

# Earth-moving machinery — Safety —

## Part 7: Requirements for scrapers

The European Standard EN 474-7:1998 has the status of a  
British Standard

ICS 53.100

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# National foreword

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The UK participation in its preparation was entrusted by Technical Committee B/513, Construction equipment and plant, and site safety, to Subcommittee B/513/1, Earth-moving machinery (International), which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

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## Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 10, an inside back cover and a back cover.

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English version

## Earth-moving machinery — Safety — Part 7: Requirements for scrapers

Engins de terrassement — Sécurité —  
Partie 7: Exigences applicables aux décapeuses

Erdbaumaschinen — Sicherheit —  
Teil 7: Anforderungen für Scraper

This European Standard was approved by CEN on 2 March 1998.

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**CEN**

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

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

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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of an identical text or by endorsement, at the latest by September 1998, and conflicting national standards shall be withdrawn at the latest by September 1998.

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.

The annex A is normative and contains “List of additional hazards”, and the annex B is informative and contains “Illustrations”.

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 rope excavators*.

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

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## 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.

## 1 Scope

This European Standard specifies additional requirements to and/or exceptions from EN 474-1:1994, *Earth-moving machinery — Safety — Part 1: General requirements*.

This European Standard applies to wheel and crawler scrapers defined in ISO 6165:1997, and gives additional requirements for derived machinery.

This European Standard deals with all significant hazards pertinent to scrapers when they are used as intended and under the conditions foreseen by the manufacturer (see annex A of this European Standard and annex C of EN 474-1:1994). This European Standard specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards.

## 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.

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 specification*.

EN 474-1:1994, *Earth-moving machinery — Safety — Part 1: General Requirements*.

ENV 1070:1993, *Safety of machinery — Terminology*.

EN 60068-2-27:1993, *Basic environmental testing procedures — Part 2: Tests — Test Ea and guidance: Shock*.

EN 60204-1:1992, *Safety of machinery — Electrical equipment — Part 1: General requirements*.

EN 60529:1991, *Degrees of protection provided by enclosures (IP Code)*.

ISO 3457:1986, *Earth-moving machinery — Guards and shields — Definitions*.

ISO 4250-2:1991, *Narrow and wide base off-road tyres and rims — Part 2: Loads and inflation pressures*.

ISO/DIS 4250-3:1993, *Earth-mover tyres and rims — Part 3: Rims*.

ISO 5006-1:1991, *Earth-moving machinery — Operator's field of view — Part 1: Test method*.

ISO 5353:1995, *Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point*.

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

ISO 6165:1997, *Earth-moving machinery — Basic types — Vocabulary*.

ISO/DIS 6393:1995, *Acoustics — Measurement of exterior noise emitted by earth-moving machinery — Stationary test conditions*.

ISO 6405-1:1991, *Earth-moving machinery — Symbols for operator controls and other displays — Part 1: Common symbols*.

ISO 6405-2:1993, *Earth-moving machinery — Symbols for operator controls and other displays — Part 2: Specific symbols for machines, equipment and accessories*.

ISO 6682:1986, *Earth-moving machinery — Zones of comfort and reach for controls*.

ISO 7133:1994, *Earth-moving machinery — Tractor-scrapers — Terminology and commercial specifications*.

ISO 9244:1995, *Earth-moving machinery — Safety signs and hazard pictorials — General principles*.

ISO/DIS 9249:1995, *Earth-moving machinery — Engine test code — Net power*.

ISO 10263-2:1994, *Earth-moving machinery — Operator enclosure environment — Part 2: Air filter test*.

ISO 10263-4:1994, *Earth-moving machinery — Operator enclosure environment — Part 4: Operator enclosure ventilation, heating and/or air-conditioning test method*.

ISO 10268:1993, *Earth-moving machinery — Retarders for dumpers and tractor-scrapers — Performance tests*.

ISO 10968:1995, *Earth-moving machinery — Operator's controls*.

ISO 12509:1995, *Earth-moving machinery — Lighting, signalling and marking lights, and reflex-reflector devices*.

ISO/DIS 13766:1996, *Earth-moving machinery — Electromagnetic compatibility*.