

# SLOVENSKI STANDARD SIST EN 1870-13:2008+A1:2009/kFprA2:2011

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Varnost lesnoobdelovalnih strojev - Krožne žage - 13. del: Horizontalne krožne žage za razrez plošč - Dopolnilo A2

Safety of woodworking machines - Circular sawing machines - Part 13: Horizontal beam panel sawing machines

Sicherheit von Holzbearbeitungsmaschinen - Kreissägemaschinen- Teil 13: Horizontale Plattenkreissägemaschinen mit Druckbalken

Sécurité des machines pour le travail du bois - Machines à scies circulaires - Partie 13: Scies à panneaux horizontales à presseur

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79.120.10 Lesnoobdelovalni stroji Woodworking machines

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#### **English Version**

# Safety of woodworking machines - Circular sawing machines - Part 13: Horizontal beam panel sawing machines

Sécurité des machines pour le travail du bois - Machines à scies circulaires - Partie 13: Scies à panneaux horizontales à presseur

Sicherheit von Holzbearbeitungsmaschinen -Kreissägemaschinen- Teil 13: Horizontale Plattenkreissägemaschinen mit Druckbalken

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 142.

This draft amendment A2, if approved, will modify the European Standard EN 1870-13:2007+A1:2009. 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.

This draft amendment was established by CEN 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-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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## **Foreword**

This document (EN 1870-13:2007+A1:2009/FprA2:2011) has been prepared by Technical Committee CEN/TC 142 "Woodworking machines - 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 the Machinery Directive.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

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EN 1870-13:2007+A1:2009/FprA2:2011 (E)

#### 1 Modifications throughout the whole document

Throughout the standard, replace the references to "EN 614-1:2006" with "EN 614-1:2006+A1:2009". Throughout the standard, replace the references to "EN 847-1:2005" with "EN 847-1:2005+A1:2007". Throughout the standard, replace the references to "EN 894-1:1997" with "EN 894-1:1997+A1:2008". Throughout the standard, replace the references to "EN 894-2:1997" with "EN 894-2:1997+A1:2008". Throughout the standard, replace the references to "EN 894-3:2000" with "EN 894-3:2000+A1:2008". Throughout the standard, replace the references to "EN 983:1996" with "EN ISO 4414:2010". Throughout the standard, replace the references to "EN 1005-1:2001" with "EN 1005-1:2001+A1:2008". Throughout the standard, replace the references to "EN 1005-2:2003" with "EN 1005-2:2003+A1:2008". Throughout the standard, replace the references to "EN 1005-3:2002" with "EN 1005-3:2002+A1:2008". Throughout the standard, replace the references to "EN 1005-4:2005" with "EN 1005-4:2005+A1:2008". Throughout the standard, replace the references to "EN 1037:1995" with "EN 1037:1995+A1:2008". Throughout the standard, replace the references to "EN 1088:1995" with "EN 1088:1995+A2:2008". Throughout the standard, replace the references to "EN 1760-3:2004" with "EN 1760-3:2004+A1:2009". Throughout the standard, replace the references to "EN ISO 3743-1:1995" with "EN ISO 3743-1:2010". Throughout the standard, replace the references to "EN ISO 3743-2:1996" with "EN ISO 3743-2:2009". Throughout the standard, replace the references to "EN ISO 3744:1995" with "EN ISO 3744:2010". Throughout the standard, replace the references to "EN ISO 3745:2003" with "EN ISO 3745:2009". Throughout the standard, replace the references to "EN ISO 3746:1995" with "EN ISO 3746:2010". Throughout the standard, replace the references to "EN ISO 4871:1996" with "EN ISO 4871:2009". Throughout the standard, replace the references to "EN ISO 9614-1:1995" with "EN ISO 9614-1:2009". Throughout the standard, replace the references to "EN ISO 11202:1995" with "EN ISO 11202:2010". Throughout the standard, replace the references to "EN ISO 11204:1995" with "EN ISO 11204:2010". Throughout the standard, replace the references to "EN 12779:2004" with "EN 12779:2004+A1:2009".

#### 2 Modifications to the Foreword

Replace the 8<sup>th</sup> paragraph with the following one:

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

In the 10<sup>th</sup> paragraph, replace "EN ISO 12100-1:2003" with "EN ISO 12100:2010".

#### 3 Modification to the Introduction

In the 2<sup>nd</sup> paragraph, replace "EN ISO 12100-1:2003" with "EN ISO 12100:2010".

#### 4 Modifications to Clause 1, Scope

*In the 1<sup>st</sup> paragraph, replace* "where the saw unit is mounted" *with* "where the saw unit of the front cutting line is mounted".

Add at the end of 1st paragraph "including reasonably foreseeable misuse".

#### 5 Modifications to Clause 2, Normative references

Delete the references to "EN 983:1996", "EN 61508-3:2001" and "EN 62061:2005".

