### SVENSK STANDARD SS-EN ISO 10472-4:2008

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Säkerhetskrav för industriell tvättutrustning – Del 4: Torkutrustning (ISO 10472-4:1997)

Safety requirements for industrial laundry machinery – Part 4: Air dryers (ISO 10472-4:1997)

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Europastandarden EN ISO 10472-4:2008 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 10472-4:2008.

Denna standard ersätter SS-EN ISO 10472-4, utgåva 1.

The European Standard EN ISO 10472-4:2008 has the status of a Swedish Standard. This document contains the official English version of EN ISO 10472-4:2008.

This standard supersedes the Swedish Standard SS-EN ISO 10472-4, edition 1.



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### **EUROPEAN STANDARD**

### EN ISO 10472-4

### NORME EUROPÉENNE EUROPÄISCHE NORM

October 2008

ICS 97.060

Supersedes EN ISO 10472-4:1997

### **English Version**

### Safety requirements for industrial laundry machinery - Part 4: Air dryers (ISO 10472-4:1997)

Exigences de sécurité pour les machines de blanchisserie industrielle - Partie 4: Séchoirs à air (ISO 10472-4:1997)

Sicherheitsanforderungen für industrielle Wäschereimaschinen - Teil 4: Trockner (ISO 10472-4:1997)

This European Standard was approved by CEN on 12 October 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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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### SS-EN ISO 10472-4:2008 (E)

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### Foreword

The text of ISO 10472-4:1997 has been prepared by Technical Committee ISO/TC 72 "Textile machinery and machinery for dry-cleaning and industrial laundering" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 10472-4:2008 by Technical Committee CEN/TC 214 "Textile machinery and accessories" the secretariat of which is held by SNV.

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 April 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 10472-4:1997.

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 Directives.

For relationship with EC Directives, 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 10472-4:1997 has been approved by CEN as a EN ISO 10472-4:2008 without any modification.

### Introduction

This part of ISO 10472 is intended to instruct the designer of industrial laundry machinery in a systematic manner, focusing on his particular type of machine, regarding the relevant essential safety requirements, and to suggest possible state-of-the-art safety solutions.

The extent to which hazards are covered is indicated in the scope of this part of ISO 10472. In addition, machinery should comply as appropriate with ISO/TR 12100-1 and ISO/TR 12100-2 for hazards which are not specifically referred to in this part of ISO 10472.

All examples given in this part of ISO 10472 represent the state of the art. Equivalent solutions are acceptable, provided they attain at least the same safety level.

The designer is presumed to have taken into account all the provisions of ISO 10472-1 before considering this part of ISO 10472.

### Safety requirements for industrial laundry machinery —

### Part 4:

Air dryers

### 1 Scope

This part of ISO 10472 covers, together with ISO 10472-1, most significant hazards associated with air dryers, and in particular with tumble dryers having a net usable cage volume > 160 l and tunnel finishers including associated conveyors and cabinet dryers.

This part of ISO 10472 complements the basic requirements as laid down in ISO/TR 12100-1 and ISO/TR 12100-2. It also gives guidance to the designer on assessing the risks associated with the hazards (see EN 1050) and on selecting measures for attaining the required safety level.

This part of ISO 10472 does not apply to ancillary equipment.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10472. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreement based on this part of ISO 10472 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 6182-1:1993, Fire protection — Automatic sprinkler systems — Part 1: Requirements and test methods for sprinklers.

ISO 10472-1:1997, Safety requirements for industrial laundry machinery — Part 1: Common requirements.

ISO/TR 12100-1:1992, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology.

ISO/TR 12100-2:1992, Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications.

ISO 13849-1:—1), Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design.

ISO 13853:—1), Safety of machinery — Safety distances to prevent danger zones being reached by the lower limbs.

ISO 14119:—1), Safety of machinery — Interlocking devices associated with guards — Principles for design and selection.

IEC 335-1:1991, Safety of household and similar electrical appliances — Part 1: General requirements.

<sup>1)</sup> To be published.

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IEC 335-2-11:1993, Safety of household and similar electrical appliances — Part 2: Particular requirements for tumbler dryers.

EN 746-2:1997, Industrial thermoprocessing equipment — Part 2: Safety requirements for combustion and fuel handling systems.

EN 953:1997, Safety of machinery — General requirements for the design and construction of guards (fixed, movable).

EN 982:1996, Safety of machinery — Safety requirements for fluid power systems and components — Hydraulics.

EN 983:1996, Safety of machinery — Safety requirements for fluid power systems and components — Pneumatics.

EN 1050:1996, Safety of machinery — Risk assessment.

EN 1760-1:1997, Safety of machinery — Pressure sensitive protective devices — Part 1: General principles for the design and testing of pressure sensing mats and floors.

EN 1760-2:—1), Safety of machinery — Pressure sensitive protective devices — Part 2: General principles for the design and testing of pressure sensitive edges and pressure sensitive bars.

EN 50100-1:—1), Safety of machinery — Electro-sensitive protective devices — Part 1: General requirements and tests.

EN 60204-1:1992, Safety of machinery — Electrical equipment of machines — Part 1: General requirements. [IEC 204-1:1992, modified]

<sup>1)</sup> To be published.