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

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In the event of any doubts arising as to the contents,
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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by The Japan Iron and Steel Federation (JISF), an accredited standards development organization. This edition replaces the previous edition (**JIS G 3135** : 2018), which has been technically revised.

However, **JIS G 3135** : 2018 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 20 April 2026.

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Cold-reduced high strength steel sheet and strip with improved formability for automobile uses

1 Scope

This Japanese Industrial Standard specifies the requirements for the cold-reduced high strength steel sheets (hereafter referred to as steel sheets) and the cold-reduced high strength steel strips (hereafter referred to as steel strips) with improved formability mainly used for automobiles, electric equipment, construction materials and the like.

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

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 0202 and JIS G 0203 apply.

3.1

preliminary strain stress, R_{WH}

test force at a total elongation of 2 % in the tensile test, divided by the original cross-sectional area of the parallel portion of the test piece before preliminary strain (N/mm²) (See Figure A.1)

3.2

strain ageing yield stress, R_{SA}

test force at yield point of a test piece which has been elongated by 2 % of its original