



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 3458 : 2020

(JISF)

Alloy steel pipes

ICS 23.040.10;77.140.75

Reference number : JIS G 3458 : 2020 (E)

Date of Establishment: 1962-03-01

Date of Revision: 2020-12-21

Date of Public Notice in Official Gazette: 2020-12-21

Developed by: The Japan Iron and Steel Federation

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

JIS G 3458:2020, First English edition published in 2021-05

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

AT

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Symbol of grade	2
5 Manufacturing method	2
6 Chemical composition	3
7 Mechanical properties	4
7.1 Tensile strength, yield point or proof stress, and elongation	4
7.2 Flattening property	5
8 Hydraulic test characteristics or non-destructive test characteristics	5
9 Dimensions, unit mass and dimensional tolerances	7
9.1 Outside diameter, wall thickness and unit mass	7
9.2 Dimensional tolerances	7
10 Appearance	9
11 Supplementary quality requirements	9
12 Tests	10
12.1 Chemical analysis	10
12.2 Mechanical test	10
12.3 Hydraulic test or non-destructive test	11
13 Inspection and reinspection	12
13.1 Inspection	12
13.2 Reinspection	12
14 Marking	12
15 Report	13
Annex JA (normative) Supplementary quality requirements	14
Annex JB (informative) Comparison table between JIS and corresponding International Standard	16

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 3458:2018**), which has been technically revised.

However, **JIS G 3458:2018** 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 20 December 2021.

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

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister is not responsible for identifying any of such patent rights, published patent application or utility model rights.

Alloy steel pipes

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 9329-2:1997**, 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 the alloy steel pipes (hereafter referred to as pipes) mainly used for piping at elevated temperatures.

NOTE 1 This Standard is generally applied to pipes of outside diameter 10.5 mm (nominal diameter 6A or 1/8B) to 660.4 mm (nominal diameter 650A or 26B) (see **9.1**).

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

ISO 9329-2:1997 *Seamless steel tubes for pressure purposes—Technical delivery conditions—Part 2: Unalloyed and alloyed steels with specified elevated temperature properties* (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	<i>Glossary of terms used in iron and steel (Heat treatment)</i>
JIS G 0202	<i>Glossary of terms used in iron and steel (Testing)</i>
JIS G 0203	<i>Glossary of terms used in iron and steel (Products and quality)</i>
JIS G 0320	<i>Standard test method for heat analysis of steel products</i>
JIS G 0321	<i>Product analysis and its tolerance for wrought steel</i>
JIS G 0404	<i>Steel and steel products—General technical delivery requirements</i>
JIS G 0415	<i>Steel and steel products—Inspection documents</i>
JIS G 0567	<i>Method of elevated temperature tensile test for steels and heat-resisting alloys</i>