

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 1215-2 : 2010

(ISO 4934 : 2003)

(JISF)

**Iron and steel—Determination of
sulfur content—Part 2: Gravimetric
method after chromatographic
separation**

ICS 77.080.01

Reference number : JIS G 1215-2 : 2010 (E)

G 1215-2 : 2010 (ISO 4934 : 2003)

Date of Establishment: 2010-05-20

Date of Public Notice in Official Gazette: 2010-05-20

Investigated by: Japanese Industrial Standards Committee
Standards Board

Technical Committee on Iron and Steel

JIS G 1215-2:2010, First English edition published in 2010-10

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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

© JSA 2010

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

AT

PROTECTED BY COPYRIGHT

Contents

	Page
Introduction.....	1
1 Scope.....	1
2 Normative references	1
3 Principle	2
4 Reagents	2
5 Apparatus	4
6 Sampling	5
7 Procedure	5
7.1 Test portion	5
7.2 Blank test	6
7.3 Determination	6
8 Expression of results.....	8
8.1 Method of calculation.....	8
8.2 Precision	8
9 Test report	9
Annex A (informative) Additional information on international cooperative tests.....	10
Annex B (informative) Graphical representation of precision data	11

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.

Consequently, **JIS G 1215**:1999 has been withdrawn and replaced with this Standard established by separating part of it.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

JIS G 1215 series consists of the following 4 parts under the general title “*Iron and steel—Determination of sulfur content*”

Part 1: Gravimetric method after separation of iron

Part 2: Gravimetric method after chromatographic separation

Part 3: Methylene blue spectrophotometric method after separation of hydrosulfide

Part 4: Infrared absorption method after combustion in an induction furnace

Iron and steel—Determination of sulfur content—Part 2: Gravimetric method after chromatographic separation

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 4934** published in 2003 without modifying the technical contents.

The portions with dotted underlines are the matters not given in corresponding International Standard.

1 Scope

This Standard specifies a gravimetric method for the determination of the sulfur content in steels and iron, excluding steels containing selenium. The method is particularly suitable as a reference method for the standardization of samples on which certified standard values are to be established.

The method is applicable to a sulfur content between 0.003 % (mass fraction) and 0.35 % (mass fraction).

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

ISO 4934:2003 *Steel and iron—Determination of sulfur content—Gravimetric method* (IDT)

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 Z 8402-1 *Accuracy (trueness and precision) of measurement methods and results—Part 1: General principles and definitions*

NOTE : Corresponding International Standard: ISO 5725-1 *Accuracy (trueness and precision) of measurement methods and results—Part 1: General principles and definitions* (IDT)