

# ILNAS

Institut luxembourgeois de la normalisation  
de l'accréditation, de la sécurité et qualité  
des produits et services

## ILNAS-EN 169:2002

### **Personal eye-protection - Filters for welding and related techniques - Transmittance requirements and recommended use**

Protection individuelle de l'oeil - Filtres  
pour le soudage et les techniques  
connexes - Exigences relatives au facteur  
de transmission et utilisation

Persönlicher Augenschutz - Filter für das  
Schweißen und verwandte Techniken -  
Transmissionsanforderungen und  
empfohlene Anwendung

11/2002



## National Foreword

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English version

## Personal eye-protection - Filters for welding and related techniques - Transmittance requirements and recommended use

Protection individuelle de l'oeil - Filtres pour le soudage et les techniques connexes - Exigences relatives au facteur de transmission et utilisation recommandée

Persönlicher Augenschutz - Filter für das Schweißen und verwandte Techniken - Transmissionsanforderungen und empfohlene Anwendung

This European Standard was approved by CEN on 2 October 2002.

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## Foreword

This document (EN 169:2002) 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of an identical text or by endorsement, at the latest by May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

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 EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The annexes A and C are informative. Annex B is normative.

In the revision of this European Standard, and that of EN 379, which was performed concurrently, it was decided to remove from EN 379 welding filters with dual scale numbers and include them within this European Standard.

This document supersedes EN 169:1992.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies the scale numbers and transmittance requirements for filters intended to protect operators performing work involving welding, braze-welding, air-arc gouging and plasma jet cutting. It also includes requirements for welding filters with dual scale numbers.

The other applicable requirements for these types of filters are given in EN 166. The requirements for the frames/mountings to which they are intended to be fitted are given in EN 175.

Guidance on the selection and use of these filters are given in Annex A.

The specifications for welding filters with switchable luminous transmittance are given in EN 379.

## 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 (including amendments).

EN 165, *Personal eye-protection – Vocabulary*.

EN 166, *Personal eye-protection - Specifications*.

EN 167:2001, *Personal eye-protection – Optical test methods*.

ISO/CIE 10526:1999, *CIE standard illuminants for colorimetry*.

ISO/CIE 10527:1991, *CIE standard colorimetric observers*.

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 165 and the following apply.

### 3.1

#### **welding filter with dual scale number**

a protective filter with two different scale numbers (light and dark zones) which are divided into a maximum of three areas of the filter. The light zone is used for brief viewing when setting the electrode to the weld and igniting it. The dark zone is used for viewing the welding process

## 4 Designation and identification

The complete table of numbering of filters is given in EN 166.

The marking of oculars and frame is described in EN 166.

The scale number of these filters comprises only the shade number corresponding to the filter, from 1,2 to 16 (see Table 1).