

Tööstuspesumasinate ohutusnõuded. Osa 1: Ühtsed nõuded

Safety requirements for industrial laundry machinery
- Part 1: Common requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 10472-1:1999 sisaldab Euroopa standardi EN ISO 10472-1:1997 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 10472-1:1999 consists of the English text of the European standard EN ISO 10472-1:1997.</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:</p> <p>Standardi EN ISO 10472 eraldi osad määravad kindlaks olulisemad ohud, mis seostuvad tööstuspesumasinatega, mida kasutatakse muuhulgas hotellides, haiglates, hooldekodudes, vanglates jt samalaadsetes asutustes, samuti selvepesumajade pesumasinatega, mille miinimumvõimsus on kehtestatud EN ISO 10472 eraldi osades.</p>	<p>Scope:</p>
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ICS 97.060

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

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English version

Safety requirements for industrial laundry machinery

Part 1: Common requirements
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Exigences de sécurité pour les machines de blanchisserie industrielle – Partie 1: Prescriptions communes (ISO 10472-1 : 1997)

Sicherheitsanforderungen für industrielle Wäschereimaschinen – Teil 1: Gemeinsame Anforderungen (ISO 10472-1 : 1997)

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

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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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

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

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. The manufacturer's attention is drawn to the fact that 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 ISO 10472 represent the state of the art. Equivalent solutions are acceptable, provided they attain at least the same safety level.

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1 Scope

The individual parts of ISO 10472 identify all significant hazards associated with laundry machinery designed for use in industrial laundry premises, which includes hotels, hospitals, nursing homes, prisons and similar premises, as well as machines designed for use in self-service establishments subject to the minimum capacities stated in the separate parts of ISO 10472. Dry-cleaning presses and garment presses are also included.

Certain specialized finishing machines used for shaped items are excluded.

Household and similar electrical appliances (see IEC 335) are not covered by ISO 10472.

The individual parts of ISO 10472 complement the basic requirements laid down in ISO/TR 12100-1 and ISO/TR 12100-2. They give guidance to the designer on assessing the risks associated with the hazards (see EN 1050) and on selecting measures to attain the required safety level. "Use of machinery" comprises both intended use and reasonably foreseeable misuse.

The individual parts of ISO 10472 do not give specific technical advice about:

- the phases of life of the machine other than use;
- noise;
- laser;
- maintenance operations and elimination of process faults;
- ergonomics;
- explosions;
- isolation of energy sources;
- pressure vessels;
- hot surfaces necessarily exposed for production purposes [but see ISO 10472-6 (press head surface)].

The individual parts of ISO 10472 do not cover electromagnetic compatibility.

Hazards due to the use of gas within a machine which is not included in the range described in 5.5.2 of this part of ISO 10472 are not covered by the individual parts of ISO 10472.

Examples of layouts of a large- and a medium-size plant which show the machines of parts 2 to 6 of ISO 10472 are given in annex B.

The individual parts of ISO 10472 apply to machines which are manufactured after the date of issue of the relevant parts.

NOTE — For significant hazards concerned with construction, transport, commissioning, decommissioning, dismantling and disposal of the machine, see ISO/TR 12100-1:1992, 3.11, 3.12 and ISO/TR 12100-2:1992, 5.5.

The guidance contained in the individual parts of ISO 10472 is based on the assumption that the designer has completed a risk analysis of the machine under consideration. This will enable him to identify and fulfil the significant requirements for the machine as stipulated by the individual parts of ISO 10472.

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 5232:—¹⁾, *Graphical symbols for textile machinery.*

ISO 9398-1:1993, *Specifications for industrial laundry machines — Definitions and testing of capacity and consumption characteristics — Part 1: Flatwork ironing machines.*

ISO 9398-2:1993, *Specifications for industrial laundry machines — Definitions and testing of capacity and consumption characteristics — Part 2: Batch drying tumblers.*

ISO 9398-3:1993, *Specifications for industrial laundry machines — Definitions and testing of capacity and consumption characteristics — Part 3: Washing tunnels.*

ISO 9398-4:1993, *Specifications for industrial laundry machines — Definitions and testing of capacity and consumption characteristics — Part 4: Washer-extractors.*

ISO 10472-2:1997, *Safety requirements for industrial laundry machinery — Part 2: Washing machines and washer-extractors.*

ISO 10472-3:1997, *Safety requirements for industrial laundry machinery — Part 3: Washing tunnel lines including component machines.*

ISO 10472-4:1997, *Safety requirements for industrial laundry machinery — Part 4: Air dryers.*

ISO 10472-5:1997, *Safety requirements for industrial laundry machinery — Part 5: Flatwork ironers, feeders and folders.*

ISO 10472-6:1997, *Safety requirements for industrial laundry machinery — Part 6: Ironing and fusing presses.*

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:—²⁾, *Safety of machinery — Safety related parts of control systems — Part 1: General principles for design.*

ISO 13850:1996, *Safety of machinery — Emergency stop — Principles for design.*

ISO 13851:—²⁾, *Safety of machinery — Two-hand control devices — Functional aspects and design principles.*

1) To be published. (Revision of ISO 5232:1988)

2) To be published.

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

ISO 13853:—²⁾, *Safety of machinery — Safety distances to prevent danger zones being reached by the lower limbs.*

ISO 14119:—²⁾, *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.*

IEC 335-2-7:1993, *Safety of household and similar electrical appliances — Part 2: Particular requirements for washing machines.*

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

IEC 335-2-44:1987, *Safety of household and similar electrical appliances — Part 2: Particular requirements for electric ironers.*

EN 563:1994, *Safety of machinery — Temperatures of touchable surfaces — Ergonomics data to establish temperature limit values for hot surfaces.*

EN 614-1:1995, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles.*

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 fixed and movable guards.*

EN 999:—²⁾, *Safety of machinery — Hand/arm speed — Approach speed of parts of the body for the positioning of safety devices.*

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

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

EN 1760-2:—²⁾, *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:—²⁾, *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 definitions given in ISO 10472-2 to ISO 10472-6 and the following definition apply.

2) To be published.