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JIS G 1214 : 1998

## Iron and steel—Methods for determination of phosphorus content

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**Descriptors** : Iron, transition metals, steels, ferrous metals, ferrous alloys, phosphorus,  
determination of content, chemical analysis and testing

**Reference number** : JIS G 1214 : 1998 (E)

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## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently, **JIS G 1214:1992** is replaced with **JIS G 1214:1998**.

In this revision, **ISO 10714** has been employed in Annex 2 for conforming to International Standard.

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In the event of any doubts arising as to the contents,  
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## Iron and steel — Methods for determination of phosphorus content

**Introduction** This Japanese Industrial Standard is prepared by citing the translation of **ISO 10714**, *Steel and iron — Determination of phosphorus content — Phosphovanadomolybdate spectrometric method* issued in 1992 in Annex 2 without changing technical contents and the style. Items which are not specified in the corresponding International Standard are added as JIS.

The underlined “informative references” in this Standard are items which do not exist in the original International Standard.

**1 Scope** This Japanese Industrial Standard specifies the methods for determination of phosphorus in iron and steel.

Remarks : The corresponding International Standard to this Standard is as follows :

ISO 10714 *Steel and iron – Determination of phosphorus content – Phosphovanadomolybdate spectrophotometric method*

**2 Normative references** The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards indicated below shall be applied.

JIS G 1201 *General rules for chemical analysis of iron and steel*

JIS Z 8402 *General rules for permissible tolerance of chemical analyses and physical tests*

**3 General matters** General matters common to methods for determination shall be in accordance with **JIS G 1201**. However, **JIS G 1201** shall not apply to Annex 2.

**4 Classification of methods for determination** The methods for determination of phosphorus in iron and steel shall be in accordance with any one of the following :

- a) **Reduced molybdophosphate spectrophotometric method** This method shall apply to the sample of 0.005 % (*m/m*) or over up to and including 0.50 % (*m/m*) phosphorus content as specified in Annex 1 (normative).
- b) **Phosphovanadomolybdate spectrophotometric method (ISO 10714)** This method shall apply to the sample of 0.001 0 % (*m/m*) or over up to and including 1.0 % (*m/m*) phosphorus content, as specified in Annex 2 (normative).
- c) **Molybdophosphate extraction spectrophotometric method** This method shall apply to the sample of 0.000 3 % (*m/m*) or over up to and including 0.010 % (*m/m*) as specified in Annex 3 (normative). However, it can not apply to the sample containing 0.1 % (*m/m*) or over tungsten.
- d) **Reduced molybdophosphate spectrophotometric method after extraction of molybdophosphate** This method shall apply to the sample of 0.000 3 % (*m/m*) or over up to and including 0.010 % (*m/m*) phosphorus content as specified in Annex 4 (normative). However, it can not apply to the sample containing 0.1 % (*m/m*) or over tungsten.