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25 - October School Sch Floor cutting-off machines - Safety CONSOLIDATED **TEXT**



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN
13862:2002+A1:2009 sisaldab Euroopa
standardi EN 13862:2001+A1:2009
ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 25.03.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13862:2002+A1:2009 consists of the English text of the European standard EN 13862:2001+A1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 25.03.2009.

The standard is available from Estonian standardisation organisation.

ICS 93.080.10

Võtmesõnad: ehitamine, jätkukohad, liikurseadmed, lõikamine, ohud, ohutus, ohutusmeetmed, ohutusseadised, paiksed seadmed, signaliseerimine, teed, tehnilised andmed, õnnetuste vältimine

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2009

EN 13862:2001+A1

ICS 93.080.10

Supersedes EN 13862:2001

English Version

Floor cutting-off machines - Safety

Machines à scier les sols - Sécurité

Bodentrennschleifmaschinen - Sicherheit

This European Standard was approved by CEN on 25 July 2001 and includes Amendment 1 approved by CEN on 15 February 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

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Foreword

This document (EN 13862:2001+A1:2009) has been prepared by Technical Committee CEN/TC 151 "Construction equipment and building material machines - Safety", the secretariat of which is held by DIN.

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 September 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-02-15.

This document supersedes A EN 13862:2001 A.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive(s).

A) For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. (A)

A₁ deleted text (A₁

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 United Kingdom.

Introduction

This European Standard is a Type C-standard as stated in A EN ISO 12100-1:2003 (4).

The machinery concerned and the extent to which hazards are covered are indicated in the scope of this European Standard.

1 Scope

This European Standard applies to $\boxed{\ }$ deleted text $\boxed{\ }$ pedestrian controlled floor sawing machines having power feed, manual feed or hand feed (see 3.2) for sawing, grooving and milling floor surfaces made of concrete, asphalt and similar mineral building materials where the main power is supplied by electric or internal combustion prime engine. The power transmission of floor sawing machines is mechanical or hydraulic.

This European Standard deals with all significant hazards pertinent to floor sawing machines, when they are used as intended and under the conditions foreseen by the manufacturer (see clause 4). This European Standard specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards.

These machines are designed for use with rotating cutting-off wheels for wet and dry cutting. These cutting-off wheels can be either a diamond cutting-off wheel or a boron nitride cutting-off wheel.

NOTE Other types of cutting tools may also be used provided that they fall within the design and usage parameters of the machine. This standard does not cover this.

This European Standard does not apply to:



- machines moving along a rail;
- hand-held portable cutting off machines for construction materials mounted on a mobile support, to be used as floor saws;
- remote controlled machines.

This European Standard covers electrical hazards by making reference to relevant European Standards (see 5.2).

Those hazards that are relevant for all mechanical, electrical, hydraulic and other equipment or machinery and that are dealt with in standards for common use are not covered by this European Standard. Reference to pertinent standards is made where such standards are applicable and so far necessary.

In this European Standard, floor sawing machines are called "machines", and cutting-off wheels are called "tools".

This European Standard applies primarily to machines which are manufactured after the date of approval of the standard by CEN.

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. [41]

A₁) deleted text (A₁)

A) EN 206-1:2000, Concrete — Part 1: Specification, performance, production and conformity (4)

EN 294:1992, Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs

A1) deleted text (A1)

♠ EN 953 ♠ Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards

A1) deleted text (A1)

EN 982:1996, Safety of machinery — Safety requirements for fluid power systems and their components - Hydraulics

A1) deleted text (A1)

A EN 13218:2002 M, Machine tools — Safety — Stationary grinding machines

EN 60204-1:2006, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005, modified) (A)

♠ EN 60335-1:2002, Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60033-1:2001, modified) ♠

♠ EN 60335-2-41:2003, Household and similar electrical appliances — Safety — Part 2-41: Particular requirements for pumps (IEC 60335-2-41:2002) ♠

EN 60529:1991, Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)

EN 61029-1:2000 (A), Safety of transportable motor operated electric tools — Part 1: General requirements (IEC 61029-1:1990, modified)

prEN ISO 3744:2006, Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering method for an essentially free field over a reflecting plane (ISO/DIS 3744:2006) (A)

EN ISO 5349-2:2001, Mechanical vibration — Measurement and evaluation of human exposure to hand-transmitted vibration — Part 2: Practical guidance for measurement at the workplace (ISO 5349-2:2001)

EN ISO 8041:2005, Human response to vibration — Measuring instrumentation (ISO 8041:2005) [A]

EN ISO 11201:1995, Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at the work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995)

♠ EN ISO 12100-1:2003, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)

EN ISO 12100-2:2003, Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)

EN ISO 13732-1:2008, Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces (ISO 13732-1:2006)

EN ISO 13849-1:2008, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)

EN ISO 20643:2008, Mechanical vibration — Hand-held and hand-guided machinery — Principles for evaluation of vibration emission (ISO 20643:2005) [41]

ISO 525:1999, Bonded abrasive products — General requirements

[A] ISO 6104:2005, Superabrasive products — Rotating grinding tools with diamond or cubic boron nitride — General survey, designation and multilingual nomenclature [A]

[A] ISO 5348:1998, Mechanical vibration and shock — Mechanical mounting of accelerometers [A]

[A] ISO 6395:2008 (A], Acoustics — Measurement of exterior noise emitted by earth-moving machinery — Dynamic test conditions

(A) ISO 7000:2004 (A), Graphical symbols for use on equipment — Index and synopsis

of vib. (A) ISO 16063-1:1998, Methods for the calibration of vibration and shock transducers — Part 1: Basic concepts (A1