



NSAI
Standards

Irish Standard
I.S. EN 474-1:2006+A5:2018

Earth-moving machinery - Safety - Part 1: General requirements

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I.S. EN 474-1:2006+A5:2018

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National Foreword

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 474-1:2006+A5

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Supersedes EN 474-1:2006+A4:2013

English Version

**Earth-moving machinery - Safety - Part 1: General
requirements**

Engins de terrassement - Sécurité - Partie 1:
Prescriptions générales

Erdbaumaschinen - Sicherheit - Teil 1: Allgemeine
Anforderungen

This European Standard was approved by CEN on 17 April 2006 and includes Amendment 5 approved by CEN on 1 October 2017.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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European foreword

This document (EN 474-1:2006+A5:2018) 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of an identical text or by endorsement, at the latest by July 2018, and conflicting national standards shall be withdrawn at the latest by July 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Corrigendum 1 issued by CEN on 2014-03-05, Amendment 1, approved by CEN on 2009-01-04, Amendment 3, approved by CEN on 2013-01-06, Amendment 4, approved by CEN on 2013-08-10 and Amendment 5, approved by CEN on 2017-10-01.

This document supersedes A5 EN 474-1:2006+A4:2013 A5.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1 and A3 A3 and A4 A4 and A5 A5.

The modifications of the related CEN Corrigendum have been implemented at the appropriate places in the text and are indicated by the tags AC AC.

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 A3 informative Annex ZA A3, which is an integral part of this document. A1

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 pipe-layers*
- *Part 10: Requirements for trenchers*

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- *Part 11: Requirements for earth and landfill compactors*
- *Part 12: Requirements for cable excavators*

For specific machines covered by other parts of the standard, this European Standard is intended for use in combination with relevant other parts 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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the 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 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 **A3** European Standard **A3** specifies the general safety requirements for earth-moving machinery¹⁾ described in EN ISO 6165:2006, except rollers and horizontal directional drill.

NOTE 1 Rollers are covered by EN 500.

NOTE 2 Horizontal directional drills are covered by EN 791.

This **A3** European Standard **A3** also applies to derivative machinery (see 3.1.2) designed primarily for use with equipment to loosen, pick-up, move, transport, distribute and grade earth and rock.

This **A3** European Standard **A3** gives the common safety requirements for earth-moving machinery families and is intended to be used in conjunction with one of the EN 474 parts 2 to 12. These machine specific parts (EN 474-2 to -12) do not repeat the requirements from **A1** EN 474-1:2006+A1:2009 **A1**, but add or replace the requirements for the family in question.

NOTE 3 The requirements specified in this part of the standard are common to two or more families of earth-moving machinery.

A4 This part gives specific requirements for demolition machinery. **A4**

Specific requirements in EN 474 parts 2 to 12 take precedence over the respective requirements of **A1** EN 474-1:2006+A1:2009 **A1**.

For multipurpose machinery the parts of the standard that cover the specific functions and applications have to be used e.g. a compact loader also used as a trencher shall use the relevant requirements of EN 474 parts 1, 3 and 10.

The standard also covers general requirements for attachments intended to be used with earth moving machine families covered in the scope.

A1 Except for part 12 this European Standard does not deal **A1** with the electrical hazards related to the main circuits and drives of machinery when the principal source of energy is electrical.

A1 This European Standard does not deal with towing of trailers. **A1**

This European Standard deals with all significant hazards, hazardous situations and events relevant to earth-moving machinery, when used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4). This European Standard 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 earth-moving machinery.

This European Standard is not applicable to earth moving machines, which are manufactured before the date of publication of this European Standard by CEN.

¹⁾ For travelling on public roads the national traffic regulations apply until harmonised requirements are available. (A CEN-standard is under preparation.)

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