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**Methods of measuring case depth
hardened by carburizing treatment for
steel**

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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 0557** : 2019), which has been technically revised.

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Methods of measuring case depth hardened by carburizing treatment for steel

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 18203** : 2016, Edition 1, with some modifications of the technical contents to specify only the matters related to the measuring methods of carburized hardening depth.

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 JA.

1 Scope

This Standard specifies the methods for measuring the case hardening depth and total thickness of surface hardening depth of steel hardened by carburizing or carbonitriding treatment followed by quenching (hereafter referred to as the carburized hardening depth).

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

ISO 18203 : 2016 *Steel — Determination of the thickness of surface-hardened layers* (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 B 0601 *Geometrical Product Specifications (GPS) — Surface texture : Profile method — Terms, definitions and surface texture parameters*

JIS B 7725 *Vickers hardness test — Verification and calibration of testing machines*

JIS B 7734 *Knoop hardness test — Verification and calibration of testing machines*

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

JIS Z 2251-1 *Knoop hardness test — Part 1 : Test method*