

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 3448 : 2016

(JISF)

**Light gauge stainless steel tubes for
ordinary piping**

ICS 23.040.10 ; 77.140.20 ; 77.140.75

Reference number : JIS G 3448 : 2016 (E)

G 3448 : 2016

Date of Establishment: 1980-05-01

Date of Revision: 2016-09-20

Date of Public Notice in Official Gazette: 2016-09-20

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

Technical Committee on Metal and Inorganic Materials

JIS G 3448 : 2016, First English edition published in 2017-02

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.

© JSA 2017

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

HT/HN

PROTECTED BY COPYRIGHT

Contents

		Page
1	Scope	1
2	Normative references	1
3	Classification and symbols	1
4	Manufacturing method	2
5	Chemical composition	2
6	Mechanical properties	2
6.1	Tensile strength and elongation	2
6.2	Flattening resistance	3
6.3	Flaring property	3
6.4	Bendability	3
7	Leak tightness	3
8	Hydrostatic pressure resistance	3
9	Leaching performance	4
10	Dimensions, dimensional tolerances and mass	4
10.1	Dimensions, tolerances on outside diameter and wall thickness, and unit mass	4
10.2	Length and its tolerances	6
11	Appearance	6
12	Tests	6
12.1	Chemical analysis	6
12.2	Mechanical test	6
12.3	Leak-tightness test	8
12.4	Hydrostatic pressure test	9
12.5	Leaching performance test	9
13	Inspection and reinspection	9
13.1	Inspection	9
13.2	Reinspection	9
14	Marking	10
15	Report	10

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 The Japan Iron and Steel Federation (JISF) 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 G 3448: 2012** is replaced with this Standard.

However, **JIS G 3448: 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 September 19, 2017.

This **JIS** document is protected by the Copyright Law.

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.

Light gauge stainless steel tubes for ordinary piping

1 Scope

This Japanese Industrial Standard specifies stainless steel tubes (straight tubes and coiled tubes, hereafter referred to as tubes) used for piping of water supply, hot water supply, drainage, chilled/heated water supply, fire-fighting water supply and others. This Standard is applicable to tubes of outside diameter 9.52 mm (designation 8Su) to 318.5 mm (designation 300Su).

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 G 0320 *Standard test method for heat analysis of steel products*

JIS G 0404 *Steel and steel products — General technical delivery requirements*

JIS G 0415 *Steel and steel products — Inspection documents*

JIS G 0583 *Automated eddy current examination of steel pipes and tubes*

JIS S 3200-1 *Equipment for 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 2241 *Metallic materials — Tensile testing — Method of test at room temperature*

3 Classification and symbols

Tubes shall be classified into four grades, and the symbol of the grade shall be as given in Table 1.

Table 1 Symbol of grade

Symbol of grade	Application (informative)
SUS304TPD	Piping of ordinary water supply, hot water supply, drainage, chilled/heated water supply, fire-fighting water supply, etc.
SUS315J1TPD SUS315J2TPD	Piping requiring higher corrosion resistance than SUS304TPD due to water quality or environment conditions, and hot water piping requiring higher stress corrosion cracking resistance than SUS316TPD
SUS316TPD	Piping requiring higher corrosion resistance than SUS304TPD due to water quality or environment conditions