

SLOVENSKI STANDARD SIST EN 1870-8:2002/kprA1:2009

01-maj-2009

Varnost lesnoobdelovalnih strojev - Krožne žage - 8. del: Enolistne obrezovalne krožne žage s pogonsko enoto in ročnim podajanjem in/ali odvzemom

Safety of woodworking machines - Circular sawing machines - Part 8: Single blade edging circular rip sawing machines with power driven saw unit and manual loading and/or unloading

Sicherheit von Holzbearbeitungsmaschinen - Kreissägemaschinen - Teil 8: Einblattbesäum- und Leistenkreissägemaschinen mit kraftbetätigtem Sägeaggregat und Handbeschickung und/oder Handentnahme

Sécurité des machines pour le travail du bois - Machines à scier circulaires - Partie 8: Déligneuses monolames à déplacement mécanisé du groupe de sciage et à chargement manuel et/ou déchargement manuel

Ta slovenski standard je istoveten z: EN 1870-8:2001/prA1

ICS:

25.080.60 Strojne žage Sawing machines

79.120.10 Lesnoobdelovalni stroji Woodworking machines

SIST EN 1870-8:2002/kprA1:2009 en,fr,de

SIST EN 1870-8:2002/kprA1:2009

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM FINAL DRAFT EN 1870-8:2001

prA1

January 2009

ICS 79.120.10

English Version

Safety of woodworking machines - Circular sawing machines - Part 8: Single blade edging circular rip sawing machines with power driven saw unit and manual loading and/or unloading

Sécurité des machines pour le travail du bois - Machines à scier circulaires - Partie 8: Déligneuses monolames à déplacement mécanisé du groupe de sciage et à chargement manuel et/ou déchargement manuel

Sicherheit von Holzbearbeitungsmaschinen -Kreissägemaschinen - Teil 8: Einblattbesäum- und Leistenkreissägemaschinen mit kraftbetätigtem Sägeaggregat und Handbeschickung und/oder Handentnahme

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 A1, if approved, will modify the European Standard EN 1870-8:2001. 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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.

Warning: This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents Page				
Fore	word	to the Foreword		
1	Modification to the Foreword	4		
2	Modification to Clause 1, Scope	4		
3	Modification to Clause 2, Normative references	4		
4	Modification to 3.2, Definitions	6		
5	Modification to Clause 4, List of hazards	6		
6	Modification to Clause 5, Safety requirements and/or measures (hanging paragraph)	8		
7	Modification to 5.1.1, Safety and reliability of control systems	8		
8	Modification to 5.1.3, Starting	9		
9	Modification to 5.1.4, Normal stopping	9		
10	Modification to 5.1.5, Emergency stop	9		
11	Modification to 5.1.8, Speed changing	9		
12	Modification to 5.1.9, Control duplication	9		
13	Modification to 5.1.10, Failure of the power supply	9		
14	Modification to 5.1.11, Movement of the fence	10		
15	Modification to 5.2.2, Risk of break-up during operation	10		
16	Modification to 5.2.3.2, Strength	10		
17	Modification to 5.2.5, Devices to minimise the possibility or the effect of ejection	10		
18	Modification to 5.3.1, Fire and explosion	10		
19	Modification to 5.3.4, Electricity	10		
20	Modification to 5.3.5, Ergonomics and handling	11		
21	Modification to 5.3.6, Lighting	11		
22	Modification to 5.3.7, Pneumatic	11		
23	Modification to 5.3.8, Hydraulic	12		
24	Modification to 5.3.12, Radiation	12		
25	Modification to 5.3.13, Laser	12		
26	Modification to 5.3.16, Isolation	12		
27	Modification to 5.3.17, Maintenance	13		
28	Modification to Clause 6, Information for use (hanging paragraph)	13		
29	Modification to 6.2.2, Marking of the machine	13		
30	Modification to 6.3, Instruction handbook	14		
31	Modification to Annex F	16		
32	Modification to Annex ZA, Relationship between this European Standard and the E Requirements of EU Directive 98/37/EC			
33	Addition of Annex ZBRelationship between this European Standard and the E Requirements of EU Directive 2006/42/EC			
34	Modification to the Bibliography	17		

Foreword

This document (EN 1870-8:2001/prA1:2009) 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 Annexes ZA and ZB, which are integral parts of this document.

1 Modification to the Foreword

Replace the fourth paragraph with the following:

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

In the 6th paragraph, replace "annexes F and ZA" with "Annexes ZA and ZB".

