
Glf c' nU] nXY Uj c' cVi hj Y h' f'] nXY _cj] n' i gb' U] b' b' Y[c j]] ja] hU W' ^! ' Glf c' nU] [fc Vc
cVXY Uj cZ Vfi y Yb' YZ' c y Yb' Y] b' fc V' Yb' Y! ' J Uf bcgfb Y nU h' j Y

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

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

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

Ta slovenski standard je istoveten z: EN 930:1997/prA2

ICS:

59.140.40 Stroji in oprema za Machines and equipment for
proizvodnjo usnja in krzna leather and fur production

61.060 Obuvala Footwear

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English Version

**Footwear, leather and imitation leather goods manufacturing
machines - Roughing, scouring, polishing and trimming
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Kunstlederwaren - Aufrau-, Ausglas-, Polier- und
Kantenbearbeitungsmaschinen - Sicherheitsanforderungen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 201.

This draft amendment A2, if approved, will modify the European Standard EN 930:1997. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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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

EN 930:1997/prA2:2009 (E)**Foreword**

This document (EN 930:1997/prA2:2009) 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 document is currently submitted to the Unique Acceptance Procedure.

The first reason for amending the published standard EN 930:1997 with A1:2004 is the revision of the EU-Machinery Directive 98/37/EC into 2006/42/EC, requiring the adaptation of published European Standards cited in the Official Journal of the European Communities under that Directive.

Additionally at this occasion the normative references have been updated, while also some other limited rather editorial improvements and corrections have been made.

1 Modification to the Foreword

Replace the 4th paragraph with the following: "For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document."

2 Modification to the Introduction

Replace the complete text with the following:

"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."

3 Modification to 1.5

Replace the existing text with the following: "This document is not applicable to roughing, scouring, polishing and trimming machines which are manufactured before the date of its publication as EN."

4 Modification to Clause 2, Normative references

Replace the introductory text with the following: "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."

Replace reference to EN 292-1:1991 with the following: "EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*".

Replace reference to EN 292-2:1991 with the following: "EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)*".

Delete reference to EN 349:1992.

Replace reference to EN 418:1992 with the following: "EN ISO 13850, *Safety of machinery - Emergency stop - Principles for design (ISO 13850:2006)*".

Replace reference to "prEN 547-2:1991" with "EN 547-2, Safety of machinery - Human body measurements - Part 2: Principles for determining the dimensions required for access openings".

Replace reference to prEN 574:1995 with "EN 574, Safety of machinery — Two-hand control devices — Functional aspects — Principles for design".

Replace reference to prEN 894-1:1992 with "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".

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Replace reference to prEN 953:1992 with "EN 953:1997, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*".

Replace reference to EN 954-1:1996 with "EN ISO 13849-1, *Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2006)*".

Replace reference to prEN 999:1993 with "EN 999, *Safety of machinery — The positioning of protective equipment in respect of approach speeds of parts of the human body*".

Delete reference to prEN 1005-1:1993.

Replace reference to prEN 1005-2:1993 with "EN 1005-2, *Safety of machinery — Human physical performance — Part 2: Manual handling of machinery and component parts of machinery*".

Replace reference to prEN 1005-3:1993 with "EN 1005-3, *Safety of machinery — Human physical performance — Part 3: Recommended force limits for machinery operation*".

Replace reference to EN 1037:1995 with "EN 1037, *Safety of machinery - Prevention of unexpected start-up*".

Delete reference to ENV 1070.

Replace reference to prEN 1093-1:1993 with "EN 1093-1, *Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 1: Selection of test methods*".

Replace reference to prEN 1127-1:1993 with "EN 1127-1:2007, *Explosive atmospheres — Explosion prevention and protection — Part 1: Basic concepts and methodology*".

Delete reference to EN ISO 11689¹⁾.

Replace prEN 50100-1:1993 with "EN 61496-1, *Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests (IEC 61496-1:2004, modified)*".

Replace prEN 50100-2:1993 with "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)*".

Replace EN 60204-1:1992 with "EN 60204-1:2006, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005 (modified))*".

Add the following item: "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)*".

Replace EN 60947-5-1:1992 with "EN 60947-5-1:2004, *Low-voltage switchgear and control gear — Part 5-1: Control circuit devices and switching elements — Electromechanical control circuit devices (IEC 60947-5-1:2003)*".

Add the following item: "EN 61310-1:2008, *Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1:2007)*".

5 Modification to Clause 3, Definitions

Replace the heading with "Terms and definitions".

Replace the introductory paragraph with the following: "For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003 and the following apply."

6 Modification to Clause 4, List of hazards

Replace the heading of this clause as well as the heading of Table 1 with the following: "List of significant hazards".

Replace the text of sub-clause 4.1 with the following text: "This clause contains all the significant hazards, hazardous situations and events, as far as they are dealt with in this document, identified by risk assessment as significant for this type of machinery and which require action to eliminate or reduce the risk."

Insert the old text of sub-clause 4.1 as a first paragraph into sub-clause 4.2.

7 Modification to 5.1

Replace the text with the following:

"Machinery shall comply with the safety requirements and/or protective measures of this clause.

In addition, the machine shall be designed according to the principles of EN ISO 12100 for relevant but not significant hazards which are not dealt with by this document.

