

Betoonpõrandasse soonelõikurmasinad. Ohutus

Floor sawing machines - Safety

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 13862:2002 sisaldab Euroopa standardi EN 13862:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.03.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 13862:2002 consists of the English text of the European standard EN 13862:2001.</p> <p>This document is endorsed on 14.03.2002 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> |
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| <p>Käsitlusala:</p> <p>This European Standard applies to self-propelled ride on and pedestrian controlled floor sawing machines having power feed, manual feed or hand feed 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.</p> | <p>Scope:</p> <p>This European Standard applies to self-propelled ride on and pedestrian controlled floor sawing machines having power feed, manual feed or hand feed 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.</p> |
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Võtmesõnad: ehitamine, jätkukohad, liikurseadmed, löikamine, ohud, ohutus, ohutusmeetmed, ohutusseadised, paigsed seadmed, signaliseerimine, teed, tehnilised andmed, õnnetuste vältimine

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.

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.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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Contents**Page**

| | |
|--|----|
| Foreword | 3 |
| 0 Introduction | 4 |
| 1 Scope..... | 4 |
| 2 Normative references..... | 5 |
| 3 Terms and definitions..... | 6 |
| 3.1 Floor sawing machine | 6 |
| 3.2 Types of machines..... | 6 |
| 3.3 Parts of a floor sawing machine | 6 |
| 3.4 Cutting head | 8 |
| 3.5 Rated spindle speed | 8 |
| 3.6 Tool(s)..... | 8 |
| 3.7 Tool flange..... | 8 |
| 3.8 Tool guard..... | 8 |
| 3.9 Nominal mass | 8 |
| 3.10 Maximum operating mass | 8 |
| 4 List of significant hazards..... | 9 |
| 5 Safety requirements and/or measures | 10 |
| 5.1 Mechanical hazards | 10 |
| 5.2 Electrical hazards..... | 14 |
| 5.3 Thermal hazards | 15 |
| 5.4 Exhaust fumes (and gas) | 15 |
| 5.5 Machines having a hydraulic power transmission..... | 15 |
| 5.6 Fluid containers..... | 16 |
| 5.7 Water supply and dust emission | 16 |
| 5.8 Rotational speed | 16 |
| 5.9 Noise..... | 16 |
| 5.10 Maintenance | 17 |
| 6 Verification of safety requirements and/or measures | 17 |
| 7 Information for use | 17 |
| 7.1 Marking..... | 17 |
| 7.2 Accompanying documents | 18 |
| Annex A (normative) Noise test code - Grade 2 of accuracy..... | 22 |
| Annex B (normative) Dimensions of the flanges for cutting-off diamond wheels..... | 25 |
| Annex C (normative) Strength of the guards - State of the art concerning the characteristics of guards used with cutting-off wheels..... | 27 |
| Annex D (normative) Pictograms | 31 |
| Annex E (normative) Verification of surface temperature..... | 33 |
| Annex ZA (informative) Relationship of this document with EC Directives | 34 |
| Bibliography..... | 35 |

Foreword

This European Standard 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 March 2002, and conflicting national standards shall be withdrawn at the latest by March 2002.

This European Standard replaces EN 500-5:1995.

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).

For relationship with EU Directives, see informative annex ZA, which is an integral part of this standard.

The annex A is normative and contains "Noise test code - Grade 2 of accuracy", annex B is normative and contains "Dimensions of the flanges for cutting-off diamond wheels", annex C is normative and contains "Strength of guards - State of the art concerning the characteristics of guards used with cutting-off wheels", annex D is normative and contains „Pictograms“, the annex E is normative and contains „Verification of surface temperature“ and the annex ZA is informative and contains „Relationship of this document with EC Directives“.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

0 Introduction

This European standard is a Type C-standard as stated in EN 292.

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 self-propelled ride-on¹⁾ and 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.

¹⁾ Specific requirements related to the operator's station and the mobility of ride-on machines will be added later on by an amendment.

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

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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| EN 292-1:1991 | Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology |
| EN 292-2:1991 | Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications |
| EN 294:1992 | Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs |
| EN 563:1994 | Safety of machinery - Temperatures of touchable surfaces - Ergonomics data to establish temperature limit values for hot surfaces |
| EN 953:1997 | Safety of machinery – Guards - General requirements for the design and construction of fixed and movable guards |
| EN 954-1:1996 | Safety of machinery - Safety related parts of control systems - Part 1: General principles of design |
| EN 982:1996 | Safety of machinery - Safety requirements for fluid power systems and their components - Hydraulics |
| EN 1070:1998 | Safety of machinery – Terminology |
| prEN 13218:1998 | Machine tools – Safety – Stationary grinding machines |
| EN 60204-1:1997 | Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:1997) |
| EN 60335-1:1994 | Safety of household and similar electrical appliances - Part 1: General requirements (IEC 60335-1:1991, modified) |
| EN 60335-2-41:1996 | Safety of household and similar electrical appliances – Part 2: Particular requirements for pumps for liquids having a temperature not exceeding 35 °C (IEC 60335-2-41:1996) |
| EN 60529:1991 | Degrees of protection provided by enclosures (IP code) (IEC 60529:1989) |
| EN 61029-1:1995 | Safety of transportable motor operated electric tools - Part 1: General requirements (IEC 61029-1:1990, modified) |

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| EN ISO 3744:1995 | Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994) |
| 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) |
| ISO 525:1999 | Bonded abrasive products - General requirements |
| ISO 6104:1979 | Abrasive products - Diamond or cubic boron nitride grinding wheels and saws - General survey, designation and multilingual nomenclature |
| ISO 6395:1988 | Acoustics - Measurement of exterior noise emitted by earth-moving machinery - Dynamic test conditions |
| ISO 7000:1989 | Graphical symbols for use on equipment - Index and synopsis |

3 Terms and definitions

For the purposes of this European Standard the terms and definitions stated in EN 1070:1998 apply. Additional terms and definitions specifically needed for this European Standard are added below.

3.1 Floor sawing machine

Mobile machine used on sites, designed for sawing, grooving and grinding ground surfaces made of concrete, asphalt and similar mineral building materials which is ride-on operated or pedestrian controlled

3.2 Types of machines

Floor sawing machines may be of the following types:

3.2.1 Hand feed machine

Machine in which the feed movement is effected by the pushing action of the operator

3.2.2 Machine with manual feed by mechanical means

Machine in which the feed movement is effected by manual operation of a crank or wheel

3.2.3 Self-propelled machine

Machine whose feed movement is obtained by a power source via mechanical or hydraulic power transmission. Self-propelled machines are ride-on operated or pedestrian controlled

3.3 Parts of a floor sawing machine

A floor sawing machine generally comprises the parts shown in figure 1