Südamikpuurimismasinad alusel. Ohutus

Core drilling machines on stand - Safety

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12348:2000 sisaldab Euroopa standardi EN 12348:2000 ingliskeelset teksti. Käesolev dokument on jõustatud 18.12.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12348:2000 consists of the English text of the European standard EN 12348:2000. This document is endorsed on 18.12.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard applies to core drilling machines on transportable stands equipped with a diamond core drill bit, usually with a water supply connection device, and intended to drill holes into stone, concrete and similar mineral materials in a stationary position where the power for the tool rotation is supplied by an electrical, hydraulic, pneumatic or internal combustion prime motor.	**Scope:** This standard applies to core drilling machines on transportable stands equipped with a diamond core drill bit, usually with a water supply connection device, and intended to drill holes into stone, concrete and similar mineral materials in a stationary position where the power for the tool rotation is supplied by an electrical, hydraulic, pneumatic or internal combustion prime motor.

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Võtmesõnad:

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English version

Core drilling machines on stand
Safety

Foreuses à béton (carotteuses) sur colonne – Sécurité

Kernbohrmaschinen auf Ständer – Sicherheit

This European Standard was approved by CEN on 2000-06-26.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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CEN

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

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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 January 2001, and conflicting national standards shall be withdrawn at the latest by January 2001.

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 Directive(s), see informative Annex ZA, which is an integral part of this standard.

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.

The annex A is normative and contains "Noise test code - Grade 2 of accuracy", annex B is normative and contains "Pictograms", annex C is normative and contains "Verification of surface temperature", and the annex ZA is informative and contains „Relationship of this European Standard with EU Directives".

This European Standard also contains a Bibliography.

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 standard.

This European standard has been prepared by taking into account the safety requirements of EN 791:1995 which are applicable to core drilling machines on a stand.

1 Scope

This European Standard applies to core drilling machines on transportable stands equipped with a diamond core drill bit, usually with a water supply connection device, and intended to drill holes into stone, concrete and similar mineral materials in a stationary position where the power for the tool rotation is supplied by an electrical, hydraulic, pneumatic or internal combustion prime motor.

The feed movement of the drill head and core drill bit may be effected by manual, mechanical or hydraulic means.

This European Standard deals with all significant hazards pertinent to core drilling machines on a stand when used as intended and under the conditions foreseen by the manufacturer (see clause 4). This standard specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards.

This standard does not apply to :

- percussive or rotary-percussive rock drills either mounted or unmounted;
- hand held power drills;
- hydraulic or pneumatic power supply sources;
- mobile undercarriages to which machines can be fitted

This European Standard does not apply to machinery covered by EN 791:1995.

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 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 as is necessary.

In this European Standard, core drilling machines on a stand are called "machines" and diamond core drill bits are called “tools”.

NOTE: The term "diamond" is used as a generic word which covers all varieties of abrasive products such as diamond, borum nitride.

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 references, 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).

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 791:1995	Drill rigs - Safety
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 for design
EN 982:1996	Safety of machinery - Safety requirements for fluid power systems and their components - Hydraulics
EN 983:1996	Safety of machinery - Safety requirements for fluid power systems and their components - Pneumatics
EN 1070:1998	Safety of machinery - Terminology
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 essential free field over a reflecting plane (ISO 11201:1995)
EN 60204-1:1997	Safety of machinery - Electrical equipment of machine - 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 61029-1:2000	Safety of transportable motor operated electric tools - Part 1: General requirements (IEC 61029-1:1990, modified)
prEN 61029-2-6:1992	Safety of transportable motor operated electric tools - Part 2-6: Particular requirements for diamond drills with water supply

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 Core drilling machine

Machine used to drill holes with a diamond core bit into walls, floors and ceilings made of concrete, natural stone and other mineral building materials. The machine is mounted on a transportable stand having a drive spindle which is equipped with a core drill bit. It is (generally) equipped with a water supply. It may have manual or powered feed. Figure 1 shows a typical example of a core drilling machine.