

**Jalatsi-, naha- ja kunstnahast toodete  
valmistamise masinad. Lõhkumis-,  
kaapimis-, lõikamis-, tsementimis- ja  
tsemendikuivatusmasinad.  
Ohutusnõuded**

Footwear, leather and imitation leather goods  
manufacturing machines - Splitting, skiving, cutting,  
cementing and cement drying machines - Safety  
requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13457:2004 sisaldab Euroopa standardi EN 13457:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13457:2004 consists of the English text of the European standard EN 13457:2004.</p> <p>This document is endorsed on 21.12.2004 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><b>Käsitlusala:</b> This European Standard applies to splitting, skiving, edge trimming, strip cutting, cementing and cement drying machines used in the manufacture of footwear, leather and imitation leather goods and other related components.</p>	<p><b>Scope:</b> This European Standard applies to splitting, skiving, edge trimming, strip cutting, cementing and cement drying machines used in the manufacture of footwear, leather and imitation leather goods and other related components.</p>
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**Võtmesõnad:**

ICS 59.140.40; 61.060

English version

**Footwear, leather and imitation leather goods manufacturing  
machines - Splitting, skiving, cutting, cementing and cement  
drying machines - Safety requirements**

Machines de fabrication de chaussures et d'articles en cuir  
et en matériaux similaires - Machines à refendre, à parer, à  
couper, à encoller et à sécher l'adhésif - Prescriptions de  
sécurité

Maschinen zur Herstellung von Leder- und  
Kunstlederwaren und Schuhwerk - Spalt-, Schärf-,  
Schneid-, Klebstoffauftrags- und  
Klebstofftrocknungsmaschinen - Sicherheitsanforderungen

This European Standard was approved by CEN on 8 August 2004.

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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.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 13457:2004) 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 April 2005, and conflicting national standards shall be withdrawn at the latest by April 2005.

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, 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 United Kingdom.

## Introduction

The extent to which hazards are covered is indicated in the scope of this document.

This document is a type C standard as stated in EN 1070.

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

When provisions of this type C standard are different from those which are stated in type A and B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for information for use and maintenance according to the provisions of this type C standard.

This document contains safety requirements for splitting, skiving, trimming, cementing and cement drying machines. It is prepared for the use of designers, manufacturers, suppliers and importers.

## 1 Scope

**1.1** This document applies to splitting, skiving, edge trimming, strip cutting, cementing and cement drying machines used in the manufacture of footwear, leather and imitation leather goods and other related components.

**1.2** This document does not apply to:

- trimming machines with rotary milling tool for the purpose of trimming edges of material, see EN 930;
- splitting and band knife machines used in tanneries, see EN 13112;
- portable machines.

**1.3** This document specifies safety requirements for construction, transport, installation, adjustment, setting, teaching or process change-over, operation, cleaning, maintenance, decommissioning, dismantling and, as far as safety is concerned, disposal for machines mentioned in 1.1.

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

**1.4** This document deals with significant hazards relevant to the footwear, leather and imitation leather goods manufacturing industries. (For a list of hazards see Clause 4.)

The document does not deal with precise technical measures for reducing the risks of fumes and dusts detrimental to health.

The use of machines falling within the scope of this document for purposes other than those specified in 1.1, may give rise to hazards not considered during its preparation.

**1.5** This document also applies to equipment for material handling and operations which are an integral part of the machine.

**1.6** This document assumes the machines

- are operated by adequately trained persons
- are used with adequate workplace lighting conforming the local regulations or to EN 12464-1 and prEN 12464-2

**1.7** This document applies to machines manufactured after its date of publication.

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

EN 547-1, *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, *Safety of machinery – Human body measurements – Part 2: Principles for determining the dimensions required for access openings.*

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

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

EN 626-1:1994, *Safety of machinery – Reduction of risks to health from hazardous substances emitted by machinery – Part 1: Principles and specifications for machinery manufacturers.*

EN 811, *Safety of machinery – Safety distances to prevent danger zones being reached by the lower limbs.*

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

EN 894-3, *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 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, *Safety of machinery – The positioning of protective equipment in respect of approach speeds of parts of the human body.*

EN 1005-2:2003, *Safety of machinery – Human physical performance – Part 2: Manual handling of machinery and component parts of machinery.*

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

EN 1037, *Safety of machinery – Prevention of unexpected start-up.*

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

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

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

EN 1127-1:1997, *Explosive atmospheres – Explosion prevention and protection – Part 1: Basic concepts and methodology.*

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 1760-2, *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 12464-1, *Light and lighting – Lighting of work places – Part 1: Indoor work places.*

prEN 12464-2, *Light and lighting – Lighting of work places – Part 2: Outdoor work places.*



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

EN 13478, *Safety of machinery – Fire prevention and protection*.

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

EN 60335-2-69:2003, *Household and similar electrical appliances – Safety – Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use (IEC 60335-2-69:2002, modified)*.

EN 60947-5-1:2004, *Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements – Electromechanical 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)*.

IEC 61496-2:1997, *Safety of machinery – Electro-sensitive protective equipment – Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs)*.

EN ISO 4871, *Acoustics - Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*.

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 11688-2:2000, *Acoustics – Recommended practice for the design of low-noise machinery and equipment – Part 2: Introduction to the physics of low-noise design (ISO/TR 11688-2:1998)*.

EN ISO 11689, *Acoustics – Procedure for the comparison of noise-emission data for machinery and equipment (ISO 11689:1996)*.

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 ISO 14122-1:2000, *Safety of machinery – Permanent means of access to machinery – Part 1: Choice of fixed means of access between two levels (ISO 14122-1:2001)*.

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

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003, EN ISO 12100-2:2003, EN 1070:1998 and the following apply.

#### 3.1

##### **splitting machine (see Figure 1)**

machine which separates leather or other splittable materials to a required thickness by cutting. The separated part is called split-leather. The material is fed to the cutting edge of the knife either between feeding rollers or, between a roller in a fixed or movable mounting, and a fixed guide