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Method of sulphur print 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 0560** : 2008), which has been technically revised.

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Method of sulphur print for steel

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 4968** : 2022, Edition 2, 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 JA.

1 Scope

This Standard specifies the method of sulphur print for steel. The method is applicable to steels of which the sulphur content is less than 0.40 %. This method can also be applied to cast irons.

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

ISO 4968 : 2022 *Steel — Macrographic examination by sulphur print (Baumann method)* (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 reference

Part or all of the provisions of the following standard, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

JIS G 0202 *Glossary of terms used in iron and steel (Testing)*

3 Terms and definitions

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

4 General

4.1 The sulphur print test is essentially a qualitative test. It is inadvisable to evaluate the sulphur content of a given steel merely on the basis of its sulphur print.

4.2 Experience shows that the degree of darkening of the photo-sensitive emulsion is not always in proportion to the quantity of sulphides present in the metal. Certain factors may influence the macrographic attack to a greater or lesser extent; as examples, the following may be quoted: