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**Kõvasulamid. Süsiniku üldsisalduse määramine.  
Kaalumeetod**

Hardmetals - Determination of total carbon content -  
Gravimetric method

## EESTI STANDARDI EESSÕNA

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Käesolev Eesti standard EVS-EN ISO 3907:2009 sisaldb Euroopa standardi EN ISO 3907:2009 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 3907:2009 consists of the English text of the European standard EN ISO 3907:2009.
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ICS 77.160

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN ISO 3907

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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.

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## 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of an identical text or by endorsement, at the latest by April 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

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### Endorsement notice

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

# 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

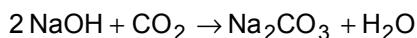
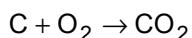
- carbides of chromium, hafnium, molybdenum, niobium, tantalum, titanium, vanadium, tungsten and zirconium,
- mixtures of these carbides and binder metals, free of lubricant,
- all grade of presintered or sintered hardmetals, produced from these carbides, and

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 Ascarite<sup>1)</sup> in a tared bulb. Determination of the increase in mass of the Ascarite<sup>1)</sup> 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  $\leq 0,6 \text{ ml}$  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.