

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 4305 : 2005

(JSSA/JSA)

**Cold-rolled stainless steel plate, sheet
and strip**

ICS 77.140.20 ; 77.140.50

Reference number : JIS G 4305 : 2005 (E)

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 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 4305 : 1999** is replaced with this Standard.

This revision has been made based on **ISO 9445 : 2002** *Continuously cold-rolled stainless steel narrow strip, wide strip, plate/sheet and cut lengths—Tolerances on dimensions and form* for the purpose of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Being in conformance with this Standard may come under the use of the following patent rights with regard to the symbols of grade as the following.

Date of Establishment: 1959-12-01

Date of Revision: 2005-12-20

Date of Public Notice in Official Gazette: 2005-12-20

Investigated by: Japanese Industrial Standards Committee
Standards Board
Technical Committee on Iron and steel

JIS G 4305 : 2005, First English edition published in 2006-03

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2006

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

Symbol of grade	Title of invention	Patent number	Registration date of establishment of patent right
SUS315J1 SUS315J2	AUSTENITIC STAINLESS STEEL HAVING SUPERIOR HOT WORKABILITY AND HIGH CORROSION RESISTANCE AND MANUFACTURE THEREOF	No.1818155	January 27 th , 1994
	AUSTENITIC STAINLESS STEEL EXCELLENT IN HOT WORKABILITY AND CORROSION RESISTANCE IN HOT WATER	No.2602411	January 29 th , 1997
	HEAT-RESISTANT AUSTENITIC STAINLESS STEEL	No.2530231	June 14 th , 1996
	AUSTENITIC STAINLESS STEEL EXCELLENT IN CORROSION RESISTANCE IN WARM WATER	No.2668116	July 4 th , 1997
	AUSTENITIC STAINLESS STEEL EXCELLENT IN CORROSION RESISTANCE IN WARM WATER	No.2756545	March 13 rd , 1998
	AUSTENITIC STAINLESS STEEL EXCELLENT IN STRESS CORROSION CRACKING RESISTANCE AND PITTING CORROSION RESISTANCE	No.3011723	December 10 th , 1999
SUS445J1 SUS445J2	FERRITIC STAINLESS STEEL FOR HEAT EXCHANGER	No.2642056	May 2 nd , 1997
	FERRITIC STAINLESS STEEL EXCELLENT IN CORROSION RESISTANCE IN WELD ZONE	No.2739531	January 23 rd , 1998
	Fe-Cr ALLOY EXCELLENT IN RIDGING RESISTANCE	No.2737819	January 16 th , 1998
	FERRITIC STAINLESS STEEL EXCELLENT IN TOUGHNESS AND CORROSION RESISTANCE	No.2135002	February 20 th , 1998
	PRODUCTION OF POLISHED FERRITIC STAINLESS STEEL SHEET EXCELLENT IN OXIDATION RESISTANCE	No.3112195	September 22 nd , 2000
	FERRITIC STAINLESS STEEL SHEET EXCELLENT IN RUST RESISTANCE AND WORKABILITY	No.3224694	August 24 th , 2001
	FERRITIC STAINLESS STEEL BRIGHT ANNEALING MATERIAL EXCELLENT IN WORKABILITY AND RUST RESISTANCE	No.3268927	January 18 th , 2002
	FERRITIC STAINLESS STEEL FOR EXTERIOR MATERIAL EXCELLENT IN CORROSION RESISTANCE	No.3297696	April 19 th , 2002
	FERRITIC STAINLESS STEEL FOR BUILDING MATERIAL	No.3411084	March 20 th , 2003
SUS312L	AUSTENITIC STAINLESS STEEL FOR BUILDING MATERIAL	No.3358678	October 11 th , 2002

Besides, this description does not affect to any extent the validity range and the like of the above patent right.

The holders of these patent rights give guarantee to the Japanese Industrial Standards Committee with respect to their willingness to permit anyone to exercise the relevant patent rights under the nondiscriminatory and reasonable conditions.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Grade and symbols	1
4 Chemical composition	2
4.1 Cast analysis value	2
4.2 Product analysis value	2
5 Mechanical properties	5
5.1 Mechanical properties of austenitic series	5
5.2 Mechanical properties of austenite-ferritic series	7
5.3 Mechanical properties of ferritic series	7
5.4 Mechanical properties of martensitic series	8
5.5 Mechanical properties of precipitation hardening series	9
6 Corrosion resistance	9
7 Surface finish	10
8 Shapes, dimensions, mass and tolerances	10
8.1 Standard dimensions	10
8.2 Calculation of mass of plates	11
8.3 Tolerances on thickness	11
8.4 Tolerances on width	13
8.5 Tolerances on length of plates	14
8.6 Flatness of plates	14
8.7 Edge camber of strip	15
9 Appearance	16
10 Manufacturing process	16
11 Test	17
11.1 Analytical test	17
11.2 Mechanical test	17
11.3 Corrosion test	18
12 Inspection	18
13 Marking	18
14 Report	19