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(JISF)

Iron and steel — Determination of phosphorus — Part 2: Spectrophotometric methods after phosphomolybdate extraction

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Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act in response to a proposal for establishment of Japanese Industrial Standard with a draft being attached, submitted by The Japan Iron and Steel Federation (JISF), an accredited standards development organization. This Standard partially replaces **JIS G 1214** : 1998, which has been withdrawn.

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.

JIS G 1214 series consists of the following 2 parts under the general title *Iron and steel — Determination of phosphorus —*:

Part 1: Molybdophosphate blue spectrophotometric method

Part 2: Spectrophotometric methods after phosphomolybdate extraction

Iron and steel — Determination of phosphorus — Part 2: Spectrophotometric methods after phosphomolybdate extraction

Introduction

This Japanese Industrial Standard has been prepared based on the **ISO 10714** : 2024, Edition 2 with some modifications of the technical contents.

Specific procedures specified in the corresponding International Standard are given in Annex A in this Standard. The vertical lines on both sides and dotted underlines in Clause **1** to Clause **5** and Annex A 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 spectrophotometric methods after phosphomolybdate extraction for the determination of phosphorus in iron and steel.

This method is applicable to the determination of phosphorus contents of 0.000 3 % or over up to and including 1.0 % in mass fraction. The method specified in the main body is applicable to the determination of phosphorus contents of 0.000 3 % or over up to and including 0.010 % in mass fraction but not applicable to the test portions with tungsten contents of 0.1 % or more in mass fraction. The method described in Annex A is applicable to the determination of phosphorus contents of 0.001 0 % or over up to and including 1.0 % in mass fraction.

NOTE 1 Table 1 shows the applicable determination ranges of standards in **JIS G 1214** (all parts).

Table 1 Determination ranges of standards in JIS G 1214 (all parts)

Standard number	Determination range [mass fraction (%)]
JIS G 1214-1	0.005 or over up to and incl. 0.50
JIS G 1214-2	0.000 3 or over up to and incl. 1.0

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

ISO 10714 : 2024 *Steel and iron — Determination of phosphorus content — Phosphovanadomolybdate spectrophotometric 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**.