

**Masinate ohutus. Ohutusnõuded paberivalmistamis- ja viimistlusmasinate kavandamisele ja valmistamisele.
Osa 3: Kerimispingid ja pikilõikepingid, vineerimasinad**

Safety of machinery - Safety requirements for the design and construction of paper making and finishing machines - Part 3: Winders and slitters, plying machines

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1034-3:1999+A1:2010 sisaldab Euroopa standardi EN 1034-3:1999+A1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.01.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 02.12.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1034-3:1999+A1:2010 consists of the English text of the European standard EN 1034-3:1999+A1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.01.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 02.12.2009.

The standard is available from Estonian standardisation organisation.

ICS 85.100

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English Version

**Safety of machinery - Safety requirements for the design and
construction of paper making and finishing machines - Part 3:
Winders and slitters, plying machines**

Sécurité des machines - Prescriptions de sécurité pour la
conception et la construction de machines de fabrication et
de finition du papier - Partie 3: Visièuses, bobineuses et
machines de fabrication du papier multicouches

Sicherheit von Maschinen - Sicherheitsanforderungen an
Konstruktion und Bau von Maschinen der Papierherstellung
und Ausrüstung - Teil 3: Umroller,
Rollenschneidemaschinen, Doubliermaschinen

This European Standard was approved by CEN on 17 September 1999 and includes Amendment 1 approved by CEN on 17 November 2009.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 1034-3:1999+A1:2009) 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 June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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 includes Amendment 1 approved by CEN on 17 November 2009.

This document supersedes EN 1034-3:1999.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

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 EU Directive(s).

A1 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

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Introduction

This European Standard is a C type standard as stated in EN 1070:1998. The extent to which hazards are covered is indicated in the scope of this standard.

1 Scope

This European Standard applies to winders and slitters and plying machines and should be used together with **EN 1034-1:2000+A1:2010**. It deals with the significant hazards listed in clause 4. Respective safety requirements and/or measures are specified in clause 5. The specifications made in this standard take precedence over any deviating specification made in **EN 1034-1:2000+A1:2010**.

This standard does not apply to machines used in paper converting. See prEN 1010-1 to prEN 1010-5.

This standard applies to machines produced after 17.11.1999.

2 Normative references

This European Standard incorporates dated or undated provisions from other publications. These normative references are cited in the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 292-1:1991, *Safety of machinery - Basic concepts - General principles for design - Part 1: Basic terminology, methodology.*

EN 292-2:1991/ A1:1995, *Safety of machinery - Basic concepts - General principles for design - Part 2: Technical principles and specifications.*

EN 294:1992, *Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs.*

EN 349, *Safety of machinery - Minimum gaps to avoid crushing of parts of the human body.*

EN 418, *Safety of machinery - Emergency stop equipment, functional aspects - Principles for design.*

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

EN 982, *Safety of machinery - Safety requirements for fluid power systems and their components – Hydraulics.*

EN 983, *Safety of machinery - Safety requirements for fluid power systems and their components – Pneumatics.*

EN 1034-1:2000+A1:2010, *Safety of machinery - Safety requirements for the design and construction of paper making and finishing machines - Part 1: Common requirements.*

EN 1050, *Safety of machinery - Principles for risk assessment.*

EN 1070:1998, *Safety of machinery – Terminology.*

EN 1088, *Safety of machinery - Interlocking devices associated with guards - Principles for design and selection*.

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

EN 1837, *Safety of machinery - Integral lighting of machines*.

EN 13023, *Noise measurement methods for printing, paper converting, paper making machines and auxiliary equipment - Accuracy grades 2 and 3*

EN 60204-1:1992, *Safety of machinery - Electrical equipment - Part 1: General requirements*.

EN 61496-1, *Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests*.

3 Terms and definitions

For the purposes of this standard, the definitions given in EN 1034-1:2000+A1:2010, EN 1070:1998, EN 292-1:1991, and the following definitions apply:

3.1

winders

machines which prepare the web for subsequent processing, for example by changing the winding hardness, removing broken webs or turning over of the web. Figure 1 illustrates the principle of a winder.

3.2

slitters

machines for cutting web in the length direction and for winding the separate web. They can either have a winding shaft or are shaftless with a core tube. Depending on the type of design, slitters are classified into two-drum and centre-driven slitters.

Figure 2 illustrates the principle of a two-drum slitter, figure 3 illustrates the principle of a centre-driven slitter.

3.3

plying machines

machines which combine, wind and possibly slit 2 or more webs. Figure 4 illustrates the principle of a plying machine.