

TÖÖSTUSPESUMASINATE OHUTUSNÕUDED. OSA 5:  
LAMETRIIKRAUAD, ETTEANDURID JA  
VOLTIMISSEADMED

Safety requirements for industrial laundry machinery -  
Part 5: Flatwork ironers, feeders and folders

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 10472-5:2008 sisaldab Euroopa standardi EN ISO 10472-5:2008 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 10472-5:2008 consists of the English text of the European standard EN ISO 10472-5:2008.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.11.2008.	Date of Availability of the European standard is 19.11.2008.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 97.060

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Koduleht [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto:info@evs.ee)

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage [www.evs.ee](http://www.evs.ee); phone +372 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

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

Exigences de sécurité pour les machines de blanchisserie  
industrielle - Partie 5: Sécheuses-repasseuses,  
engageuses et plieuses (ISO 10472-5:1997)

Sicherheitsanforderungen für industrielle  
Wäschereimaschinen - Teil 5: Mangeln, Eingabe- und  
Faltmaschinen (ISO 10472-5:1997)

This European Standard was approved by CEN on 23 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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

## Foreword

The text of ISO 10472-5:1997 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 10472-5:2008 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 May 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 10472-5:1997.

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 10472-5:1997 has been approved by CEN as a EN ISO 10472-5:2008 without any modification.

## **Annex ZA (informative)**

### **Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive Machinery 98/37/EC, amended by 98/79/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements (except 1.7.4. (f)) of that Directive and associated EFTA regulations.

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

## **Annex ZB (informative)**

### **Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive Machinery 2006/42/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements (except 1.4.2.1 § 2, 1.7.3, 1.7.4.2 t) and u)) of that Directive and associated EFTA regulations.

**WARNING —** Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

## Contents

	Page
<b>1</b> Scope .....	1
<b>2</b> Normative references .....	1
<b>3</b> Definitions .....	2
<b>4</b> Hazards .....	3
<b>5</b> Safety requirements and/or measures for the hazards identified in clause 4 .....	4
<b>5.1</b> General .....	4
<b>5.2</b> Mechanical hazards .....	4
<b>5.2.1</b> Bed and cylinder ironers .....	4
<b>5.2.2</b> All types of feeding, folding and multi-function machines .....	10
<b>5.3</b> Electrical hazards .....	11
<b>5.4</b> Thermal hazards .....	11
<b>5.4.1</b> Heated bed or rollers and heating system .....	11
<b>5.4.2</b> Heat radiation to the workplace .....	11
<b>5.4.3</b> Ironed work .....	11
<b>5.4.4</b> Ignition of the work .....	11
<b>5.5</b> Hazards generated by noise .....	11
<b>5.6</b> Hazards caused by fire and explosion from a gas-heated machine .....	12
<b>5.7</b> Hazards caused by harmful fumes from gas-heated machines .....	12
<b>5.8</b> Hazards due to neglect of ergonomic principles in machine design .....	12
<b>5.9</b> Hazards caused by unexpected ejection of fluids .....	12
<b>5.10</b> Failure of control systems .....	12
<b>6</b> Verification of safety requirements and/or measures .....	12
<b>7</b> Information concerning machine use .....	19
<b>7.1</b> Instruction handbook .....	19
<b>7.2</b> Warning signs .....	19

© ISO 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case postale 56 • CH-1211 Genève 20 • Switzerland  
Internet central@iso.ch  
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10472-5 was prepared by Technical Committee ISO/TC 72, *Textile machinery and machinery for dry-cleaning and industrial laundering*, Subcommittee SC 5, *Industrial laundry and dry-cleaning machinery*.

ISO 10472 consists of the following parts, under the general title *Safety requirements for industrial laundry machinery*:

- *Part 1: Common requirements*
- *Part 2: Washing machines and washer-extractors*
- *Part 3: Washing tunnel lines including component machines*
- *Part 4: Air dryers*
- *Part 5: Flatwork ironers, feeders and folders*
- *Part 6: Ironing and fusing presses*



## 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.