EESTI STANDARD EVS-EN 1837:1999



# Masinate ohutus. Masinate tervikvalgustus

Safety of machinery - Integral lighting of machines

EESTI STANDARDIKESKUS

**EESTI STANDARDI EESSÕNA** **NATIONAL FOREWORD**

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| Käesolev Eesti standard EVS-EN 1837:1999 sisaldab Euroopa standardi EN 1837:1999 ingliskeelset teksti.<br><br>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.<br><br>Standard on kättesaadav Eesti standardiorganisatsioonist. | This Estonian standard EVS-EN 1837:1999 consists of the English text of the European standard EN 1837:1999.<br><br>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.<br><br>The standard is available from Estonian standardisation organisation. |

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| **Käsitlusala:**<br>This standard specifies the parameters of integral lighting systems designed to provide illumination in and/or at both stationary and mobile machines to enable the safe use of the machine and the efficient performance of the visual task within and/or at the machine to be carried out This standard does not specify lighting systems mounted on the machine to specifically illumination visual tasks outside the machine. The function and requirements of these systems are specified in the European Standard dealing with the lighting of work places. This European Standard is under preparation. This standard does not establish additional quirements for the operation of lighting systems - in severe conditions (extreme environmental conditions such as freezer applications, high temperatures, etc.); - subject to special rules (e.g. explosive atmospheres);- where the transmittance is reduced by environmental conditions, such as smoke, splashing etc. | **Scope:**<br>This standard specifies the parameters of integral lighting systems designed to provide illumination in and/or at both stationary and mobile machines to enable the safe use of the machine and the efficient performance of the visual task within and/or at the machine to be carried out This standard does not specify lighting systems mounted on the machine to specifically illumination visual tasks outside the machine. The function and requirements of these systems are specified in the European Standard dealing with the lighting of work places. This European Standard is under preparation. This standard does not establish additional quirements for the operation of lighting systems - in severe conditions (extreme environmental conditions such as freezer applications, high temperatures, etc.); - subject to special rules (e.g. explosive atmospheres);- where the transmittance is reduced by environmental conditions, such as smoke, splashing etc. |

**ICS** 91.160.10

**Võtmesõnad:** accident prevention, human factor engineering, illuminance, inspection, installation, lamps, lighting, lighting equipment, luminaires, maintenance, quality, safety of machines

# EUROPEAN STANDARD
# NORME EUROPÉENNE
# EUROPÄISCHE NORM

EN 1837

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ICS 13.110; 91.160.10

Descriptors: Machinery, safety, lighting.



**English version**

Safety of machinery

## Integral lighting of machines

Sécurité des machines – Eclairage intégré aux machines

Sicherheit von Maschinen – Maschinenintegrierte Beleuchtung

This European Standard was approved by CEN on 1999-01-25.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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



Ref. No. EN 1837 : 1999 E

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 169 "Light and lighting", 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 1999, and conflicting national standards shall be withdrawn at the latest by August 1999.

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.

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.

This European Standard is a type B standard as stated in EN 292-1 and is a supplement to EN 292-2. The machinery concerned and the extent to which hazards are covered are indicated in the scope of this standard.

## Introduction

To illuminate visual tasks within and/or at machines integral lighting systems (built in or at machines) can be required. These integral lighting systems require special characteristics that allow both safe use and efficient performance of the visual task by the operator during operation and service.

## 1 Scope

This standard specifies the parameters of integral lighting systems designed to provide illumination in and/or at both stationary and mobile machines to enable the safe use of the machine and the efficient performance of the visual task within and/or at the machine to be carried out.

This standard does not specify lighting systems mounted on the machine to specifically illuminate visual tasks outside the machine. The function and requirements of these systems are specified in the European Standard dealing with the lighting of work places. This European Standard is under preparation.

This standard does not establish additional requirements for the operation of lighting systems

- in severe conditions (extreme environmental conditions such as freezer applications, high temperatures, etc.);
- subject to special rules (e.g. explosive atmospheres);
- where the transmittance is reduced by environmental conditions, such as smoke, splashing, etc.

## 2 Normative references

This European Standard incorporates by dated or undated reference, 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.

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|---|---|---|
| EN 292-1 | 1991 | Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology |
| EN 292-2 | 1995 | Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications |
| EN 1070 | 1998 | Safety of machinery - Terminology |
| EN 60598 | | Luminaires |
| prEN 12464 | | Lighting applications - Lighting of work places |
| prEN 12665 | | Lighting applications - Basic terms and criteria for specifying lighting requirements |