



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 4317 : 2018
(JSSA/JSA)
Hot-formed stainless steel sections

ICS 77.140.20;77.140.70

Reference number : JIS G 4317 : 2018 (E)

Date of Establishment: 1977-03-01

Date of Revision: 2018-08-20

Date of Public Notice in Official Gazette: 2018-08-20

Investigated by: Japanese Industrial Standards Committee
Standards Board for ISO area
Technical Committee on Metal and Inorganic
Materials

JIS G 4317:2018, First English edition published in 2019-01

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 2019

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 Symbol of grade	2
4 Manufacturing method	2
5 Chemical composition	3
5.1 Heat analysis values	3
5.2 Product analysis values	3
6 Mechanical properties	4
6.1 General requirements	4
6.2 Mechanical properties of austenitic series	4
6.3 Mechanical properties of austenitic-ferritic series	5
6.4 Mechanical properties of ferritic series	5
7 Corrosion resistance	6
8 Cross-sectional shape, dimensions and dimensional tolerances	6
8.1 Cross-sectional shape	6
8.2 Dimensions and dimensional tolerances	6
9 Tolerance on bend	10
10 Length	10
10.1 Standard length.....	10
10.2 Tolerance on length	11
11 Surface finish	11
12 Appearance.....	11
13 Mass	11
14 Tests	13
14.1 Chemical analysis	13
14.2 Mechanical tests	13
14.3 Corrosion test	14
15 Inspection	14
16 Marking	14
17 Report	15

Annex JA (informative)	Heat treatment conditions of stainless steels	16
Annex JB (informative)	Cross-sectional shape, standard cross-sectional dimensions, cross-sectional area and cross-sectional properties	17
Annex JC (normative)	Quality requirements for specially shaped sections	22
Annex JD (informative)	Comparison table between JIS and corresponding International Standard	23

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 Stainless Steel Association (JSSA)/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 G 4317:2013** is replaced with this Standard.

However, **JIS G 4317:2013** 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 August 19, 2019.

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.

Hot-formed stainless steel sections

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 16143-2:2014**, Edition 2, with some modifications of the technical contents.

The vertical lines on both sides indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JD.

1 Scope

This Standard specifies sections produced by hot forming stainless steels into H sections, angles, U sections and other shapes of sections (hereafter referred to as specially shaped sections).

Sections is a generic term for H sections, equal-leg angles, unequal-leg angles, U sections and specially shaped sections.

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

ISO 16143-2:2014 Stainless steels for general purposes—Part 2: Corrosion-resistant semi-finished products, bars, rods and sections (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

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 0321 *Product analysis and its tolerance for wrought steel*
- JIS G 0404 *Steel and steel products—General technical delivery requirements*
- JIS G 0415 *Steel and steel products—Inspection documents*
- JIS G 0571 *Method of oxalic acid etching test for stainless steels*
- JIS G 0572 *Method of ferric sulfate-sulfuric acid test for stainless steel*
- JIS G 0573 *Method of 65 per cent nitric acid test for stainless steels*
- JIS G 0575 *Method of copper sulfate-sulfuric acid test for stainless steels*
- JIS Z 2241 *Metallic materials—Tensile testing—Method of test at room temperature*
- JIS Z 2243-1 *Brinell hardness test—Part 1: Test method*
- JIS Z 2244 *Vickers hardness test—Test method*
- JIS Z 2245 *Rockwell hardness test—Test method*
- JIS Z 8401 *Guide to the rounding of numbers*