

Steels - Determination of depth of decarburization

Steels - Determination of depth of decarburization

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 3887:2004 sisaldab Euroopa standardi EN ISO 3887:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 3887:2004 consists of the English text of the European standard EN ISO 3887:2003.</p> <p>This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

<p>Käsitlusala:</p> <p>This International Standard defines decarburization and specifies three methods of measuring the depth of decarburization of non-alloy and low-alloy steels.</p>	<p>Scope:</p> <p>This International Standard defines decarburization and specifies three methods of measuring the depth of decarburization of non-alloy and low-alloy steels.</p>
--	--

ICS 77.040.99

Võtmesõnad:

English version

Steels

**Determination of depth of decarburization
(ISO 3887 : 2003)**

Aciers – Détermination de la profondeur de décarburation
(ISO 3887 : 2003)

Stahl – Bestimmung der Entkohlungstiefe (ISO 3887 : 2003)

This European Standard was approved by CEN on 2003-01-17.

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.

CEN

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

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

Foreword

International Standard

ISO 3887 : 2003 Steels – Determination of depth of decarburization,

which was prepared by ISO/TC 17 'Steel' of the International Organization for Standardization, has been adopted by Technical Committee ECISS/TC 2 'Steel – Physico-chemical and non-destructive testing', the Secretariat of which is held by AFNOR, 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 September 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 3887 : 2003 was approved by CEN as a European Standard without any modification.

1 Scope

This International Standard defines decarburization and specifies three methods of measuring the depth of decarburization of non-alloy and low-alloy steels.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4545, *Metallic materials — Hardness test — Knoop test*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 9556, *Steel and iron — Determination of total carbon content — Infrared absorption method after combustion in an induction furnace*

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

decarburization

loss of carbon from the surface zone of the steel where the loss is:

- a) either partial decarburization, d_3 ;
- b) or complete decarburization, d_1 , measured as the distance between the surface of the product and the point at which carbon is detectable

NOTE The depth of complete decarburization as described in b) is determined by examination of the microstructure.

3.2

depth of functional decarburization

d_2

distance between the surface of the product and the point at which the carbon content or hardness is at the level where the performance of the product would be unaffected by a reduction in carbon (i.e., at the minimum level specified in the product standard)