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JIS G 1326 : 2000

**Methods for chemical analysis  
of ferronickel**

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ICS 77.100

**Descriptors** : ferronickel, ferro-alloys, nickel-containing alloys, chemical analysis and testing, testing

**Reference number** : JIS G 1326 : 2000 (E)

## 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 the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS G 1326 : 1987** is replaced with **JIS G 1326 : 2000**.

In this revision, in order to conform to the International Standards, Annexes 1, 3, 5, 6, 10, 11 and 12 have been adopted and this Standard expresses the determination methods for each component on the form of annex system.

**JIS G 1326** has the following Annexes.

- Annex 1 (normative) *Determination of nickel content—Dimethylglyoxime gravimetric method (ISO 6352)*
- Annex 1 annex A (normative) *Determination of nickel in combined filtrates by atomic absorption spectrometric method*
- Annex 2 (normative) *Determination of nickel content—Disodium dihydrogen ethylenediamine tetraacetate titrimetric method after separation of dimethylglyoxime precipitate*
- Annex 3 (normative) *Determination of cobalt content—Flame atomic absorption spectrometric method (ISO 7520)*
- Annex 4 (normative) *Determination of carbon content—Coulometric method after combustion*
- Annex 5 (normative) *Determination of carbon content—Infra-red absorption method after combustion (ISO 7524)*
- Annex 6 (normative) *Determination of silicon content—Silicon dioxide gravimetric method (ISO 8343)*
- Annex 7 (normative) *Determination of silicon content—Molybdosilicic acid blue absorptiometric method*
- Annex 8 (normative) *Determination of manganese content—Atomic absorption spectrometric method*
- Annex 9 (normative) *Determination of phosphorus content—Molybdophosphoric acid blue absorptiometric method after extraction and separation of molybdophosphoric acid*
- Annex 10 (normative) *Determination of phosphorus content—Phosphovanadomolybdate molecular absorptiometric method (ISO 11400)*
- Annex 11 (normative) *Determination of sulfur content—Infra-red absorption method after combustion (ISO 7526)*
- Annex 12 (normative) *Determination of sulfur content—Potassium iodate titrimetric method after combustion (ISO 7527)*
- Annex 13 (normative) *Determination of sulfur content—Methylene blue absorptiometric method after vaporization and isolation of hydrogen sulfide*
- Annex 14 (normative) *Determination of chromium content—Atomic absorption spectrometric method*
- Annex 15 (normative) *Determination of copper content—Atomic absorption spectrometric method*

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## Methods for chemical analysis of ferronickel

**Introduction** This Japanese Industrial Standard has been constructed with the Annexes 1, 3, 5, 6, 10, 11 and 12, which are specified on the basis of **ISO 6352** : 1985 *Ferronickel—Determination of nickel content—Dimethylglyoxime gravimetric method*, **ISO 7520** : 1985 *Ferronickel—Determination of cobalt content—Flame atomic absorption spectrometric method*, **ISO 7524** : 1985 *Nickel, ferronickel and nickel alloys—Determination of carbon content—Infra-red absorption method after induction furnace combustion*, **ISO 8343** : 1985 *Ferronickel—Determination of silicon content—Gravimetric method*, **ISO 11400** : 1992 *Nickel, ferronickel and nickel alloys—Determination of phosphorus content—Phosphovanadomolybdate molecular absorption spectrometric method*, **ISO 7526** : 1985 *Nickel, ferronickel and nickel alloys—Determination of sulfur content—Infra-red absorption method after induction furnace combustion* and **ISO 7527** : 1985 *Nickel, ferronickel and nickel alloys—Determination of sulfur content—Iodimetric titration method after induction furnace combustion*), without any modification in the technical contents; and additionally with Annexes 2, 4, 7, 8, 9, 13, 14 and 15, which are the determination methods not specified in the corresponding International Standards.

**1 Scope** This Japanese Industrial Standard specifies the methods for determination of nickel, cobalt, carbon, silicon, manganese, phosphorus, sulfur, chromium and copper contained in ferronickel.

Remarks : The International Standards corresponding to this Standard are as follows.

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| ISO 6352 : 1985  | <i>Ferronickel—Determination of nickel content—Dimethylglyoxime gravimetric method</i>  |
| ISO 7520 : 1985  | <i>Ferronickel—Determination of cobalt content—Flame atomic absorption spectrometric method</i>   |
| ISO 7524 : 1985  | <i>Nickel, ferronickel and nickel alloys—Determination of carbon content—Infra-red absorption method after induction furnace combustion</i>       |
| ISO 7526 : 1985  | <i>Nickel, ferronickel and nickel alloys—Determination of sulfur content—Infra-red absorption method after induction furnace combustion</i>       |
| ISO 7527 : 1985  | <i>Nickel, ferronickel and nickel alloys—Determination of sulfur content—Iodimetric titration method after induction furnace combustion</i>       |
| ISO 8343 : 1985  | <i>Ferronickel—Determination of silicon content—Gravimetric method</i>  |
| ISO 11400 : 1992 | <i>Nickel, ferronickel and nickel alloys—Determination of phosphorus content—Phosphovanadomolybdate molecular absorption spectrometric method</i> |