JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 1239 : 2014

(JISF)

Iron and steel—Determination of oxygen—Infrared absorption method after fusion under inert gas

ICS 77.080.10;77.080.20

Reference number : **JIS G 1239** : **2014** (**E**)

Date of Establishment: 2014-02-20
Date of Public Notice in Official Gazette: 2014-02-20
Investigated by: Japanese Industrial Standards Committee
Standards Board
Technical Committee on Iron and Steel

JIS G 1239:2014, First English edition published in 2016-09

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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

Printed in Japan

NH/AT

Contents

Page

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by The Japan Iron and Steel Federation (JISF) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

Iron and steel—Determination of oxygen—Infrared absorption method after fusion under inert gas

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 17053** published in 2005 with some modifications of the technical contents such as alteration of the scope of application.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies an infrared absorption method after fusion under inert gas for the determination of oxygen in iron and steel. This method is applicable to mass fraction of oxygen 0.000 5 % or over up to and including 0.05 %.

NOTE 1 Since the determination method specified in this Standard includes in its determination value the content of oxygen combined with or adsorbed on the sample surface, if used for determination made on micro region, it may indicate a higher value than the actual oxygen content in the sample.

NOTE 2 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 17053:2005 *Steel and iron—Determination of oxygen—Infrared method after fusion under inert gas* (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 G 0417 *Steel and iron—Sampling and preparation of samples for the determination of chemical composition*

NOTE : Corresponding International Standard: ISO 14284 *Steel and iron—Sampling and preparation of samples for the determination of chemical composition* (IDT)

JIS G 1201 *Iron and steel—General rules for analytical methods*

JIS K 0050 *General rules for chemical analysis*