



SLOVENSKI STANDARD
SIST EN ISO 10714:2003

01-april-2003

>Y_c`j`b`y`Ync`!`8`c`c` Yj`Ub`Y`Z`cg`Z`f`U`!`:`cg`Z`f`cj`Ub`UX`ca`c`]`VX`U`b`U`
gdY`_`f`c`Z`l`ca`Y`f`j`g`_`U`a`Y`c`X`U`f`i`c``%`\$`+`%`.`%`-`&`L`

Steel and iron - Determination of phosphorus content - Phosphovanadomolybdate spectrophotometric method (ISO 10714:1992)

Bestimmung des Phosphorgehaltes - Fotometrische Bestimmung - Vanatomolybdatphosphat-Verfahren (ISO 10714:1992)

Aciers et fontes - Dosage du phosphore - Méthode par spectrophotométrie au phosphovanadomolybdate (ISO 10714:1992)

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Ta slovenski standard je istoveten z: **EN ISO 10714:2002**

ICS:

77.040.30 Kemijska analiza kovin Chemical analysis of metals

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 10714

July 2002

ICS 77.040.30

English version

**Steel and iron - Determination of phosphorus content -
Phosphovanadomolybdate spectrophotometric method (ISO
10714:1992)**

Aciers et fontes - Dosage du phosphore - Méthode par
spectrophotométrie au phosphovanadomolybdate (ISO
10714:1992)

Bestimmung des Phosphorgehaltes - Fotometrische
Bestimmung - Vanadatmolybdatphosphat-Verfahren
(ISO 10714:1992)

This European Standard was approved by CEN on 29 May 2002.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 10714:2002 (E)**Foreword**

The text of the International Standard from Technical Committee ISO/TC 17 "Steel" of the International Organization for Standardization (ISO) has been taken over as a European Standard by Technical Committee EC/ISS/TC 20 "Methods of chemical analysis of ferrous products", the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2003, and conflicting national standards shall be withdrawn at the latest by January 2003.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 10714:1992 has been approved by CEN as a European Standard without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

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Annex ZA
(normative)

**Normative references to international publications
with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 1042	1998	Laboratory glassware - One-mark volumetric flasks	EN ISO 1042	1999
ISO 3696	1987	Water for analytical laboratory use - Specification and test methods	EN ISO 3696	1995

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INTERNATIONAL STANDARD

ISO
10714

First edition
1992-05-15

Steel and iron — Determination of phosphorus content — Phosphovanadomolybdate spectrophotometric method

iTeh STANDARD PREVIEW

(standards.iteh.ai)
*Aciers et fontes — Dosage du phosphore — Méthode par
spectrophotométrie au phosphovanadomolybdate*

[SIST EN ISO 10714:2003](#)

[https://standards.iteh.ai/catalog/standards/sist/cee06901-1e50-4676-9e80-
b6937a49797f/sist-en-iso-10714-2003](https://standards.iteh.ai/catalog/standards/sist/cee06901-1e50-4676-9e80-b6937a49797f/sist-en-iso-10714-2003)



Reference number
ISO 10714:1992(E)

ISO 10714:1992(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10714 was prepared by Technical Committee ISO/TC 17, *Steel*, Sub-Committee SC 1, *Methods of determination of chemical composition*.

The publication of this International Standard gives rise to the cancellation of ISO 2732:1984.

Annexes A and B of this International Standard are for information only.

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International Organization for Standardization
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Steel and iron — Determination of phosphorus content — Phosphovanadomolybdate spectrophotometric method

1 Scope

This International Standard specifies a spectrophotometric method for the determination of phosphorus in steel and iron with the following limitations.

The method is applicable to phosphorus contents between 0,001 0 % (*m/m*) and 1,0 % (*m/m*).

Arsenic, hafnium, niobium, tantalum, titanium, and tungsten interfere in determining phosphorus, but the interferences can be partially overcome by formation of complexes and use of small quantities of test portion. Depending on the concentration of the interfering elements, the application ranges and test portions given in table 1 apply.

The lower end of the application range can only be reached in test samples with low contents of the interfering elements.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All stan-

dards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 377-2:1989, *Selection and preparation of samples and test pieces of wrought steels — Part 2: Samples for the determination of the chemical composition.*

ISO 385-1:1984, *Laboratory glassware — Burettes — Part 1: General requirements.*

ISO 648:1977, *Laboratory glassware — One-mark pipettes.*

ISO 1042:1983, *Laboratory glassware — One-mark volumetric flasks.*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods.*

ISO 5725:1986, *Precision of test methods — Determination of repeatability and reproducibility for a standard test method by inter-laboratory tests.*

Table 1

Maximum content of the interfering elements, % (<i>m/m</i>)						Test portion g	Application range, Δw_p % (<i>m/m</i>)
As	Hf	Nb	Ta	Ti	W		
0,05	0,1	1	0,1	2	2	1,0	0,001 to 0,010
0,2	0,5	5	0,5	10	8	0,25	0,005 to 0,040
0,5	1,5	10	1,0	25	25	0,10	0,010 to 0,100
0,2	0,5	5	0,5	10	8	0,25	0,100 to 1,00