

**Jalatsi-, naha- ja kunstnahast toodete
valmistamise masinad. Lõikamis- ja
augustamismasinad. Ohutusnõuded**

Footwear, leather and imitation leather goods
manufacturing machines - Cutting and punching
machines - Safety requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 12044:2005 sisaldab Euroopa standardi EN 12044:2005 + AC:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.09.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 12044:2005 consists of the English text of the European standard EN 12044:2005 + AC:2006.</p> <p>This document is endorsed on 29.09.2005 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: This European Standard applies for cutting and punching machines used in the manufacture of footwear, leather and imitation leather goods and other related components.</p> | <p>Scope: This European Standard applies for cutting and punching machines used in the manufacture of footwear, leather and imitation leather goods and other related components.</p> |
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ICS 59.140.40, 61.060

Võtmesõnad:

ICS 59.140.40; 61.060

English Version

Footwear, leather and imitation leather goods manufacturing
machines - Cutting and punching machines - Safety
requirements

Machines de fabrication de chaussures et articles en cuir et
en matériaux similaires - Machines de coupe et de
poinçonnage - Prescriptions de sécurité

Maschinen zur Herstellung von Schuhen, Leder- und
Kunstlederwaren - Stanzmaschinen -
Sicherheitsanforderungen

This European Standard was approved by CEN on 17 June 2005.

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.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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Foreword

This European Standard (EN 12044:2005) has been prepared by Technical Committee CEN/TC 201 "Leather and imitation leather goods and footwear manufacturing machinery - Safety", the secretariat of which is held by UNI.

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 February 2006, and conflicting national standards shall be withdrawn at the latest by February 2006.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this European Standard.

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 United Kingdom.

0 Introduction

This European Standard is a type C standard as stated in EN ISO 12100-1.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this European Standard.

When 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, for machines that have been designed and built according to the provisions of this type C standard.

This European Standard contains safety requirements for cutting and punching machines. It is aimed at designers, manufacturers, suppliers and importers.

1 Scope

1.1 This European Standard specifies safety requirements for design and operation of the machines defined in 1.2.

It takes account of intended use, foreseeable misuse, component and system failure.

1.2 This European Standard applies for cutting and punching machines used in the manufacture of footwear, leather and imitation leather goods and other related components. This European Standard applies to the following cutting and punching machines:

- swing arm cutting presses with manual or powered swing arm;
- manual and automatic travelling head cutting presses with powered travelling head;
- manual and automatic beam cutting presses;
- punching and perforating presses;
- C-frame cutting presses.

1.3 This European Standard is not applicable to:

- mechanical presses;
- presses intended for working cold metal;
- fastening, riveting, stitching, stapling, bending or folding machines;
- guillotines, shears and similar machines;
- shoe and leather presses as described in EN 12203.

1.4 This European Standard deals with all significant hazards, hazardous situations and events relevant to the footwear, leather and imitation leather goods manufacturing machinery, when it is used as intended and under the conditions foreseen by the manufacturer (see Clause 4) and is intended for operation in applications by trained persons.

1.5 This European Standard deals with material feeding and handling devices, when attached to the machine.

1.6 This European Standard is not applicable to the machines which are manufactured before the date of publication of this European Standard by CEN.

2 Normative references

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

EN 294:1992, *Safety of machinery – Safety distance to prevent danger zones being reached by the upper limbs*

EN 349:1993, *Safety of machinery – Minimum gaps to avoid crushing of parts of the human body*

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

EN 547-1:1996, *Safety of machinery – Human body measurements – Part 1: Principles for determining the dimensions required for openings for whole body access into machinery*

EN 547-2:1996, *Safety of machinery – Human body measurements – Part 2: Principles for determining the dimensions required for access openings*

EN 574:1996, *Safety of machinery – Two-hand controls devices – Functional aspects – Principles for design*

EN 894-1:1997, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 1: General principles for human interactions with displays and control actuators*

EN 894-2:1997, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 2: Displays*

EN 894-3:2000, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 3: Control actuators*

EN 953:1997, *Safety of machinery – Guards – General requirements for the design and construction of fixed and movable guards*

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

EN 981:1996, *Safety of machinery – System of auditory and visual danger and information signals*

EN 982:1996, *Safety of machinery – Safety requirements for fluid power systems and their components – Hydraulics*

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

EN 999:1998, *Safety of machinery – The positioning of protective equipment in respect of approach speeds of parts of the human body*

EN 1005-3:2002, *Safety of machinery – Human physical performance – Part 3: Recommended force limits for machinery operation*

EN 1088:1995, *Safety of machinery – Interlocking devices associated with guards – Principles for design and selection*

EN 1837:1999 *Safety of machinery – Integral lighting of machines*

EN ISO 11688-1:1998, *Acoustics - Recommended practice for the design of low-noise machinery and equipment – Part 1: Planning (ISO/TR 11688-1:1995)*

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 12545:2000, *Footwear, leather and imitation leather goods manufacturing machines – Noise test code – Common requirements*

EN ISO 14122-2:2001, *Safety of machinery – Permanent means of access to machinery – Part 2: Working platforms and walkways (ISO 14122-2:2001)*

EN 60204-1:1997, *Safety of machinery – Electrical equipment of machines – Part 1: General requirements (IEC 60204-1:1997)*

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

EN 60947-4-1, *Low-voltage switchgear and controlgear – Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters (IEC 60947-4-1:2000)*

EN 60947-5-1: *Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements; Electro-mechanical control circuit devices (IEC 60947-5-1:2003)*

EN 61496-1:2004, *Safety of machinery – Electro-sensitive protective equipment – Part 1: General requirements and tests (IEC 61496-1:2004, modified)*

prEN 61496-2:2004, *Safety of machinery – Electro-sensitive protective equipment – Part 2: Particular requirements of equipment using active opto-electronic protective devices (AOPDs)*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 12100-1:2003 apply. Additional definitions specifically needed for this European Standard are added below.

3.1

automatic cutting press

machine where the tool repeats continuously or intermittently all functions without manual intervention between each cycle (see also Figures 11 and 12)

3.2

beam cutting press

machine in which the striking surface is attached to the beam which moves vertically and is supported at either end (see also Figure 5)

NOTE In this type of machine the striking surface and the cutting surface are of approximately equal surface area.

3.3

beam cutting press with articulated die carrier not attached to the beam

beam cutting press equipped with an all-round movable cutting die support arm as well as a pivoted die support with centering and clamping device for chucking single cavity cutting dies (see also Figure 8)

3.4

beam cutting press with receding head

beam cutting press where the beam at the top of its stroke is also capable of horizontal movement in order to clear the cutting surface (see also Figure 6)