Unalloyed steel- Determination of low carbon content - Part 2: Infrared absorption method after combustion in an induction furnace (with preheating)

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 15349-2:2004 sisaldab Euroopa standardi EN ISO 15349-2:2003 ingliskeelset teksti. This Estonian standard EVS-EN ISO 15349-2:2004 consists of the English text of the European standard EN ISO 15349-2:2003.

Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This part of ISO 15349 specifies an infrared absorption method after combustion in an induction furnace for the determination of the low carbon content in unalloyed steel. The method is applicable to carbon contents between 0,0003 % (m/m) and 0,010 % (m/m)

Scope:

This part of ISO 15349 specifies an infrared absorption method after combustion in an induction furnace for the determination of the low carbon content in ui to c. (m/m) unalloyed steel. The method is applicable

ICS 77.080.20

Võtmesõnad:

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English version

Inalloyed steel - Determination of low carbon content

24 Infrared absorption method after combustion in an induction furnace (with preheating) (ISO 15349-2:1999)

Acier non allié - Determination des faibles teneurs en carbone - Partie 2: Méthode par absorption dans l'infrarouge après combustion dans un four à induction (avecpréchauffage) (ISO 15349-2: 1999)

Unlegierter Stahl - Bestimmung niedriger Kohlenstoffgehalte - Teil 2: Verfahren mit Infrarotabsorption nach Verbrennung im Induktionsofen (mit Vorwärmung) (ISO 15349-2: 1999)

This European Standard was approved by CEN on 2003-05-16.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom. 100 O

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

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

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Foreword

International Standard

ISO 15349-2: 1999 Unalloyed steel – Determination of low carbon content – Infrared absorption method after combustion in an induction furnace furnace (with preheating),

which was prepared by ISO/TC 17 'Steel' of the International Organization for Standardization, has been adopted by Technical Committee ECISS/TC 20 'Methods of chemical analysis of ferrous products', the Secretariat of which is held by SIS, as a European Standard.

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

In accordance with the CEN/CENELEC Internal Regulations, the national Standards Organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 15349-2: 1999 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative.)

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1 Scope

This part of ISO 15349 specifies an infrared absorption method after combustion in an induction furnace for the determination of the low carbon content in unalloyed steel.

The method is applicable to carbon contents between 0,000 3 % (m/m) and 0,010 % (m/m).

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 15349. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 15349 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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

ISO 1042:1998, Laboratory glassware — One-mark volumetric flasks.

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

ISO 5725-1:1994, Accuracy (trueness and precision) of measurement methods and results — Part 1: General principles and definitions.

ISO 5725-2:1994, Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method.

ISO 5725-3:1994, Accuracy (trueness and precision) of measurement methods and results — Part 3: Intermediate measures of the precision of a standard measurement method.

ISO 14284:1996, Steel and iron — Sampling and preparation of samples for the determination of chemical composition.

3 Principle

Preheating of a test portion at low temperature and combustion of a test portion with accelerator at a high temperature in an induction furnace in a current of pure oxygen. Transformation of carbon into carbon dioxide and/or carbon monoxide.