

**Masinate ohutus. Ohutusnõuded
paberivalmistamis- ja
viimistlusmasinate kavandamisele ja
valmistamisele. Osa 5: Masinad
lainepapi tootmiseks ja masinad
lehtpaberi ja lainepapi muunduseks**

Safety of machinery - Safety requirements for the design and construction of printing and paper converting machines - Part 5: Machines for the production of corrugated board and machines for the conversion of flat and corrugated board

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1010-5:2005 sisaldab Euroopa standardi EN 1010-5:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.07.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1010-5:2005 consists of the English text of the European standard EN 1010-5:2005.</p> <p>This document is endorsed on 15.07.2005 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>This standard applies to machines for the production of corrugated board and the conversion of flat and corrugated board: - corrugated board production machines; - folder gluer machines; - printer slotters, rotary die cutters and combined machines (inline machines); - hand-fed platen machines for cutting and creasing; - automatic platen machines for cutting and creasing; - tube winding machines.</p>	<p>Scope:</p> <p>This standard applies to machines for the production of corrugated board and the conversion of flat and corrugated board: - corrugated board production machines; - folder gluer machines; - printer slotters, rotary die cutters and combined machines (inline machines); - hand-fed platen machines for cutting and creasing; - automatic platen machines for cutting and creasing; - tube winding machines.</p>
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English version

Safety of machinery - Safety requirements for the design and construction of printing and paper converting machines - Part 5: Machines for the production of corrugated board and machines for the conversion of flat and corrugated board

Sécurité des machines - Prescriptions de sécurité pour la conceptions des machines d'impression, de transformation et définition du papier - Partie 5: Onduleuses et machines de transformation du carton plat et du carton ondulé

Sicherheit von Maschinen - Sicherheitsanforderungen an Konstruktion und Bau von Druck- und Papierverarbeitungsmaschinen - Wellpappenerzeugungs-, Flach- und Wellpappenverarbeitungsmaschinen

This European Standard was approved by CEN on 2 September 2004.

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

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

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Foreword

This document (EN 1010-5:2005) has been prepared by Technical Committee CEN/TC 198 "Printing and paper machinery - Safety", the secretariat of which is held by DIN.

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 November 2005, and conflicting national standards shall be withdrawn at the latest by November 2005.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directives.

For relationship with EU Directives, see informative Annex ZA, B, C or D which is an integral part 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This document is a type C standard as stated in EN ISO 12100-1:2003.

It contains additional safety requirements and/or deviations from EN 1010-1:2004. The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

For machines designed and built in compliance with this type C standard, the following rule applies: where provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards.

This standard consists of the following parts:

- Part 1 Common requirements
- Part 2 Printing and varnishing machines including pre-press machinery
- Part 3 Cutting machines
- Part 4 Bookbinding, paper converting and finishing machines
- Part 5 Machines for the production of corrugated board and machines for the conversion of flat and corrugated board

1 Scope

This standard applies to machines for the production of corrugated board and the conversion of flat and corrugated board:

- corrugated board production machines;
- folder gluer machines;
- printer slotters, rotary die cutters and combined machines (inline machines);
- hand-fed platen machines for cutting and creasing;
- automatic platen machines for cutting and creasing;
- tube winding machines.

This document shall be used together with EN 1010-1:2004. Both parts together identify all significant hazards relevant to machines for the production of corrugated board and the conversion of flat and corrugated board when they are used as intended and under the conditions foreseen by the manufacturer (see clause 4). The specific requirements in EN 1010-5 take precedence over respective requirements in EN 1010-1:2004.

This document does not deal with risks generated by noise emitted from the machines. These issues are fundamentally covered in EN 1010-1:2004. However, this document specifies requirements for noise reduction of corrugated board and flatbed punching machines.

This document is not applicable to machines for the production of corrugated board and machines for the conversion of flat and corrugated board which are manufactured before the date of publication of this document by CEN.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 418:1992, *Safety of machinery — Emergency stop equipment, functional aspects — Principles for design*

EN 619:2002, *Continuous handling equipment and systems — Safety and EMC requirements for equipment for mechanical handling of unit loads*

EN 954-1:1996, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

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

EN 1010-1:2004, *Safety of machinery — Technical safety requirements for the design and construction of printing and paper converting machines — Part 1: Common requirements*

EN 1050:1996, *Safety of machinery — Principles for risk assessment*

EN 1088:1996, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

EN 13023:2003, *Noise measurement methods for printing, paper converting, paper making machines and auxiliary equipment — Accuracy categories 2 and 3*

EN ISO 4871, *Acoustics — Declaration and verification of noise emission values of machinery and equipment*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*.

3 Terms and definitions

For the purposes of this European Standard, the terms given in EN ISO 12100-1:2003 and EN 1010-1:2004 and the following terms apply.

3.1

ESPD

electro-sensitive protective device

3.2

stop safe section

specific part of a machine or equipment which can be provided with a separate safeguard against restart