japanese Industrial Standard has been prepared by adopting the first edition of **ISO 5960** published in 1984 for clause **5** “Atomic absorption spectrometric method (bracket method)” without modifying the technical contents, adding, at the same time, the specifications unique to Japanese Industrial Standard in clauses **6, 7** and **8**, namely, atomic absorption spectrometric method (hydrochloric acid · nitric acid decomposition method), trioctylamine extraction atomic absorption spectrometric method, and ICP atomic emission spectrometric method, respectively.

Except in clauses **6, 7** and **8**, which involve test methods not given in the International Standard, the portions given sidelines or dotted underlines are the matters not stated in the corresponding International Standard. A list of modifications with explanations is given in Annex JA.

1 Scope This Standard specifies the methods for determination of cadmium in copper and copper alloys (wrought copper and copper alloy products, foundry copper unwrought products and copper casting).

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

ISO 5960 : 1984 *Copper alloys—Determination of cadmium content—Flame atomic absorption spectrometric method (MOD)*

The symbol (MOD), as defined in **ISO/IEC Guide 21**, indicates that the original International Standard has been modified.

2 Normative reference The following standard contains provisions which, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) shown below shall be applied.

JIS H 1012 *General rules for chemical analysis of copper and copper alloys*

3 General matters The general matters common to analytical methods shall be in accordance with **JIS H 1012**.

4 Classification of determination methods The method for determination of cadmium shall be in accordance with either of the followings.

a) **Atomic absorption spectrometric method (bracketing calibration method)**
This method shall be applied to the sample with cadmium content of 0.000 5 % (mass percentage) or over up to and including 2.0 % (mass percentage).

b) **Atomic absorption spectrometric method (hydrochloric acid · nitric acid decomposition method)** This method shall be applied to the sample with cadmium content of 0.000 5 % (mass percentage) or over up to and including 0.01 % (mass percentage).