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

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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 0557:2006**), 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.

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, extracting the contents relevant to the measuring method of case depth by carburizing.

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 of measuring the case depth of steel hardened by carburizing or carbonitriding treatment followed by quenching (hereafter referred to as the case depth). The interpolation method for determining effective case depth is specified in Annex A.

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

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 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*

NOTE Corresponding International Standard: ISO 6507-2 *Metallic materials—Vickers hardness test—Part 2: Verification and calibration of testing machines*

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

NOTE At the time of revision of this Standard, the International Standard corresponding to **JIS B 7734** was **ISO 4546:1993**. Thereafter, **ISO 4546** has been withdrawn and replaced by **ISO 4545-2** in 2017.

JIS G 0201 *Glossary of terms used in iron and steel (Heat treatment)*