

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 3128 : 2021

(JISF)

**High yield strength steel plates for welded
structure**

ICS 25.160.01 ; 77.140.50

Reference number : JIS G 3128 : 2021 (E)

PROTECTED BY COPYRIGHT

10 S

G 3128 : 2021

Date of Establishment: 1983-11-01

Date of Revision: 2021-09-21

Date of Public Notice in Official Gazette: 2021-09-21

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

Technical Committee on Metal and Inorganic Materials

JIS G 3128 : 2021, First English edition published in 2022-01

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 2022

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

PROTECTED BY COPYRIGHT

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Symbol of grade and applicable thickness	2
4 Chemical composition and carbon equivalent	2
5 Heat treatment	3
6 Mechanical properties	3
7 Shape, dimensions, mass and tolerances	5
8 Appearance	6
9 Tests	6
9.1 Chemical analysis	6
9.2 Mechanical tests	6
10 Inspection	8
11 Reinspection	8
12 Marking	8
13 Report	8
Annex JA (normative) Supplementary quality requirements	10
Annex JB (informative) Comparison table between JIS and corresponding International Standards	11

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 The Japan Iron and Steel Federation (JISF) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied *mutatis mutandis* pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS G 3128** : 2009), which has been technically revised.

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 and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

High yield strength steel plates for welded structure

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 4950-1** : 1995, Edition 2, **ISO 4950-2** : 1995, Edition 2, and **ISO 4950-3** : 1995, Edition 2, with some modifications of the technical contents.

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 hot-rolled steel plates of 780 N/mm² in tensile strength and 685 N/mm² in proof stress with excellent weldability (hereafter referred to as steel plates) used for bridge, pressure vessels, high pressure equipment and other structures.

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

ISO 4950-1 : 1995 *High yield strength flat steel products — Part 1 : General requirements*

ISO 4950-2 : 1995 *High yield strength flat steel products — Part 2 : Products supplied in the normalized or controlled rolled condition*

ISO 4950-3 : 1995 *High yield strength flat steel products — Part 3 : Products supplied in the heat-treated (quenched + tempered) condition* (overall evaluation : 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 0404 *Steel and steel products — General technical delivery requirements*

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

JIS G 0416 *Steel and steel products — Location and preparation of samples and test pieces for mechanical testing*