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Earth-moving machinery - Safety - Part 10:  
Requirements for trenchers CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 474-10:2007+A1:2009 sisaldab Euroopa standardi EN 474-10:2006+A1:2009 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 27.03.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 11.02.2009.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 474-10:2007+A1:2009 consists of the English text of the European standard EN 474-10:2006+A1:2009.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 27.03.2009 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 11.02.2009.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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ICS 53.100

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English Version

## Earth-moving machinery - Safety - Part 10: Requirements for trenchers

Engins de terrassement - Sécurité - Partie 10: Prescriptions applicables aux trancheuses

Erdbaumaschinen - Sicherheit - Teil 10: Anforderungen für Grabenfräsen

This European Standard was approved by CEN on 17 April 2006 and includes Amendment 1 approved by CEN on 20 December 2008.

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.

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## Foreword

This document (EN 474-10:2006+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 August 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-12-20.

This document supersedes <sup>A1</sup> EN 474-10:2006 <sup>A1</sup>.

The start and finish of text introduced or altered by amendment is indicated in the text by tags <sup>A1</sup> <sup>A1</sup>.

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.

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

For bibliographic references, see <sup>A1</sup> EN 474-1:2006+A1:2009 <sup>A1</sup>.

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.

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## 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 which are 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.

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## 1 Scope

This part of EN 474 deals with all significant hazards, hazardous situations and events relevant to trenchers 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).

The requirements of this part are complementary to the common requirements formulated in <sup>A1</sup> EN 474-1:2006+A1:2009 <sup>A1</sup>.

This part does not deal with the specific hazards related to derivative use.

This part does not repeat the requirements from <sup>A1</sup> EN 474-1:2006+A1:2009 <sup>A1</sup>, but adds or replaces the requirements for application for trenchers.

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 trenchers.

This European Standard is not applicable to trenchers 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.

<sup>A1</sup> EN 474-1:2006+A1:2009 <sup>A1</sup>, *Earth-moving machinery — Safety — Part 1: General requirements*

<sup>A1</sup> *deleted text* <sup>A1</sup>

<sup>A1</sup> EN ISO 3411:2007, *Earth-moving machinery — Physical dimensions of operators and minimum operator space envelope (ISO 3411:2007)* <sup>A1</sup>

<sup>A1</sup> EN ISO 3471:2008, *Earth-moving machinery - Roll-over protective structures - Laboratory tests and performance requirements (ISO 3471:2008)* <sup>A1</sup>

<sup>A1</sup> EN ISO 6682:2008, *Earth-moving machinery — Zones of comfort and reach for controls (ISO 6682:1986 including Amendment 1:1989)* <sup>A1</sup>

<sup>A1</sup> EN ISO 7096:2008 <sup>A1</sup>, *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)*

<sup>A1</sup> ISO 6016:2008 <sup>A1</sup>, *Earth-moving machinery — Methods of measuring the masses of whole machines, their equipment and components*

<sup>A1</sup> ISO 6393:2008, *Earth-moving machinery - Determination of sound power level - Stationary test conditions* <sup>A1</sup>

<sup>A1</sup> ISO 6394:2008 <sup>A1</sup>, *Earth-moving machinery — Determination of emission sound pressure level at operator's position — Stationary test conditions*

ISO 12509:2004, *Earth-moving machinery — Lighting, signalling and marking lights, and reflex-reflector devices*

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