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**Tööstuspesumasinate ohutusnõuded.
Osa 3: Pesutunnel-liinid koos
komponentseadmetega**

Safety requirements for industrial laundry machinery
- Part 3: Washing tunnel lines including component
machines

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 10472-3:1999 sisaldab Euroopa standardi EN ISO 10472-3:1997 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 10472-3:1999 consists of the English text of the European standard EN ISO 10472-3:1997.</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 pesutunnel-liinidega ja selliste komponentseadmetega nagu pidevtunneliga pesumasinad, väänamispressid või -tsentrifuugid, edasikandesüsteemid, automaatsed teisaldustrumlid, peale- või mahalaadimissüsteemi liidesed, juurdepääsuplatvormid ja redelid.</p>	<p>Scope:</p>
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ICS 97.060

Võtmesõnad: juhised, kontrollimine, märgistamine, ohud, ohutusabinõud, ohutusnõuded, pesumajad, pesupesemisseadmed, pesutunnel, seadmete ohutus, tehnilised andmed, tekstiilitööstusseadmed, tööstusseadmed, õnnetusjuhtumite vältimine

ICS 97.060

Descriptors: Laundry machinery, safety requirements.

English version

Safety requirements for industrial laundry machinery
Part 3: Washing tunnel lines including component machines
(ISO 10472-3 : 1997)

Exigences de sécurité pour les machines de blanchisserie industrielle – Partie 3: Trains de lavage incluant les machines composantes (ISO 10472-3 : 1997)

Sicherheitsanforderungen für industrielle Wäschereimaschinen – Teil 3: Durchlaufwaschanlagen einschließlich Einzelmaschinen (ISO 10472-3 : 1997)

This European Standard was approved by CEN on 1997-12-21.

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.

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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 10472-3 : 1997 Safety requirements for industrial laundry machinery – Part 3: Washing tunnel lines including component machines,

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 10472-3 : 1997 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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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 washing tunnel lines including component machines such as:

- continuous tunnel washing machines;
- squeeze presses or centrifugal extraction machines;
- transfer conveyor systems;
- automatic transfer tumblers;
- loading or unloading system interfaces;
- access platform and ladders.

This part of ISO 10472 does not cover particular hazards for continuous stand-alone washing lines for endless towels.

This part of ISO 10472 does not cover the hazards caused by processing work which may create an explosive or flammable atmosphere inside the machine.

This part of ISO 10472 complements the basic requirements 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, e. g. chemical store and supply pumps, steam valves and supply pipework, vent systems, work feed systems and discharge systems and ducting to the atmosphere.

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 13852:1996, *Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs.*

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

EN 616:—¹⁾, *Continuous handling equipment and systems — Common safety requirements for design, manufacturing, erection and commissioning stages.*

EN 620:—¹⁾, *Continuous handling equipment and systems — Equipment for mechanical handling both unit loads and bulk materials — Special safety requirements for design, manufacturing, erection and commissioning stages.*

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 1037:1995, *Safety of machinery — Prevention of unexpected start-up.*

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

washing tunnel line

Complete integrated system of linked machines for the washing, moisture extraction and drying or disentangling of discrete batches of textile fabric, including all necessary equipment for supply of water, steam, gas, electricity and chemicals.

3.2

continuous tunnel washing machine

Machine designed to wash items in successive loads as a continuous process.

NOTE — This machine may consist of one cage rotating around a longitudinal axis and subdivided into separate compartments, or several cages or several machines linked by means of a transfer system.

¹⁾ To be published.