This is a free page sample. Access the full version online.



Irish Standard I.S. EN ISO 15350:2010

Steel and iron - Determination of total carbon and sulfur content - Infrared absorption method after combustion in an induction furnace (routine method) (ISO 15350:2000)

© NSAI 2010 No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i>	<i>This document is based on:</i> EN ISO 15350:2010	<i>Publisl</i> 21 Apr	<i>hed:</i> il, 2010	
This document was published under the authority of the NSAI and comes into effect on: 13 May, 2010			ICS number: 77.080.01	
NSAI 1 Swift Square, T +3 Northwood, Santry F +3 Dublin 9 E st W N	Sales: 53 1 807 3800 T +353 1 53 1 807 3838 F +353 1 andards@nsai.ie W stand SAl.ie	857 6730 857 6729 ards.ie		
Údarás um Chaighdeáin Náisiúnta na hÉireann				

EUROPEAN STANDARD

EN ISO 15350

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2010

ICS 77.080.01

English Version

Steel and iron - Determination of total carbon and sulfur content - Infrared absorption method after combustion in an induction furnace (routine method) (ISO 15350:2000)

Aciers et fontes - Dosage du carbone et du soufre totaux -Méthode par absorption dans l'infrarouge après combustion dans un four à induction (méthode pratique) (ISO 15350:2000) Stahl und Eisen - Bestimmung der Gesamtgehalte an Kohlenstoff und Schwefel - Infrarotabsorptionsverfahren nach Verbrennung in einem Induktionsofen (Standardverfahren) (ISO 15350:2000)

This European Standard was approved by CEN on 18 March 2010.

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 CEN 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2010 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 15350:2010: E

EN ISO 15350:2010 (E)

Contents

Page

Foreword

The text of ISO 15350:2000 has been prepared by Technical Committee ISO/TC 17 "Steel" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15350:2010 by Technical Committee ECISS/TC 102 "Methods of chemical analysis for iron and steel" 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 October 2010, and conflicting national standards shall be withdrawn at the latest by October 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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

Endorsement notice

The text of ISO 15350:2000 has been approved by CEN as a EN ISO 15350:2010 without any modification.

This page is intentionally left BLANK.

INTERNATIONAL STANDARD

ISO 15350

First edition 2000-12-15

Steel and iron — Determination of total carbon and sulfur content — Infrared absorption method after combustion in an induction furnace (routine method)

Aciers et fontes — Dosage du carbone et du soufre totaux — Méthode par absorption dans l'infrarouge après combustion dans un four à induction (méthode pratique)



Reference number ISO 15350:2000(E)

© ISO 2000

ISO 15350:2000(E)

I.S. EN ISO 15350:2010

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2000

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.ch Web www.iso.ch

Contents

Page

Forewo	ord		.iv
1	Scope		1
2	Normative refe	erences	1
3	Principle		2
4	Reagents		2
5	Apparatus		3
6	Test method		3
7	Sampling		4
8	Procedure		4
9	Expression of	results	10
10	Test report		11
Annex	A (informative)	Examples of diagram for analytical principles	13
Annex	B (informative)	Example calculation of a linearity check	19
Annex	C (informative)	Additional information on international cooperative tests	20
Annex	D (informative)	Graphical representation of precision data	24

ISO 15350:2000(E)

Foreword

SO (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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 15350 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 1, *Methods of determination of chemical composition*.

Annexes A to D of this International Standard are for information only.

Steel and iron — Determination of total carbon and sulfur content — Infrared absorption method after combustion in an induction furnace (routine method)

1 Scope

This International Standard specifies an infrared absorption method, after combustion in an induction furnace, for the determination of the total carbon and sulfur content in steel and iron.

The method is applicable to carbon contents of mass fraction between 0,005 % and 4,3 % and to sulfur contents of mass fraction between 0,000 5 % and 0,33 %.

This method is intended to be used in normal production operations and is intended to meet all generally accepted, good laboratory practices of the type expected by recognized laboratory accreditation agencies. It uses commercially available equipment, is calibrated and calibration verified using steel and iron certified reference materials, and its performance is controlled using normal statistical process control (SPC) practices.

This method can be used in the single element mode, i.e., determination of carbon and sulfur independently or in the simultaneous mode, i.e., determination of carbon and sulfur concurrently.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard 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 437:1982, Steel and cast iron — Determination of total carbon content — Combustion gravimetric method.

ISO 4934:1980, Steel and cast iron — Determination of sulfur content — Gravimetric method.

ISO 4935:1989, Steel and iron — Determination of sulfur content — Infrared absorption method after combustion in an induction furnace.

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 9556:1989, Steel and Iron — Determination of total carbon content — Infrared absorption method after combustion in an induction furnace.

ISO 10701:1994, Steel and iron — Determination of sulfur content — Methylene blue spectrophotometric method.



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation