JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS G 0417 : 2025

(JISF)

Steel and iron — Sampling and preparation of samples for the determination of chemical composition

ICS 77.080.20;77.140.01

Reference number: JIS G 0417 : 2025 (E)

Date of Establishment: 1999-12-20

Date of Revision: 2025-04-21

Date of Public Notice in Official Gazette: 2025-04-21

Developed by: The Japan Iron and Steel Federation

Investigated by: The Japan Iron and Steel Federation,
Standardization Center

JIS G 0417 : 2025, First English edition published in 2025-09

Translated and published by: Japanese Standards Association
Mita Avanti, 3-11-28, 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 SW

Contents

Page

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 0417** : 1999), which has been technically revised.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister is not responsible for identifying any of such patent rights, published patent application or utility model rights.

Blank

Steel and iron — Sampling and preparation of samples for the determination of chemical composition

Introduction

This Japanese Industrial Standard has been prepared based on ISO 14284 : 2022, Edition 2, with some modifications of the technical contents.

Annex JA is unique to JIS and not given in the corresponding International Standard. Clause 5 and Clause 8 of the corresponding International Standard are shown in Annex JB and Annex JC respectively, for reference. The dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JD.

1 Scope

This Standard specifies methods for sampling and preparation of samples for the determination of the chemical composition of pig irons, cast irons and steels. Methods are specified for both liquid and solid metal.

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

ISO 14284 : 2022 *Steel and iron — Sampling and preparation of samples for the determination of chemical composition* (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 G 0201 *Glossary of terms used in iron and steel (Heat treatment)*

JIS G 0203 *Glossary of terms used in iron and steel (Products and quality)*

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

JIS G 1239 *Iron and steel — Determination of oxygen — Infrared absorption method after fusion under inert gas*

JIS R 6001-1 *Bonded abrasives — Determination and designation of grain size distribution — Part 1: Macrogrits F4 to F220*

JIS R 6001-2 *Bonded abrasives — Determination and designation of grain size distribution — Part 2: Microgrits*

JIS R 6010 *Coated abrasive grain sizes*