

**Mullatöömasinad. Ohutus. Osa 12: Nõuded
kaabelekkavaatoritele KONSOLIDEERITUD TEKST**

Earth-moving machinery - Safety - Part 12:
Requirements for cable excavators CONSOLIDATED
TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 474-12:2007+A1:2008 sisaldab Euroopa standardi EN 474-12:2006+A1:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 10.11.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.10.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 474-12:2007+A1:2008 consists of the English text of the European standard EN 474-12:2006+A1:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 10.11.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 01.10.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

**Earth-moving machinery - Safety - Part 12: Requirements for
cable excavators**

Engins de terrassement - Sécurité - Partie 12: Prescriptions
applicables aux pelles à câbles

Erdbaumaschinen - Sicherheit - Teil 12: Anforderungen für
Seilbagger

This European Standard was approved by CEN on 17 April 2006 and includes Amendment 1 approved by CEN on 18 August 2008.

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Foreword

This document (EN 474-12:2006+A1:2008) 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of an identical text or by endorsement, at the latest by April 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document supersedes EN 474-12:2006.

This document includes Amendment 1, approved by CEN on 2008-08-18.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

This document 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.

A1 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

For bibliographic references, see EN 474-1:2006.

EN 474 "Earth-moving machinery — Safety" comprises the following parts:

- Part 1: General requirements
- Part 2: Requirements for tractor-dozers
- Part 3: Requirements for loaders
- Part 4: Requirements for backhoe-loaders
- Part 5: Requirements for hydraulic excavators
- Part 6: Requirements for dumpers
- Part 7: Requirements for scrapers
- Part 8: Requirements for graders
- Part 9: Requirements for pipelayers
- Part 10: Requirements for trenchers
- Part 11: Requirements for earth and landfill compactors
- Part 12: Requirements for cable excavators

This European Standard is intended for use in combination with Part 1 of the series.

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 part of EN 474 is a type C standard as stated in EN ISO 12100-1:2003.

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

When provisions of this type C standard are different from those stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

1 Scope

This part of EN 474 deals with all significant hazards, hazardous situations and events relevant to cable excavators as defined in EN ISO 6165:2006, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4).

This European Standard applies also to cable excavators, their undercarriage and upper-structure, if intended for use in combination with other equipment or attachment, such as drill rigs, pile driving and extracting equipment and moving equipment (e.g. rail track, walking legs, pontoon, ship) or stationary undercarriage. This European Standard is not dealing with the specific hazards due to these additional equipment or attachment.

NOTE For these additional equipment or attachment, relevant specific European Standards should be considered where available, for example:

- for pile driving and extracting equipment: EN 996:1995;
- for drill rigs: EN 791:1995.

The requirements of this part are complementarily to the common requirements formulated in EN 474-1:2006.

This part does not repeat the requirements from EN 474-1:2006, but adds or replaces the requirements for application for cable excavators.

This part specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards, hazardous situations and events during commissioning, operation and maintenance of the machinery in the scope.

This European Standard is not applicable to cable excavators manufactured before the date of publication of this European Standard by CEN.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 474-1:2006, *Earth-moving machinery — Safety — Part 1: General requirements*.

EN 791:1995, *Drill rigs — Safety*.

EN 12643:1997, *Earth-moving machinery — Rubber-tyred machines — Steering requirements (ISO 5010:1992, modified)*.

EN 60204-32:1998, *Safety of machinery — Electrical equipment of machines — Part 32: Requirements for hoisting machines (IEC 60204-32:1998)*.

EN ISO 2867:2006, *Earth-moving machinery — Access systems (ISO 2867:2006)*.

EN ISO 6165:2006, *Earth-moving machinery — Basic types — Identification and terms and definitions (ISO 6165:2006)*.

EN ISO 7096:2000, *Earth moving machinery — Laboratory evaluation of operator seat vibration (ISO 7096:2000)*.

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

ISO 4310:1981, *Cranes — Test code and procedures*.

ISO 6014:1986, *Earth-moving machinery — Determination of ground speed*

ISO 7546:1983, *Earth moving machinery — Loader and front loading excavator buckets — Volumetric ratings*.

ISO 10262:1998, *Earth-moving machinery — Hydraulic excavators — Laboratory tests and performance requirements for operator protective guards*.

ISO 15219:2004, *Earth-moving machines — Cable excavators — Terminology and commercial specifications*.

3 Terms and definitions, symbols and abbreviated terms

For the purposes of this European Standard, the terms and definitions given in EN 474-1:2006, EN ISO 12100-1:2003, ISO 15219:2004 and the following apply.

NOTE 1  The terms used for cable excavators  are defined in ISO 15219:2004 and illustrated in Annex C.

NOTE 2 Definitions used in EN and ISO standards referred to in this European Standard are also valid for this document.

3.1

cable excavator

excavator (see EN ISO 6165:2006), having a wire rope-operated upper structure primarily designed for excavating with a dragline bucket, a front shovel or grab, used for compacting material with a compaction plate, for demolition work by hook or ball and for material handling with special equipment and attachment

3.2

boom hoist system

consists of the boom (lower-, intermediate- and head-section), the A-frame system and the boom hoist winch system

3.3

lift system

consists of the main winch system used for earth-moving-, demolition-, compaction- and object-handling (e. g. with hook assembly) application

4 List of additional significant hazards

See Annex A

NOTE Annex A (normative) contains all the significant hazards, hazardous situations and events, as far as they are dealt with in this European Standard, identified by risk assessment as significant for this type of machinery and which require action to eliminate or reduce the risk.

5 Safety requirements and/or measures

5.1 General

Cable excavators shall comply with the requirements of EN 474-1:2006, as far as not modified or replaced by the requirements of this part.

5.2 Access

EN 474-1:2006, 5.2 applies with the following exception:

Dimension code G in Figure 2 of EN ISO 2867:2006 may be > 600 mm when the hand rails/handholds are placed in the door opening.