

Translated and Published by Japanese Standards Association

# JIS G 4802 : 2019 (JISF) Cold-reduced steel strip for springs

ICS 77.140.10;77.140.25;77.140.50 Reference number : JIS G 4802 : 2019 (E)

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Date of Establishment: 1983-03-01 Date of Revision: 2019-09-20 Date of Public Notice in Official Gazette: 2019-09-20 Investigated by: Japanese Industrial Standards Committee Standards Board for ISO area Technical Committee on Metal and Inorganic Materials

JIS G 4802:2019, First English edition published in 2020-04

Translated and published by: Japanese Standards Association Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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Printed in Japan

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# 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 4802**:2011), which has been technically revised.

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NOTE Based on Article 9 of the Supplementary Provisions to the Unfair Competition Prevention Act etc., any submission of proposal, or employment of procedures such as deliberation by the Japanese Industrial Standards Committee under the previous Industrial Standardization Act shall be deemed to have been conducted pursuant to the provision of Article 12, paragraph (1) of the revised Industrial Standardization Act.

# **Cold-reduced** steel strip for springs

## Introduction

This Japanese Industrial Standard has been prepared based on **ISO 4960**:2007, Edition 3, 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 steel strips (hereafter referred to as strips) and steel sheets cut from strips (hereafter referred to as cut lengths), that are mainly used for the manufacture of flat springs and coiled springs.

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

ISO 4960:2007 Cold-reduced carbon steel strip with a mass fraction of carbon over 0.25  $\%~(\rm MOD)$ 

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 0553 Steel—Macroscopic examination by etching

JIS G 0555 Microscopic testing method for the non-metallic inclusions in steel

JIS G 0558 Steels—Determination of depth of decarburization

JIS Z 2244 Vickers hardness test—Test method

NOTE Corresponding International Standard: ISO 6507-1 Metallic materials— Vickers hardness test—Part 1: Test method (MOD)

### **3** Classification and symbols

The strips and cut lengths are classified into nine grades that are designated by the symbols as shown in Table 1.