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(JISF)

**Electrolytic zinc-coated steel sheet and  
strip**

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

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## Contents

	Page
Introduction .....	1
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Symbols of grade, applicable nominal thicknesses, base metals and temper grades .....	3
5 Coating .....	5
5.1 Types of coating .....	5
5.2 Coating mass .....	5
5.3 Symbol for coating mass .....	5
5.4 Coating adherence .....	6
6 Chemical treatment .....	8
7 Oiling .....	9
8 Mechanical properties .....	9
8.1 Applicable mechanical properties .....	9
8.2 Bendability .....	9
8.3 Yield point or proof stress, tensile strength and elongation, and amount of bake hardening .....	9
8.4 Hardness .....	12
9 Dimensions and dimensional tolerances .....	14
9.1 Expression of dimensions .....	14
9.2 Standard nominal thicknesses .....	15
9.3 Dimensional tolerances .....	15
10 Shape .....	16
10.1 Camber .....	16
10.2 Squareness .....	16
10.3 Flatness .....	17
11 Mass .....	18
11.1 Mass of sheet .....	18
11.2 Mass of coil .....	19
12 Appearance .....	19
13 Tests .....	19
13.1 Coating test .....	19
13.2 Mechanical tests .....	21

14	Inspection and reinspection .....	22
14.1	Inspection .....	22
14.2	Reinspection .....	22
15	Marking .....	23
16	Items to be confirmed at the time of ordering .....	23
17	Report .....	24
Annex JA (normative)	Dimensional tolerances on electrolytic zinc-coated steel sheet and strip .....	25
Annex JB (normative)	Shapes of electrolytic zinc-coated steel sheet and strip .....	32
Annex JC (normative)	Test method for coating mass determination of electrolytic zinc-coated steel sheet and strip by EDTA titrimetric method .....	37
Annex JD (normative)	Test method for off-line coating mass determination of electrolytic zinc-coated steel sheet and strip by X-ray fluorescence analysis method .....	39
Annex JE (normative)	Test method for online coating mass determination of electrolytic zinc-coated steel strip by X-ray fluorescence analysis method .....	43
Annex JF (normative)	Test method for coating mass determination of electrolytic zinc-coated steel sheet and strip by gravimetric method .....	47
Annex JG (normative)	Test method for determination of amount of bake hardening .....	49
Annex JH (normative)	Test method for coating mass determination of electrolytic zinc-coated steel sheet and strip by atomic absorption spectrometric method .....	51
Annex JI (normative)	Test method for coating mass determination of electrolytic zinc-coated steel sheet and strip by ICP atomic emission spectrometric method .....	53
Annex JJ (informative)	Comparison table between JIS and corresponding International Standard .....	56

## 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 3313: 2017**), which has been technically revised.

However, **JIS G 3313: 2017** 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 21 February 2022.

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# Electrolytic zinc-coated steel sheet and strip

## Introduction

This Japanese Industrial Standard has been prepared based on **ISO 5002:2013**, Edition 4, 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 JJ.

## 1 Scope

This Standard specifies the requirements for electrolytic zinc-coated steel sheets (hereafter referred to as sheets) and strips (hereafter referred to as coils).

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

ISO 5002 : 2013 *Hot-rolled and cold-reduced electrolytic zinc-coated carbon steel sheet of commercial and drawing qualities* (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

Part or all of the provisions of the following standards, 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 0404 *Steel and steel products — General technical delivery requirements*

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

JIS G 1257-0 *Iron and steel — Atomic absorption spectrometric method — Part 0 : General rules*

JIS G 1258-0 *Iron and steel — ICP atomic emission spectrometric method — Part 0 : General rules*

JIS G 3101 *Rolled steels for general structure*

JIS G 3113 *Hot-rolled steel plates, sheet and strip for automobile structural uses*

JIS G 3131 *Hot-rolled mild steel plates, sheet and strip*

JIS G 3134 *Hot-rolled high strength steel plates, sheet and strip with improved formability for automobile uses*

JIS G 3135 *Cold-reduced high strength steel sheet and strip with improved formability for automobile uses*

JIS G 3141 *Cold-reduced carbon steel sheet and strip*

JIS K 0119 *General rules for X-ray fluorescence analysis*

JIS K 8001 *General rules for test methods of reagents*

JIS K 8847 *Hexamethylenetetramine (Reagent)*

JIS Z 2241 *Metallic materials — Tensile testing — Method of test at room temperature*

JIS Z 2244-1 *Vickers hardness test — Part 1 : Test method*

JIS Z 2245 *Rockwell hardness test — Test method*

JIS Z 2248 *Metallic materials — Bend test*

JIS Z 8401 *Rounding of numbers*

### 3 Terms and definitions

For the purpose of this Standard, the following terms and definitions, and those given in JIS G 0201, JIS G 0202 and JIS G 0203 apply.

#### 3.1

##### **chromate-free treatment**

chemical treatment free from hexavalent chromium

#### 3.2

##### **preliminary strain stress, $R_{WH}$**

in the tensile test to apply the strain to the test piece preliminarily, the value obtained by dividing the test force when the total elongation of 2 % is applied to the test piece by the original cross-sectional area of the parallel portion of the test piece before giving a preliminary strain

Note 1 to entry Unit: N/mm<sup>2</sup>

Note 2 to entry See Figure JG.1.

#### 3.3

##### **strain ageing yield stress, $R_{SA}$**

the value obtained by dividing the test force at the yield point of air-cooled test piece after heating at 170 °C for 20 min after giving a total elongation of 2 % by the original cross-sectional area of the parallel portion of the test piece before giving a preliminary strain

Note 1 to entry Unit: N/mm<sup>2</sup>