

**Earth-moving machinery - Design requirements for circulation on the road**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15573:2008 sisaldab Euroopa standardi EN 15573:2008 ingliskeelset teksti.

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ICS 53.100

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English Version

## Earth-moving machinery - Design requirements for circulation on the road

Engins de terrassement - Prescriptions de conception pour la circulation sur route

Erdbaumaschinen - Anforderungen an die Anwendung auf der Straße

This European Standard was approved by CEN on 7 March 2008.

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## Foreword

This document (EN 15573:2008) 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of an identical text or by endorsement, at the latest by November 2008, and conflicting national standards shall be withdrawn at the latest by November 2008.

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 standard intends to harmonise the various technical requirements of the EEA applicable to earth-moving machinery for their circulation on the road. Earth-moving machinery fulfilling the requirements of this standard may be subject to certain administrative provisions before being permitted to travel on the road.

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 the United Kingdom.

## **Introduction**

This European Standard is a type C standard as stated in EN ISO 12100.

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

## 1 Scope

This European Standard specifies the requirements for earth-moving machinery described in EN ISO 6165 [2], intended to travel on the road.

This European Standard specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards, hazardous situations and events during on road travel of earth-moving machinery.

This European Standard does not apply to earth-moving machinery with a width exceeding 3 metres (see 4.2.5).

This European Standard does not apply to earth-moving machinery on legs e.g. walking excavators.

This European Standard does not cover the hazards relevant to non-riding and remote control earth-moving machinery.

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

## 2 Normative references

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

EN 474 (all parts), *Earth-moving machinery — Safety*

EN 500 (all parts), *Mobile road construction machinery — Safety*

EN ISO 3450:1996, *Earth-moving machinery — Braking systems of rubber-tyred machines — Systems and performance requirements and test procedures* (ISO 3450:1996)

EN ISO 3457, *Earth-moving machinery — Guards — Definitions and requirements* (ISO 3457:2003)

EN ISO 6683, *Earth-moving machinery — Seat belts and seat belt anchorages — Performance requirements and tests* (ISO 6683:2005)

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

ISO 1724:2003, *Road vehicles — Connectors for the electrical connection of towing and towed vehicles — 7-pole connector type 12 N (normal) for vehicles with 12 V nominal supply voltage*

ISO 5006:2006, *Earth-moving machinery — Operator's field of view — Test method and performance criteria*

ISO 5010, *Earth-moving machinery — Rubber-tyred machines — Steering requirements*

ISO 5676:1983, *Tractors and machinery for agriculture and forestry — Hydraulic coupling — Braking circuit*

ISO 6011, *Earth-moving machinery — Visual display of machine operation*

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

ISO 6016, *Earth-moving machinery — Methods of measuring the masses of whole machines, their equipment and components*

ISO/FDIS 6395:2007, *Earth-moving machinery — Determination of sound power level — Dynamic test conditions*

ISO 6489-3:2004, *Agricultural vehicles — Mechanical connections between towed and towing vehicles — Part 3: Tractor drawbar*

ISO 6746-1, *Earth-moving machinery — Definitions of dimensions and codes — Part 1: Base machine*

ISO 6746-2, *Earth-moving machinery — Definitions of dimensions and codes — Part 2: Equipment and attachments*

ISO 9533, *Earth-moving machinery — Machine mounted forward and reverse audible warning alarm — Sound test method*

ISO 10261, *Earth-moving machinery — Product identification numbering system*

ISO 10263-5, *Earth-moving machinery — Operator enclosure environment — Part 5: Windscreen defrosting system test method*

ISO 10265, *Earth-moving machinery — Crawler machines — Performance requirements and test procedures for braking systems*

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

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

ISO/DIS 14401-1:2007, *Earth-moving machinery — Field of vision of surveillance and rear-view mirrors — Part 1: Test methods*

ISO/DIS 14401-2:2007, *Earth-moving machinery — Field of vision of surveillance and rear-view mirrors — Part 2: Performance criteria*

ISO/DIS 15998:2005, *Earth-moving machinery — Machine-control systems (MCS) using electronic components — Performance criteria and tests for functional safety*

ISO 21507, *Earth-moving machinery — Performance requirements for non-metallic fuel tanks*

### **3 Terms and definitions**

For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003 apply.

Earth-moving machinery and their families are defined in EN ISO 6165 [2].

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

Additional definitions specifically needed for this European Standard are added below.

#### **3.1 intended operation**

use in earth-moving operation e.g. excavation, loading, transportation, drilling, spreading, compacting or trenching of earth, rock or other materials