

## SLOVENSKI STANDARD SIST EN 13112:2003/kFprA1:2009

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Tannery machines - Splitting and bandknife shearing machines - Safety requirements

Gerberei-Maschinen - Spalt- und Bandmesserschermaschinen - Sicherheitsanforderungen

Machines de tannerie - Machines à refendre et tondeuses à ruban - Prescriptions de sécurité

Ta slovenski standard je istoveten z: EN 13112:2002/FprA1

## <u>ICS:</u>

59.140.40 Stroji in oprema za proizvodnjo usnja in krzna

Machines and equipment for leather and fur production

SIST EN 13112:2003/kFprA1:2009

en,fr

SIST EN 13112:2003/kFprA1:2009

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## FINAL DRAFT EN 13112:2002

FprA1

April 2009

ICS 59.140.40

**English Version** 

## Tannery machines - Splitting and bandknife shearing machines -Safety requirements

Machines de tannerie - Machines à refendre et tondeuses à ruban - Prescriptions de sécurité

Gerberei-Maschinen - Spalt- und Bandmesserschermaschinen - Sicherheitsanforderungen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 200.

This draft amendment A1, if approved, will modify the European Standard EN 13112:2002. 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

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Ref. No. EN 13112:2002/FprA1:2009: E

## EN 13112:2002/FprA1:2009 (E)

## Foreword

This document (EN 13112:2002/FprA1:2009) has been prepared by Technical Committee CEN/TC 200 "Tannery machinery - Safety", the secretariat of which is held by UNI.

This document is currently submitted to the Unique Acceptance Procedure.

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 Directive(s).

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

The first reason for amending the published standard EN 13112:2002 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 existing* 4<sup>th</sup> *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 Clause 1, Scope

*Replace the 4<sup>th</sup> paragraph* "This European Standard applies to the machines manufactured after its date of issue." *with the following:* "This document is not applicable to the splitting and bandknife shearing machines which are manufactured before the date of its publication as EN.".

## 4 Modification to Clause 2, Normative references

*Introductory text:* Replace the first paragraph 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."

Delete all full stops at the end of reference titles.

**EN 292-1**: Delete this item and add 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)".

**EN 292-2**: Delete this item and add the following: "EN ISO 12100-2:2003, Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)".

**EN 418**: Delete this item and add the following: "EN ISO 13850:2006, Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)".

**EN 457**: Delete this item and add the following: "EN ISO 7731:2008, Ergonomics — Danger signals for public and work areas — Auditory danger signals (ISO 7731:2003)".

**EN 954-1**: Delete this item and add the following: "EN ISO 13849-1:2008, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)".

Delete reference to EN 1070.

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**prEN 1760-2**: Replace this item with the following: "EN 1760-2:2001, 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 ISO 3743-1: Replace "EN ISO 3743-1" with "EN ISO 3743-1:1995".

EN ISO 3743-2: Replace "EN ISO 3743-2" with "EN ISO 3743-2:1996".

EN ISO 3744: Replace "EN ISO 3744" with "EN ISO 3744:1995".

EN ISO 3746: Replace "EN ISO 3746" with "EN ISO 3746:1995".

EN ISO 3747: Replace "EN ISO 3747" with "EN ISO 3747:2000".

EN ISO 4871: Replace "EN ISO 4871" with "EN ISO 4871:1996".

Replace the reference EN ISO 9614 with the following:

"EN ISO 9614-1:1995, Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurements at discrete points (ISO 9614-1:1993)

EN ISO 9614-2:1996, Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 2: Measurement by scanning (ISO 9614-2:1996)

EN ISO 9614-3:2002, Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 3: Precision method for measurement by scanning (ISO 9614-3:2002)".

EN ISO 11201: Replace "EN ISO 11201" with "EN ISO 11201:1995".

EN ISO 11202: Replace "EN ISO 11202" with "EN ISO 11202:1995".

EN ISO 11203: Replace "EN ISO 11203" with "EN ISO 11203:1995".

EN ISO 11204: Replace "EN ISO 11204" with "EN ISO 11204:1995".

EN ISO 11688-1: Replace "EN ISO 11688-1" with "EN ISO 11688-1:1998".

EN ISO 11688-2: Replace "EN ISO 11688-2" with "EN ISO 11688-2:2000".

**EN 61496-1:1997**: Replace this item with the following: "EN 61496-1:2004, Safety of machinery — Electrosensitive protective equipment — Part 1: General requirements and tests (IEC 61496-1:2004, modified)".

**prEN 61496-2:1997**: Replace this item with the following: "CLC/TS 61496-2:2006, Safety of machinery — Electro-sensitive protective equipment — Particular requirements for equipment using active optoelectronic protective devices (AOPDs) (IEC 61496-2:2006)".

**EN 60204-1:1997**: Replace this item with: "EN 60204-1:2006, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005, modified)".

## 5 Modification to Clause 3, Terms and definitions - Terminology

*Introductory paragraph: replace the text 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 with:* "List of significant hazards" *and add the following table title:* "Table 1 - List of significant hazards".

Introductory paragraphs: replace the text with the following:

"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.

The significant hazards for splitting and bandknife shearing machines are outlined in 4.1 to 4.7.

The danger zones which give rise to mechanical hazards are illustrated in Figures 1, 2, 3, 4 and 5. The figures are informative only.".