For hazards which are to be reduced by the application of a type B-standard such as EN 294, EN ISO 13850, EN 547, EN 60204-1 etc., the manufacturer shall carry out a risk assessment to establish the requirements of the B-standards which are to be applied."

8 Modification to 5.2.1.1

In the 1st sentence replace "prEN 953:1992 and 4.2.2.2 of EN 292-2:1991" with "EN 953".

9 Modification to 5.2.1.2

Replace the text in brackets in the 2nd paragraph with the following: "See among others EN 61496-1 and CLC/TS 61496-2".

10 Modification to 5.2.1.3

In the 1st sentence add after "using a tool": ", in accordance with 3.2, 3.9 and 3.10 of EN 953:1997."

Delete the 2nd sentence.

Add a second paragraph as follows: "Fixing systems of fixed guards and fixed covers shall remain attached to these parts or to the machine when the parts are removed."

11 Modification to 5.2.2.1

Replace "EN 60204-1:1992" with "EN 60204-1" and "EN 60947-5-1:1992" with "EN 60947-5-1".

EN 930:1997/prA2:2009 (E)**12 Modification to 5.2.4**

Replace the 3rd sentence with the following: "Information shall be given in accordance with 7.1 and 7.2 of EN 626-1:1994 (see also Clause 7). Guidance on the selection of testing methods can be found in EN 1093-1."

13 Modification to 5.2.5.1

Replace "6.5 of EN 1127-1:1993" with "6.4 of EN 1127-1:2007".

14 Modification to 5.2.6.1

Replace "3.8 of EN 292-2:1991, EN 982:1996 and EN 983:1996" with "4.10 of EN ISO 12100-2:2003, EN 982 and EN 983".

15 Modification to 5.2.6.2

Replace "EN 1037:1995" with "EN 1037".

16 Modification to 5.2.6.3

Replace the 2nd indent of the 1st paragraph with "shall as a minimum comply with performance level "c" as defined in accordance with EN ISO 13849-1".

17 Modification to 5.2.7

Replace the text with the following: "The design shall be in accordance with the requirements of EN 547-2, EN 894-1, EN 1005-2 and EN 1005-3."

18 Modification to 5.3.1.2

Replace the 1st sentence with the following: "The tool shall be enclosed by a fixed guard in accordance with EN 953 and EN 294:1992, Tables 1, 3 or 4 as relevant, except for that part that is necessarily exposed for the work process."

19 Modification to 5.3.1.3

Replace the text with the following: "If movable guards in accordance with 3.3 of EN 953:1997 have to be opened to allow access for tool changing, such opening shall not permit access to dangerous moving parts. This shall be achieved either by compliance with EN 294:1992, Tables 1, 3 or 4 or by interlocking in accordance with EN 1088."

20 Modification to 5.3.1.5

Replace the last sentence with the following: "Impact resistance shall be in accordance with 5.5.2 and 5.5.3 of EN 953:1997."

21 Modification to 5.3.2.1

In the second item under b) replace "which satisfies EN 418:1992 and Annex C" with the following: "that complies with EN ISO 13850 and Annex C."

Replace the last part of c) "which satisfies prEN 574:1995 type II, category 3 of EN 954-1:1996 and Annex D of this standard" with the following: "that complies with type II of EN 574 and Annex D."

22 Modification to 5.3.2.2

Replace the text under a) with the following: "fixed guards in accordance with EN 953, with safety distances in accordance with Tables 12, 3 and 4 of EN 294 as relevant, and".

Replace the text under b) with the following: "movable guards with interlocking in accordance with A.1 and EN 1088, while the related parts of the control system shall as a minimum comply with performance level "c" as defined in EN ISO 13849-1".

Replace the introductory sentence of the 2nd paragraph with: "Feed openings in fixed or interlocking guards, not respecting the safety distances of EN 294, shall be provided with;"

Replace the 1st indent of the 2nd paragraph with: "a trip device in accordance with Annex B, with components in accordance with Annex D and with the related parts of the control systems as a minimum complying with performance level "c" as defined in EN ISO 13849 -1".

Replace the 2nd indent of the 2nd paragraph with: "an electro-sensitive protective device of type 2 in accordance with EN 61694-1, with the related parts of the control system as a minimum complying with performance level "d" as defined in EN ISO 13849-1, and positioned in accordance with EN 999."

23 Modification to 5.3.2.3

Replace the text with the following: "Access to the cutter unit of groove trimming machines (milling machines) shall be prevented by an interlocking guard with guard locking in accordance with A.3 and EN 1088, with components in accordance with Annex D and with the related parts of the control systems as a minimum complying with performance level "d" as defined in EN ISO 13849".

24 Modification to 5.3.2.4

Replace the text with the following:

"For trimming machines (e.g. copy milling and heel gouging machines) with clamping fixture and manual loading and unloading of the product, automatically operated guards shall prevent contact with the trimming tool during loading and unloading.

The guards shall be interlocked with the trimming operation in such a way that:

- a) the trimming operation (with retracted guard) can only start after clamping is completed, and
- b) the clamping force is maintained until the guard is in its protective position.

The related parts of the control system shall as a minimum comply with performance level "d" as defined in EN ISO 13849-1."