JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS H 3100 : 2018

(JCBA/JSA)

Copper and copper alloy sheets, plates and strips

ICS 77.150.30

Reference number : JIS H 3100 : 2018 (E)

Date of Establishment: 1977-05-01
Date of Revision: 2018-03-20
Date of Public Notice in Official Gazette: 2018-03-20
Investigated by: Japanese Industrial Standards Committee
Standards Board for ISO area
Technical Committee on Metal and Inorganic Materials

JIS H 3100:2018, First English edition published in 2018-11

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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

Printed in Japan

AT

Contents

Page

Foreword

This Japanese Industrial Standard has been 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 3100**:2012 is replaced with this Standard.

However, **JIS H 3100**:2012 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 19, 2019.

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.

Copper and copper alloy sheets, plates and strips

1 Scope

This Japanese Industrial Standard specifies the rolled copper and copper alloy sheets and plates (hereafter referred to as plates) and strips (hereafter referred to as strips) (excluding the copper and copper alloy plates and strips specified in **JIS H 3110**, **JIS H 3130** and **JIS H 3510**).

The plates include the circular plates which are machined, punched or sheared from plates or strips.

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 H 0321 *General rules for inspection of non-ferrous metal materials*

JIS H 0500 *Glossary of terms used in wrought copper and copper alloys*

JIS H 0501 *Methods for estimating average grain size of wrought copper and copper alloys*

JIS H 0505 *Measuring methods for electrical resistivity and conductivity of non-ferrous materials*

JIS H 1051 *Copper and copper alloys—Determination of copper content*

JIS H 1052 *Methods for determination of tin in copper and copper alloys*

JIS H 1053 *Methods for determination of lead in copper and copper alloys*

JIS H 1054 *Methods for determination of iron in copper and copper alloys*

JIS H 1055 *Methods for determination of manganese in copper and copper alloys*

JIS H 1056 *Methods for determination of nickel in copper and copper alloys*

JIS H 1057 *Methods for determination of aluminium in copper and copper alloys*

JIS H 1058 *Copper and copper alloys—Determination of phosphorus content*

JIS H 1062 *Methods for determination of zinc in copper and copper alloys*

JIS H 1074 *Copper and copper alloys—Determination of zirconium content*

JIS H 1292 *Copper alloys—Methods for X-ray fluorescence spectrometric analysis*

JIS Z 2241 *Metallic materials—Tensile testing—Method of test at room temperature*

JIS Z 2244 *Vickers hardness test—Test method*

JIS Z 2248 *Metallic materials—Bend test*

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions, and those given in **JIS H 0500** apply.

3.1

oxygen free copper

copper which contains copper 99.96 % or more, satisfying the quality (hydrogen embrittlement) specified in **5.6**

NOTE Copper including oxygen may be subject to the hydrogen embrittlement at the elevated temperature of 400 °C or higher. Utilizing this property, the oxygen contained in copper is detectable by the hydrogen embrittlement test.

3.2

eddy current conductivity meter

device for measuring the electric conductivity of metal based on the correlation between the magnitude and distribution of eddy current generated in the metal by an adjacent a.c. magnetic field, and its electric conductivity

4 Name, grade, class and designation

The name, grade, class and designation of plates and strips are as given in Table 1. The product designation (see Table 3 and Table 5) shall be indicated by the designation given in Table 1 followed by the temper designation (see **JIS H 0500**). When plates and strips are used for the electric conduction or the pressure vessels, the product designation shall be indicated by the designation given in Table 1 followed by the symbol of application and the temper designation (see Table 4, Table 6 and Table 7).