

## **Ekraanid laseriga töökohtades. Ohutusnõuded ja katsetamine**

Screens for laser working places - Safety requirements and testing

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12254:2010 sisaldab Euroopa standardi EN 12254:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.05.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 24.03.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12254:2010 consists of the English text of the European standard EN 12254:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.05.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 24.03.2010.

The standard is available from Estonian standardisation organisation.

ICS 13.280

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English Version

## Screens for laser working places - Safety requirements and testing

Écrans pour postes de travail au laser - Exigences et essais de sécurité

Abschirmungen an Laserarbeitsplätzen - Sicherheitstechnische Anforderungen und Prüfung

This European Standard was approved by CEN on 20 February 2010.

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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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## Foreword

This document (EN 12254:2010) has been prepared by Technical Committee CEN/TC 85 "Eye protective equipment", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

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 12254:1998+A2:2008.

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 Annex ZA, which is an integral part 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, Croatia, 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.

## 1 Scope

This European Standard specifies functional requirements and a product labelling applicable to temporary and permanent passive guards (in the following called screens) for protection against laser radiation. This standard includes test methods for testing functional performance and the specification of the user documentation to be supplied with the product. The screens are designed to protect the user from:

- unintentional exposure to direct and/or diffuse laser radiation;
- a time limited exposure to laser radiation, based on the functional requirements determined by risk assessment.

This European Standard applies to supervised screens for installations in working places at which laser radiation up to a maximum mean power of 100 W or single pulse energy of 30 J occurs within the spectral range between 180 nm (0,18  $\mu\text{m}$ ) and  $10^6$  nm (1 000  $\mu\text{m}$ ).

This European Standard applies to the protection against laser radiation only. This standard does not apply to other hazards including hazards from secondary radiation that can arise during, for example, material processing.

This European Standard gives guidance on how to select such screens.

Laser enclosures and housings that are supplied as part of the laser product or are supplied to be fitted to a laser system to form a laser product (according to EN 60825-1) are not considered to be within the scope of the standard.

## 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 165:2005, *Personal eye-protection — Vocabulary*

EN 166:2001, *Personal eye-protection — Specifications*

EN 168:2001, *Personal eye-protection — Non-optical test methods*

EN 1598:1997, *Health and safety in welding and allied processes — Transparent welding curtains, strips and screens for arc welding processes*

EN 1598:1997/A1:2001, *Health and safety in welding and allied processes — Transparent welding curtains, strips and screens for arc welding processes*

EN 60825-1:2007, *Safety of laser products — Part 1: Equipment classification and requirements (IEC 60825-1:2007)*

EN 60825-4:2006, *Safety of laser products — Part 4: Laser guards (IEC 60825-4:2006)*

IEC 60050-845:1987, *International Electrotechnical Vocabulary — Chapter 845: Lighting*