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Tööstuspesumasinate ohutusnõuded. Osa 4: Õhkuivatid

Safety requirements for industrial laundry machinery
- Part 4: Air dryers

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 10472-4:1999 sisaldab Euroopa standardi EN ISO 10472-4:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 10472-4:1999 consists of the English text of the European standard EN ISO 10472-4:1997.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: Standardi EN ISO 10472 see osa ja EN ISO 10472-1 määravad kindlaks olulisemad ohud, mis seostuvad õhkkuivatite ja eriti trummelkuivatitega, mille kasulik netokambriimaht on üle 160 liitri, samuti tunnelpakkijatega, mille koosseisu kuuluvad asjakohased transportöörid ja kuivatuskambrid.</p>	<p>Scope: Standardi EN ISO 10472 see osa ja EN ISO 10472-1 määravad kindlaks olulisemad ohud, mis seostuvad õhkkuivatite ja eriti trummelkuivatitega, mille kasulik netokambriimaht on üle 160 liitri, samuti tunnelpakkijatega, mille koosseisu kuuluvad asjakohased transportöörid ja kuivatuskambrid.</p>
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Võtmesõnad: juhised, kontrollimine, kuivatid, märgistamine, ohud, ohutusabinõud, ohutusnõuded, pesumajad, pesupesemisseadmed, seadmete ohutus, tehnilised andmed, tekstiilitööstusseadmed, tööstusseadmed, õnnetusjuhtumite vältimine

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Safety requirements for industrial laundry machinery

Part 4: Air dryers
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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 1997-12-24.

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CEN

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

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Foreword

International Standard

ISO 10472-4 : 1997 Safety requirements for industrial laundry machinery – Part 4: Air dryers, which was prepared by ISO/TC 72 'Textile machinery and machinery for dry-cleaning and industrial laundering' of the International Organization for Standardization, has been adopted by CEN/TC 214 as a European Standard.

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 the relevant EU Directives.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 1998 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

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.

Endorsement notice

The text of the International Standard ISO 10472-4 : 1997 was approved by CEN as a European Standard without any modification.

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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.

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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.*

1) To be published.

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]

3 Definitions

For the purposes of this part of ISO 10472, the following definitions apply:

3.1

tumble dryer

Machine for moisture extraction from a load of damp textile material by tumbling in a rotating cage in an atmosphere of hot air produced by the tumble dryer.

NOTE — It may also be used to agitate the loads mechanically without hot air.

3.1.1

front-loaded tumble dryer

Tumble dryer in which the plane of the loading door is at a right angle to the axis of rotation of the cage.

3.1.2

pass-through tumble dryer

Tumble dryer having the loading and unloading doors on opposite sides.

3.1.3

tilting tumble dryer

Tumble dryer which tilts for loading and/or unloading.

3.1.4

automatic tilting tumble dryer

Tilting tumble dryer with the tilting motion to load and unload, and opening and closing doors, under automatic (not manual) control.

1) To be published.