



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 3468 : 2021

(JISF)

**Large diameter welded stainless steel
pipes**

ICS 23.040.10 ; 77.140.75

Reference number : JIS G 3468 : 2021 (E)

PROTECTED BY COPYRIGHT

15 S

Date of Establishment: 1978-12-01

Date of Revision: 2021-04-20

Date of Public Notice in Official Gazette: 2021-04-20

Developed by: The Japan Iron and Steel Federation

Investigated by: The Japan Iron and Steel Federation, Standardization
Center

JIS G 3468 : 2021, First English edition published in 2021-12

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 2021

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

HN

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Symbols of grade	2
5 Manufacturing method	3
6 Chemical composition	4
7 Mechanical properties	5
7.1 Tensile strength, proof stress and elongation of base metal	5
7.2 Tensile strength of weld	6
8 Hydraulic test characteristics or non-destructive test characteristics	6
9 Dimensions, unit mass and dimensional tolerances	7
9.1 Dimensions and unit mass	7
9.2 Dimensional tolerances	10
9.3 Weld bead height	10
10 Appearance	11
11 Supplementary quality requirements	11
12 Tests	11
12.1 Chemical analysis	11
12.2 Mechanical tests	11
12.3 Hydraulic test or non-destructive test	13
13 Inspection and reinspection	13
13.1 Inspection	13
13.2 Reinspection	13
14 Marking	14
15 Report	14
Annex JA (normative) Supplementary quality requirements	15
Annex JB (informative) Comparison table between JIS and corresponding International Standard	20

Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by The Japan Iron and Steel Federation (JISF), an accredited standards development organization. This edition replaces the previous edition (**JIS G 3468:2017**), which has been technically revised.

However, **JIS G 3468: 2017** may be applied in the **JIS** mark certification based on the relevant provisions of Article 30, paragraph (1), etc. of the Industrial Standardization Act until 19 April 2022.

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

It should be noted that being in conformance with this Standard may come under the use of the patent rights and other rights held by the following:

— Name: NIPPON STEEL Stainless Steel Corporation

— Address: 1-8-2 Marunouchi, Chiyoda-ku, Tokyo-to

Symbol of grade	Title of invention	Patent number	Registration date of establishment of patent right
SUS821L1TPY	Alloy-saving duplex stainless steel with good corrosion resistance and toughness of weld heat affected zone	5345070	23 August 2013

The holder of this patent right and other rights has indicated an intention of granting license to anyone under the nondiscriminatory and reasonable conditions, except to the other relevant holders of the patent rights and other rights related to this Standard who will not grant their licenses under the same conditions.

It should be noted that following this Standard does not always refer to granting a free license.

Some parts of this Standard may conflict with patent rights and other rights other than mentioned above. The relevant Minister is not responsible for identifying any of such patent rights and other rights.

The “patent rights and other rights” as mentioned here include patent right, published patent application or utility model right.

Large diameter welded stainless steel pipes

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 9330-6** : 1997, Edition 1, with some modifications of the technical contents.

Annex JA is unique to **JIS** and not given in the corresponding International Standard. The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard specifies requirements for large diameter welded stainless steel pipes (hereafter referred to as pipes) used for piping for corrosion resistance, low temperature service, elevated temperature service or the like.

NOTE 1 This Standard generally applies to pipes of outside diameter 165.2 mm (nominal diameter 150A or 6B) to 1 016.0 mm (nominal diameter 1 000A or 40B) (see **9.1**).

NOTE 2 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 9330-6 : 1997 *Welded steel tubes for pressure purposes — Technical delivery conditions — Part 6 : Longitudinally welded austenitic stainless steel tubes* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

Part or all of the provisions of the following standards, 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 0201 *Glossary of terms used in iron and steel (Heat treatment)*

JIS G 0202 *Glossary of terms used in iron and steel (Testing)*

JIS G 0203 *Glossary of terms used in iron and steel (Products and quality)*

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 0567 *Method of elevated temperature tensile test for steels and heat-resisting*