

Translated and Published by Japanese Standards Association

 $JIS\ G\ 3112:2020$

(JISF)

Steel bars for concrete reinforcement

ICS 77.140.15;91.080.40

 $Reference\ number:\ JIS\ G\ 3112:2020\ (E)$

G 3112:2020

Date of Establishment: 1964-07-01

Date of Revision: 2020-04-20

Date of Public Notice in Official Gazette: 2020-04-20

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

Technical Committee on Metal and Inorganic

Materials

JIS G 3112:2020, First English edition published in 2020-09

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 2020

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

Contents

	Page
Introduction	
1	Scope
2	Normative references — 1
3	Terms and definitions ————————————————————————————————————
4	Symbol of grade ————————————————————————————————————
5	Manufacturing method
6 6.1 6.2	Chemical composition3Heat analysis values3Carbon equivalent3
7	Mechanical properties4
8 8.1 8.2	Shape, dimensions, masses and tolerances — 6 Shape, dimensions, masses and tolerances of round steel bars — 6 Shape, dimensions, masses and tolerances of deformed steel bars — 6
9	Appearance 9
10 10.1 10.2 10.3	Tests
11 11.1 11.2	Inspection 12 Inspection 12 Reinspection 12
12 12.1 12.2 12.3	Marking13Marking method13Marking on each piece or coil13Marking on each bundle14
13	Report
Annex JA (informative) Comparison table between JIS and corresponding International Standards	

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 3112**:2010), which has been technically revised.

However, **JIS** G **3112**:2010 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 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 and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

Steel bars for concrete reinforcement

JIS G 3112:2020

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 6935-1**:2007, Edition 2, and **ISO 6935-2**:2019, Edition 4, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standards. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies requirements for round steel bars ¹⁾ and deformed steel bars ¹⁾ manufactured by hot rolling to be used as reinforcement in concrete. This Standard does not apply to rerolled steel bars for concrete reinforcement specified in **JIS G 3117**.

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

ISO 6935-1:2007 Steel for the reinforcement of concrete—Part 1: Plain bars ISO 6935-2:2019 Steel for the reinforcement of concrete—Part 2: Ribbed bars (overall evaluation: MOD)

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

Note 1) Including those in coil form.

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 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 3117 Rerolled steel bars for concrete reinforcement
- JIS G 3191 Dimensions, mass and permissible variations of hot rolled steel bars and bar in coil
- JIS Z 2241 Metallic materials—Tensile testing—Method of test at room temperature
- JIS Z 2248 Metallic materials—Bend test