Müüritis- ja kivitükelduspingid tööobjektil. Ohutus KONSOLIDEERITUD TEKST

Masonry and stone cutting-off machines for job site -CEX OCCUPANT Safety CONSOLIDATED TEXT



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12418:2000+A1:2009 sisaldab Euroopa standardi EN 12418:2000+A1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2009 käskkirjaga ja jõustub sellekohase

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

Standard on kättesaadav Eesti standardiorganisatsioonist.

teate avaldamisel EVS Teatajas.

This Estonian standard EVS-EN 12418:2000+A1:2009 consists of the English text of the European standard EN 12418:2000+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 91,220

Võtmesõnad:

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 12418:2000+A1

ICS 91.220

Supersedes EN 12418:2000

English Version

Masonry and stone cutting-off machines for job site - Safety

Scies de chantier à tronçonner les matériaux - Sécurité

Steintrennmaschinen für den Baustelleneinsatz - Sicherheit

This European Standard was approved by CEN on 3 May 2000 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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Com	ents	Page
Forew	ord	3
	uction	
1	Scope	4
2	Normative references	
3	Terms and definitions	
4	List of significant hazards	
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9	Safety requirements and/or measures Mechanical hazard Electrical hazards Thermal hazards Exhaust fumes (and gas) Fluid containers Protection against water splashes Rotational speed Noise Maintenance	11 15 15 16 16 16 16
6	Verification of safety requirements and/or measures	17
7 7.1 7.2	Information for use	17
Annex	A (normative) Noise test code - Grade 2 of accuracy	22
Annex	B (normative) Dimensions of the flanges for cutting-off diamond wheel	25
	C (normative) Strength of guards - State of the art concerning the characteristics of guards used with cutting-off wheels	
Annex	D (normative) Pictograms	31
Annex	E (normative) Verification of surface temperature	33
Annex	F (normative) A Vibration test code (A)	34
	ZA (informative) A Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by 98/79/EC 4	
	ZB (informative) And Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC (And Inc.)	39
Bibliog	graphy	40

Foreword

This document (EN 12418:2000+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 EN 12418:2000.

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)

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 wheel", annex C is normative and contains "Strength of cutting-off wheel guards ", the annex D is normative and contains "Pictograms", the annex E is normative and contains "Verification of surface temperature" $\boxed{\mathbb{A}}$, the Annex F is normative and contains "Vibration text code" $\boxed{\mathbb{A}}$ and the annex ZA is informative and contains "Relationship of this European Standard with EU Directives"; this European Standard also contains a Bibliography.

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 EN ISO 12100-1:2003 (4).

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

1 Scope

This European Standard applies to transportable masonry and stone cutting-off machines stationary during work, principally used on job site building construction for cutting-off stones, other mineral construction materials and composite materials having at least one supporting surface. The power for the tool rotation is supplied by electrical or internal combustion prime motor. This European Standard deals with all significant hazards pertinent to masonry and stone cutting-off machines for job site (see clause 4), when they are used as intended and under the conditions foreseen by the manufacturer. 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 diamond cutting-off wheels with a continuous rim and/or segmented rim.

This European Standard does not apply to:

- metal cutting-off machines;
- wood and timber sawing machines;
- machines with a feed or descent mechanism other than manual, or with a pedal;
- mobile machines on a trolley travelling on the ground;
- hand-held portable grinding and cutting-off machines;
- hand-held portable grinding and cutting-off machines mounted on a support to be used in a fixed position.

This European Standard does not cover the operation of transportable masonry and stone cutting-off machines in potential explosive atmospheres.

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

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

In this standard, the masonry and stone cutting-off machines for job site construction are called: "cutting-off machines" or "machines", and cutting-off wheels are also called: "tools".

This standard applies primarily to the 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. (4)
- A₁) deleted text (A₁)
- EN 953 (A), Safety of machinery General requirements for the design and construction of guards (fixed, movable)
- A1) deleted text (A1)
- (A) EN 12096:1997, Mechanical vibration Declaration and verification of vibration emission values
- A) EN 13218:2002 (A), 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) (A)
- EN 60335-2-41:2003, Household and similar electrical appliances Safety Part 2-41: Particular requirements for pumps (IEC 60335-2-41:2002) (A)
- EN 61029-1:2000 (A), Safety of transportable motor operated electric tools Part 1: General requirements (IEC 61029-1:1990, modified)
- prEN 61029-2-7:1992, Safety of transportable motor operated electric tools Part 2-7: Particular requirements for diamond saws with water supply
- Prenticolar prenti
- 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 a work station and at other specified positions Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995) (A)
- ♠ 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 13857:2008, Safety of machinery Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)

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

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

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

Methods

Occurrence of the control o ISO 16063-1:1998, Methods for the calibration of vibration and shock transducers — Part 1: Basic concepts (A1