## 7 Modification to Clause 5, Safety requirements and/or measures

Delete the NOTE and the introductory text (hanging paragraphs).

#### 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 12100-2 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 953, EN ISO 13850, 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.".

#### 5.2.1.1:

*Replace the following text in the* 1<sup>st</sup> *indent* "EN 953 and 4.2.2.2 of EN 292-2:1991/A1:1995" *with:* "EN 953 and 5.3.2.2 of EN ISO 12100-2:2003".

*Replace the following text in the 2<sup>nd</sup> indent* "EN 953, EN 1088 and 4.2.2.3 of EN 292-2:1991/A1:1995" *with:* "EN 953, EN 1088 and 5.3.2.3 of EN ISO 12100-2:2003".

#### 5.2.1.2:

*Replace the following text in the 1<sup>st</sup> indent* "EN 953 and 4.2.2.2 of EN 292-2:1991/A1:1995" *with:* "EN 953 and 5.3.2.2 of EN ISO 12100-2:2003".

*Replace the following text in the 2<sup>nd</sup> indent* "EN 953:1997, 4.2.2.1 of EN 292-2:1991/A1:1995" *with:* "EN 953 and 5.3.2.3 of EN ISO 12100-2:2003".

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.".

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#### 5.2.1.4:

*Replace* "will effect a shutdown of the" *in the* 1<sup>st</sup> *paragraph with* "will shutdown the" *and* "before reaching" *with* "before".

Replace the text in the  $2^{nd}$  paragraph with the following:

"Suitable protective devices are:

- movable interlocking guards which satisfy EN 953 and EN 1088, 5.3.2.3 of EN ISO 12100-2:2003 and the distances given in the appropriate table (1 or 3) of EN 294;
- trip devices, such as:
  - electrosensitive protective devices satisfying EN 61496-1, CLC/TS 61496-2 and EN 999;
  - pressure sensitive protective device satisfying EN 1760-2 type 3.1 or 3.2.".

#### 5.2.2.1:

Replace "EN 60529:1991" with: "EN 60529.

#### 5.2.3:

Replace "see 7.1.2 j of this standard" with: "see 7.3.2 j)".

#### 5.2.4:

*Replace the following text in the 3<sup>rd</sup> paragraph* "satisfy 3.8 of EN 292-2:1991/A1:1995, EN 982 and EN 983" *with:* "satisfy 4.10 of EN 12100-2:2003, EN 982 and EN 983".

### 5.2.5:

Replace the text "in annex A and 7.1.2.h of this standard" with: "in Annex A and 7.3.2 h)".

### 5.2.6.2:

*Replace* "see 7.1.1" *with:* "see 7.3.1".

### 5.2.7.3:

*Replace* "same level as the" *in the* 1<sup>st</sup> *indent with:* "same performance level as for the".

Replace the text in the  $2^{nd}$  indent with:

"shall as a minimum comply with performance level "c" as defined in EN ISO 13849-1.".

## 5.2.8.1:

Replace in the 1<sup>st</sup> sentence of the 1<sup>st</sup> paragraph "EN 418" with: "EN ISO 13850".

### 5.3.1.2:

*Replace the following text in the 1<sup>st</sup> indent* "according to prEN 1760-2:1996 with a control system conforming to the requirements of at least category 3 of EN 954-1 shall be applied" *with:* "according to EN 1760-2 and with the related parts of the control system as a minimum complying with performance level "d" as defined in EN ISO 13849-1".

## Replace the complete text in the $2^{nd}$ indent with

"an electrosensitive protective device of type 4 in accordance with EN 61496-1 and CLC/TS 61496-2 and with the related parts of the control system as a minimum complying with performance level "d" as defined in EN ISO 13849-1 and conforming to EN 999.".

Replace "EN 457" in the last but one paragraph with: "EN ISO 7731".

#### 5.3.1.3:

*Replace* "according to 3.7.9 and 1.2.5 of annex A of EN 292-2:1991/A1:1995" *in the 1<sup>st</sup> paragraph with:* "according to 4.11.10 of EN ISO 12100-2:2003".

#### 5.3.1.4:

Replace the complete text in the 1<sup>st</sup> indent with:

"an electrosensitive protective device of type 4 in accordance with EN 61496-1 and CLC/TS 61496-2 and with the related parts of the control system as a minimum complying with performance level "d" as defined in EN ISO 13849-1 and conforming to EN 999.".

### 5.3.2.1.1:

Replace the text in the indents with the following:

"a fixed distance guard, according to EN 953, to 5.3.2.1 of EN ISO 12100-2:2003 and respecting the distances of Table 4 of EN 294:1992, and

- a pressure sensitive protective device of type 3.1 or 3.2 according to EN 1760-2 and with the related parts of the control system as a minimum complying with performance level "d" as defined in EN ISO 13849-1.".

#### 5.3.2.1.2:

Replace the text in the indent with the following:

"fixed enclosing guard in accordance with EN 953 and 5.3.2.2 of EN ISO 12100-2:2003.".

#### 5.4.1:

Replace the text in the indent with the following:

"fixed enclosing guards which satisfy EN 953 and 5.3.2.2 of EN ISO 12100-2:2003.".

#### 5.4.2:

Replace the text in the indents with the following:

"fixed enclosing guards or coves which satisfy EN 953 and 5.3.2.2 of EN ISO 12100-2:2003