



NSAI
Standards

Irish Standard
I.S. EN ISO 3907:2009

Hardmetals - Determination of total carbon - Gravimetric method (ISO 3907:2009)

I.S. EN ISO 3907:2009

Incorporating amendments/corrigenda issued since publication:

<i>This document replaces:</i> EN 23907:1993	<i>This document is based on:</i> EN ISO 3907:2009 EN 23907:1993	<i>Published:</i> 1 October, 2009 25 March, 1994
This document was published under the authority of the NSAI and comes into effect on: 10 November, 2009		ICS number: 77.160
NSAI 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie
Údarás um Chaighdeáin Náisiúnta na hÉireann		

I.S. EN ISO 3907:2009

EUROPEAN STANDARD

EN ISO 3907

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2009

ICS 77.160

Supersedes EN 23907:1993

English Version

Hardmetals - Determination of total carbon - Gravimetric method (ISO 3907:2009)

Métaux-durs - Dosage du carbone total - Méthode
gravimétrique (ISO 3907:2009)

Hartmetalle - Bestimmung des Gesamtkohlenstoff-
Gehaltes - Gravimetrisches Verfahren (ISO 3907:2009)

This European Standard was approved by CEN on 29 September 2009.

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, 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

Contents

Page

Foreword.....	3
----------------------	----------

Foreword

This document (EN ISO 3907:2009) has been prepared by Technical Committee ISO/TC 119 "Powder metallurgy".

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 April 2010, and conflicting national standards shall be withdrawn at the latest by April 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.

This document supersedes EN 23907:1993.

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, 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 3907:2009 has been approved by CEN as a EN ISO 3907:2009 without any modification.

This page is intentionally left BLANK.

I.S. EN ISO 3907:2009
**INTERNATIONAL
STANDARD**

**ISO
3907**

Third edition
2009-10-01

**Hardmetals — Determination of total
carbon — Gravimetric method**

Métaux-durs — Dosage du carbone total — Méthode gravimétrique



Reference number
ISO 3907:2009(E)

© ISO 2009

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.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

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.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 3907 was prepared by Technical Committee ISO/TC 119, *Powder metallurgy*, Subcommittee SC 4, *Sampling and testing methods for hardmetal*.

This third edition cancels and replaces the second edition (ISO 3907:1985), which has been technically revised.

Hardmetals — Determination of total carbon — Gravimetric method

1 Scope

This International Standard specifies a gravimetric method for the determination of the mass fraction of total carbon in carbides and hardmetals.

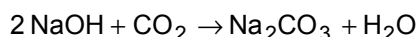
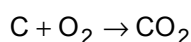
This method is applicable to

- carbides of chromium, hafnium, molybdenum, niobium, tantalum, titanium, vanadium, tungsten and zirconium,
 - mixtures of these carbides and binder metals, free of lubricant,
 - all grade of presintered or sintered hardmetals, produced from these carbides, and
- having a mass fraction of total carbon exceeding 4 %.

2 Principle

Oxidation of carbon to carbon dioxide at a high temperature in a stream of pure oxygen, with the addition of a flux, if necessary.

Absorption of the carbon dioxide, carried by oxygen, by Ascarite¹⁾ in a tared bulb. Determination of the increase in mass of the Ascarite¹⁾ which corresponds to the quantity of carbon dioxide formed.



3 Reagents

During the analysis, use only reagents of recognized analytical grade, and only distilled water or water of equivalent purity.

3.1 Oxygen, with a limitation of carbon-containing impurities of $\leq 0,6$ ml of carbon per cubic metre of oxygen.

1) Ascarite is the trade name of a product supplied by Arthur H. Thomas Co. This information is given for the convenience of users of the International Standard and does not constitute an endorsement by ISO of the product named. Equivalent products may be used if they can be shown to lead to the same results.

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

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-