Steels - Determination and verification of the depth of carburized and hardened cases

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 2639:2003 sisaldab Euroopa standardi EN ISO 2639:2002 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 2639:2003 consists of the English text of the European standard EN ISO 2639:2002.

Käesolev dokument on jõustatud 19.03.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 19.03.2003 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 International Standard defines the effective case depth, and specifies methods for the determination of this depth, in steel

Scope:

This International Standard defines the effective case depth, and specifies methods for the determination of this depth, in steel

ICS 77.040.99

Võtmesõnad: carburizing, case hardening, case-hardening, dimensional measurement, hardness measurement, knoop hardness, rockwell hardness, rockwell hardness measurement, steels, testing, tests, thickness, vickers hardness, vickers hardness measurement

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 2639

November 2002

040.99

English version

Steel

Determination and verification of the depth of carburized and hardened cases (ISO 2639: 2002)

Acier – Détermination et vérification de la profondeur de cémentation (ISO 2639: 2002)

Stahl - Bestimmung und Prüfung der Einsatzhärtungstiefe (ISO 2639 : 2002)

This European Standard was approved by CEN on 2002-10-15.

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, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzer-land, and the United Kingdom.

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

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EN ISO 2639: 2002

Foreword

International Standard

ISO 2639: 2002 Steel – Determination and verification of the depth of carburized and hardened cases, 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 March 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, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 2639 : 2002 was approved by CEN as a European Standard without any modification.

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

1 Scope

This International Standard defines the case-hardened depth, and specifies methods for the determination of this depth, in steel.

It is applicable to

- a) carburized cases and carbonitrided cases;
- b) parts that, when heat treated to final hardness, have a hardness of less than 450 HV 1 at a distance of three times the case-hardened depth, from the surface.

The case-hardened depth is defined by special agreement where these conditions are not met.

For steels that, in the part under test, and at a distance of three times the case-hardened depth from the surface, present a hardness greater than 450 HV 1, the criterion can still be used, provided that a limiting hardness value greater than 550 HV 1 – in steps of 25 units – be selected for the case-hardened depth.

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 4545, Metallic materials — Hardness test — Knoop test

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