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(JCDA)

Plastic covered copper tubes

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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 Development Association (JCDA) 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 3330 : 2000** is replaced with this Standard.

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In the event of any doubts arising as to the contents,
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Plastic covered copper tubes

Introduction This Japanese Industrial Standard specifies the plastic covered copper tubes used widely for water supply, hot water supply, etc. and has been established for the sake of convenience to users.

Application to water pipes (including hot water pipes) falling under the category of water supply equipment of Water Works Law is considered, and **JIS S 3200-1** and **JIS S 3200-7** have been quoted so as to correspond to “Standards of structure and material quality for water supply equipment” in Article 4 of the Enforcement Order of Water Works Law.

1 Scope This Standard specifies the seamless copper tubes covered with plastic resin on outside surface (hereafter referred to as “covered copper tubes”) which are used for the pipings for water supply, hot water supply, drainage, hot and cold water supply of air conditioners and other pipings with working pressure of 1.0 MPa or under.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 7502 *Micrometer callipers*

JIS B 7507 *Vernier, dial and digital callipers*

JIS B 7512 *Steel tape measures*

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 1051 *Methods for determination of copper in copper and copper alloys*

JIS H 1058 *Methods for determination of phosphorus in copper and copper alloys*

JIS H 3300 *Copper and copper alloy seamless pipes and tubes*

JIS K 7112 *Plastics—Methods of determining the density and relative density of non-cellular plastics*

JIS K 7113 *Testing method for tensile properties of plastics*

JIS K 7206 *Plastics—Thermoplastic materials—Determination of Vicat softening temperature*

JIS K 7209 *Plastics—Determination of water absorption*

JIS S 3200-1 *Equipment to water supply service—Test methods of hydrostatic pressure*

JIS S 3200-7 *Equipment for water supply service—Test methods of effect to water quality*

JIS Z 2201 *Test pieces for tensile test for metallic materials*

JIS Z 2241 *Method of tensile test for metallic materials*

3 Definitions For the purposes of this Standard, the following definitions for main terms apply:

- a) **working pressure** Hydraulic pressure under usual working condition, and “maximum working pressure” (static hydraulic pressure).
- b) **original tubes** Copper tubes before covering the outside surface.
- c) **covered copper tubes**
 - 1) Copper tubes covered with low ratio expanded polyethylene and polyethylene resin on the outside surface of original tubes by extrusion moulding (P).
 - 2) Copper tubes covered with polyvinyl chloride compound on the outside surface of original tubes by extrusion moulding (V).

4 Classification and symbols The classification and symbols of covered copper tubes shall be as shown in Table 1. An example of a section of each covered copper tube shall be as shown in Table 2.

Table 1 Classification and symbols of covered copper tubes

Covering material class	Temper of original tube	Symbol
P	Soft (O)	P-O-M
P	Hard (H)	P-H-M
V	Soft (O)	V-O-M
V	Hard (H)	V-H-M

- Remarks
- 1 P and V in the symbol column stand for class of covering material on covered copper tube. O and H are given in number 5603 specified in **JIS H 0500**.
 - 2 M indicates type M of Table 9 (2) in **JIS H 3300**. However, type L specified in **JIS H 3300** may be used as agreed upon between the purchaser and the supplier. In this case, the symbol shall be L instead of M.