Add the following reference:

"EN 61800-5-2:2007, Adjustable speed electrical power drive systems — Part 5-2: Safety requirements — Functional (IEC 61800-5-2:2007)".

Replace the reference to EN ISO 3743-1:1995 with the following one:

"EN ISO 3743-1:2010, Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for small movable sources in reverberant fields — Part 1: Comparison method for a hard-walled test room (ISO 3743-1:2010)".

Replace the reference to EN ISO 3744:1995 with the following one:

"EN ISO 3744:2010, Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010)".

Replace the reference to EN ISO 3746:1995 with the following one:

"EN ISO 3746:2010, Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:2010)".

Add the following reference:

"EN ISO 4414:2010, Pneumatic fluid power — General rules and safety requirements for systems and their components (ISO 4414:2010)".

Replace the reference EN ISO 11202:1995 with the following one:

"EN ISO 11202:2010, Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections (ISO 11202:2010)".

Replace the reference to EN ISO 11204:1995 with the following one:

"EN ISO 11204:2010, Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections (ISO 11204:2010)".

Replace the references to EN ISO 12100-1:2003 and EN ISO 12100-2003 with the following one:

"EN 12100:2010, Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)".

## 6 Modifications to Clause 3, Terms and definitions

In the 1<sup>st</sup> paragraph, replace "EN ISO 12100-1:2003" with "EN ISO 12100:2010".

In Definition 3.19, replace "(see Figure 2)" with "(see Figure 2), where the saw unit can be mounted below or above the workpiece support".

After Definition 3.24, add the following NOTE:

"NOTE The same function can be achieved by telescopic collets or by collets with extended length mounted on the panel pusher.".

Delete term and definition 3.29 and renumber accordingly, i.e. replace definition numbers 3.30 to 3.32 with numbers 3.29 to 3.31.

In Definition 3.30, replace the existing definition and NOTE 1 with:

"software that is part of the system supplied by the control manufacturer and which is not accessible for modification by the user of the machinery

NOTE 1 Firmware or system software are examples of embedded software (3.1.37 of EN ISO 13849-1:2008).".

In Definition 3.31, replace existing definition and NOTE with:

"software specific to the application, implemented by the machine manufacturer, and generally containing logic sequences, limits and expressions that control the appropriate inputs, outputs, calculations and decisions necessary to meet the SRP/CS requirements

[3.1.36 of EN ISO 13849-1:2008]".

Add the following term and definition:

#### "3.32

#### performance level PL

discrete level used to specify the ability of safety-related parts of control systems to perform a safety function under foreseeable conditions

[3.1.23 of EN ISO 13849-1:2008]".

## 7 Modifications to Clause 4, List of significant hazards

Replace reference to "EN 1050:1996" with "EN ISO 12100:2010".

Delete in the 1<sup>st</sup> paragraph "as far as they are dealt with in this document".

Replace the 2<sup>nd</sup> paragraph with:

"These hazards are listed in Table 1:".

Replace Table 1 with the following one:

"Table 1 — List of significant hazards

No	Hazards, hazardous situations and hazardous events	EN ISO 12100:2010	Relevant clause of this document	
1 Mechanical hazards related to:				
	- machine parts or workpieces due to:			
	a) shape;	6.2.2.1, 6.2.2.2, 6.3	5.2.2, 5.3.3, 5.3.5, 5.3.6, 6.2, 6.3, Annex B	
	b) relative location;		5.2.2, 5.2.3, 5.2.6, 5.3.6, 6.2	
	c) mass and stability (potential energy of elements which may move under the effect of gravity);		5.2.6, 5.2.8	
	d) mass and velocity (kinetic energy of elements in controlled or uncontrolled motion);		5.2.3, 5.2.6, 5.3.5, 5.3.6	
	e) mechanical strength;		5.3.2, Annex A, Annex C	
	- accumulation of energy inside the machinery by:			
	f) gases under pressure;	6.2.10, 6.3.5.4	5.4.6	
1.1	Crushing hazard		5.2.3, 5.2.4, 5.2.6, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.4.11, 5.4.12	
1.2	Shearing hazard		5.2.3, 5.2.4, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.4.11, 5.4.12	
1.3	Cutting or severing hazard		5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.3.4, 5.3.6, 5.3.7, 5.4.11, 5.4.12	
1.4	Entanglement hazard		5.2.4, 5.2.5, 5.3.6, 5.3.7, 5.4.11, 5.4.12	
1.5	Drawing-in or trapping hazard		5.2.3, 5.2.4, 5.2.5, 5.3.4, 5.3.6, 5.3.7, 5.4, 11, 5.4.12	
1.6	Impact hazard		5.2.3, 5.3.5, 5.4.11	
1.9	High pressure fluid injection or ejection hazard	6.2.10	5.2.4, 5.3.5, 5.4.7, 5.4.11	
			(continued)	