

## **Mullatöömasinad. Ligipääsuavade minimaalmõõtmed**

Earth-moving machinery - Minimum access dimensions

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 2860:2008 sisaldab Euroopa standardi EN ISO 2860:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 15.12.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.09.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 2860:2008 consists of the English text of the European standard EN ISO 2860:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 15.12.2008 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 17.09.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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ICS 53.100

Võtmesõnad:

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English Version

Earth-moving machinery - Minimum access dimensions (ISO  
2860:1992)

Engins de terrassement - Dimensions minimales des  
passages (ISO 2860:1992)

Erdbaumaschinen - Öffnungen - Mindestmaße (ISO  
2860:1992)

This European Standard was approved by CEN on 25 August 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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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

The text of ISO 2860:1992 has been prepared by Technical Committee ISO/TC 127 "Earth-moving machinery" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 2860:2008 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 March 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

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 supersedes EN ISO 2860:1999.

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 EC Directive(s).

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

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.

### Endorsement notice

The text of ISO 2860:1992 has been approved by CEN as a EN ISO 2860:2008 without any modification.

## **Annex ZA (informative)**

### **Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive Machinery 98/37/EC, amended by 98/79/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements **1.1.2d** and **1.6.2** of that Directive and associated EFTA regulations.

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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## **Annex ZB (informative)**

### **Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements **1.1.6** and **1.6.2** of that Directive and associated EFTA regulations.

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# Earth-moving machinery — Minimum access dimensions

## 1 Scope

This International Standard specifies the minimum access openings on earth-moving machinery as defined in ISO 6165 for

- a) hand access,
- b) head access,
- c) body access,
- d) arm access,
- e) two-handed access.

It provides engineers and designers with information in order that the access openings provided on equipment and machinery for purposes of inspection, adjustment and maintenance have sufficient dimensions for the intended function by personnel in the field or shop.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to

agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3411:1982, *Earth-moving machinery — Human physical dimensions of operators and minimum operator space envelope*.

ISO 6165:1987, *Earth-moving machinery — Basic types — Vocabulary*.

## 3 Minimum access openings

The dimensions shown in 3.1 to 3.4 are the recommended minimum for limited activity through the opening. Larger openings will be needed in specific instances, depending upon the nature of the task, size and mass of the parts, etc. Such larger openings can be more useful and allow greater efficiency.

The larger openings for access with arctic clothing are for earth-moving machines and equipment intended for use in cold environments.

Based on available anthropometric data, the recommended openings, in figures 1 to 5, are the smallest that will accommodate the 95th percentile operator as defined in ISO 3411.

In all cases in 3.1 to 3.4, all corners may have an optional maximum 25 mm radius.