

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 3505 : 2017

(JISF)

Low carbon steel wire rods

ICS 77.140.60;77.140.65

Reference number : **JIS G 3505 : 2017 (E)**

Date of Establishment: 1956-08-21

Date of Revision: 2017-02-20

Date of Public Notice in Official Gazette: 2017-02-20

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

JIS G 3505:2017, First English edition published in 2017-04

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 2017

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 Classification and symbols	1
4 Manufacturing method	2
5 Chemical composition	2
6 Dimensions	2
7 Appearance	3
8 Chemical analysis	3
9 Inspection	3
10 Marking.....	3
11 Report	4
Annex JA (normative) Supplementary quality requirements	5
Annex JB (informative) Comparison table between JIS and corresponding International Standards	7

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 The Japan Iron and Steel Federation (JISF) 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 3505:2004** is replaced with this Standard.

However, **JIS G 3505:2004** 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 February 19, 2018.

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

It should be noted that being in conformance with this Standard may come under the use of the patent rights held by the following:

(Patent number)	(Title of invention)	(Date of registration)
No. 4325957	Steel wire rod in which strain aging is suppressed	June 19, 2009

The relevant holders of the above-mentioned patent rights have indicated to the Japanese Industrial Standards Committee an intention of granting license to anyone under the nondiscriminatory and reasonable conditions, except to the other relevant holders of the patent rights related to this Standard who will not grant their licenses under the same conditions.

It should be noted that following this Standard does not always refer to granting a free license.

There is the possibility that some parts of this Standard may conflict with patent rights other than mentioned above. 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.

The “patent rights” as mentioned here include patent right, application for a patent after opening to the public or utility model right.

Low carbon steel wire rods

Introduction

This Japanese Industrial Standard has been prepared based on the second editions of **ISO 16120-1** and **ISO 16120-2** published in 2011 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 low carbon steel wire rods (hereafter referred to as wire rods) to be used for the manufacture of the low carbon steel wire, zinc-coated low carbon steel wire, etc. It is not applicable to wire rods for core wire of electrodes.

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

ISO 16120-1:2011 *Non-alloy steel wire rod for conversion to wire—Part 1: General requirements*

ISO 16120-2:2011 *Non-alloy steel wire rod for conversion to wire—Part 2: Specific requirements for general-purpose wire rod* (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 3191 *Dimensions, mass and permissible variations of hot rolled steel bars and bar in coil*

3 Classification and symbols

The wire rods are classified into 10 grades, and the symbols of grades shall be as given in Table 1 and Table JA.1.