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# Jalatsi-, naha- ja kunstnahast toodete valmistamise masinad. Masinad eeltöötlemiseks, kõlutustamiseks, läigestamiseks ja servalõikamiseks. Ohutusnõuded KONSOLIDEERITUD TEKST

Footwear, leather and imitation leather goods manufacturing machines - Roughing, scouring, polishing and trimming his Concernent of the second o machines - Safety requirements CONSOLIDATED TEXT



## **EESTI STANDARDI EESSÕNA**

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 930:1999+A2:2009 sisaldab Euroopa standardi	This Estonian standard EVS-EN 930:1999+A2:2009 consists of the English text of
EN 930:1997+A2:2009 ingliskeelset teksti.	the European standard EN 930:1997+A2:2009.
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<b>ICS</b> 59.140.40, 61.060	
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# EUROPEAN STANDARD NORME EUROPÉENNE

# EN 930:1997+A2

**EUROPÄISCHE NORM** 

August 2009

ICS 59.140.40; 61.060

Supersedes EN 930:1997

**English Version** 

## Footwear, leather and imitation leather goods manufacturing machines - Roughing, scouring, polishing and trimming machines - Safety requirements

Machines pour la fabrication de chaussures et d'articles en cuir et matériaux similaires - Machines à carder, à verrer, à polir et à fraiser - Prescriptions de sécurité

Maschinen zur Herstellung von Schuhen, Leder- und Kunstlederwaren - Aufrauh-, Ausglas-, Polier- und Kantenbearbeitungsmaschinen - Sicherheitsanforderungen

This European Standard was approved by CEN on 16 July 1997 and includes Amendment 1 approved by CEN on 16 August 2004, and Amendment 2 approved by CEN on 16 July 2009.

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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 CEN Management Centre has the same status as the official versions.

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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 930:1997+A2:2009) 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 2010, and conflicting national standards shall be withdrawn at the latest by February 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 supersedes EN 930:1997.

This document includes Amendment 1, approved by CEN on 2004-08-16 and Amendment 2, approved by CEN on 2009-07-16.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $(A_1)$   $(A_2)$   $(A_2)$ .

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).

Approximation For relationship with EU Directive(s), 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 United Kingdom.

## Introduction

A This document is a type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous 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 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.

### 1 Scope

**1.1** This standard applies to the following machines which are intended to work material for the manufacture of footwear:

- Automatic and manual roughing, scouring and polishing machines;
- Automatic and manual edge contour trimming machines.
- **1.2** This standard does not apply to modular shoe repair machines.
- **1.3** This standard specifies safety requirements for design, construction and operation.

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

**1.4** This standard covers all hazards relevant to the footwear, leather and imitation leather goods manufacturing industries.

The use of machines within the scope of this standard in different industries may give rise to hazards which were not taken into account at the time of its preparation.

**1.5** A This document is not applicable to roughing, scouring, polishing and trimming machines which are manufactured before the date of its publication as EN. (A)

#### 2 Normative references

 $\boxed{\mathbb{A}}$  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.  $\boxed{\mathbb{A}}$ 

 $|A_2\rangle$  deleted text  $\langle A_2 \rangle$ 

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

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 $\boxed{\mathbb{A}}$  EN 547-2, Safety of machinery - Human body measurements - Part 2: Principles for determining the dimensions required for access openings  $\boxed{\mathbb{A}}$ 

► EN 574, Safety of machinery — Two-hand control devices — Functional aspects — Principles for design

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 894-1, 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 (A2

EN 953:1997, Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards (A)

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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 🔄

A2 deleted text (A2

EN 1005-2, Safety of machinery — Human physical performance — Part 2: Manual handling of machinery and component parts of machinery (A)

▶ EN 1005-3, Safety of machinery — Human physical performance — Part 3: Recommended force limits for machinery operation ♠

AD EN 1037, Safety of machinery - Prevention of unexpected start-up A

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EN 1088:1995, Safety of machinery - Interlocking devices with or without guard locking – General principles and provisions for design

No EN 1093-1, Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 1: Selection of test methods ▶ EN 1127-1:2007, Explosive atmospheres — Explosion prevention and protection — Part 1: Basic concepts and methodology ♠

A) EN 12545:2000, Footwear, leather and imitation leather goods manufacturing machines - Noise test code - Common requirements (A)

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

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A EN ISO 12100–1:2003, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003) (№)

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

A EN ISO 13849-1, Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2006)

🖄 EN ISO 13850, Safety of machinery - Emergency stop - Principles for design (ISO 13850:2006) 🕭

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M EN 60204-1:2006, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005 (modified)) <sup>A</sup>

A 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) <sup>A</sup><sub>2</sub>

N 60947-5-1, Low-voltage switchgear and control gear — Part 5-1: Control circuit devices and switching elements — Electromechanical control circuit devices (IEC 60947-5-1:2003) <sup>(A2)</sup>

M EN 61310-1, Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1:2007)

M EN 61496-1, Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests (IEC 61496-1:2004, modified) <sup>A</sup><sub>2</sub>

A CLC/TS 61496-2, Safety of machinery - Electro-sensitive protective equipment - Particular requirements for equipment using active optoelectronic protective devices (AOPDs) (IEC 61496-2:2006) (▲2

### 3 A Terms and definitions (A2

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

#### 3.1

#### roughing machine

a machine which transmits energy from a prime mover to a tool for the purpose of roughing surfaces of material used in the manufacture of footwear, leather and imitation leather goods and other related components prior to cementing