2 Modification to Clause 1, Scope

Replace the first paragraph with: "This document deals with the significant hazards, hazardous situations and events as listed in Clause 4 which are relevant to single blade edging circular rip sawing machines with power driven saw unit and manual loading and/or unloading, hereinafter referred to as "machines", designed to cut solid wood, chipboard, fibreboard and plywood."

And delete the second paragraph.

3 Modification to Clause 2, Normative references

Replace the standard 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 reference EN 292-1:1991 in Clause 2 and replace "EN 292-1:1991" with "EN ISO 12100-1:2003" throughout the document.

Delete references EN 292-2:1991 and EN 292/A1:1995.

Delete reference to EN 294:1992 and replace it with "EN ISO 13857:2008, Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)". Replace "EN 294:1992" with "EN ISO 13857:2008" throughout the document.

In the title of EN 349:1993 replace "distances" with "gaps".

Replace reference to EN 418:1992 with "EN ISO 13850, Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)" and replace "EN 418:1992" in 5.1.5, 1st paragraph, with "EN ISO 13850".

Replace "EN 847-1:1997" with "EN 847-1:2005" throughout the document.

Delete reference to EN 954-1:1996 and replace it with "EN ISO 13849-1:2008, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)". Replace "EN 954-1:1996" with "EN ISO 13849-1:2008" throughout the document.

Replace "EN 60204-1:1992" with "EN 60204-1:2006" and replace in the title "(IEC 60204-1:1992, modified)" with "(IEC 60204-1:2005, modified)".

Replace reference to "EN 60825-1:1994" with "EN 60825-1:2007, Safety of laser products — Part 1: Equipment classification and requirements (IEC 60825-1:2007)".

Replace reference to "EN 60947-4-1:1992" with "EN 60947-4-1:2001, Low-voltage switchgear and controlgear — Part 4-1: Contactors and motor-starters — Electromechanical contactors and motor-starters (IEC 60947-4-1:2000)" and "EN 60947-4-1:1992" with "EN 60947-4-1:2001" throughout the document.

Replace reference "EN 60947-5-1:1997" 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)" and replace "EN 60947-5-1:1997" with "EN 60947-5-1:2004" throughout the document.

Replace the title of EN ISO 3743-1 with "Acoustics — Determination of sound power levels of noise sources — Engineering methods for small, movable sources in reverberant fields — Part 1: Comparison method for hard-walled test rooms (ISO 3743-1:1994)".

Replace the title of EN ISO 3743-2 with "Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering methods for small, movable sources in reverberant fields — Part 2: Methods for special reverberation test rooms (ISO 3743-2:1994)".

Replace the title of EN ISO 4871 with "Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)".

Replace the title of EN ISO 11202 with "Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Survey method in situ (ISO 11202:1995)".

Delete reference to "ISO 3745:1997" and replace it with "EN ISO 3745:2003, Acoustics — Determination of sound power levels of noise sources using sound pressure — Precision methods for anechoic and semi-anechoic rooms (ISO 3745:2003)" and replace "ISO 3745:1997" with "EN ISO 3745:2003" throughout the document.

Replace reference to "HD 21.1 S3:1997" with "HD 21.1 S4:2002, Cables of rated voltages up to and including 450/750 V and having thermoplastic insulation — Part 1: General requirements" and replace "HD 21.1 S3:1997" with "HD 21.1 S4:2002" throughout the document.

Replace reference to "HD 22.1 S3:1997" with "HD 22.1 S4:2002, Cables of rated voltages up to and including 450/750 V and having cross-linked insulation — Part 1: General requirements" and replace "HD 22.1 S3:1997" with "HD 22.1 S4:2002" throughout the document.

Add the following references:

"EN 614-1:2006, Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles",

"EN 894-1:1997, 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

EN 894-2:1997, Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays

EN 894-3:2000, Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators",

"EN 1005-1:2001, Safety of machinery — Human physical performance — Part 1: Terms and definitions

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 1005-4:2005, Safety of machinery — Human physical performance — Part 4: Evaluation of working postures and movements in relation to machinery

EN 1037:1995, Safety of machinery — Prevention of unexpected start-up",

"EN 50370-1:2005, Electromagnetic compatibility (EMC) — Product family standard for machine-tools — Part 1: Emission

EN 50370-2:2003, Electromagnetic compatibility (EMC) — Product family standard for machine-tools — Part 2: Immunity",

"EN 60439-1:1999, Low-voltage switchgear and controlgear assemblies — Part 1: Type-tested and partially type-tested assemblies (IEC 60439-1:1999)",

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

"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)".

4 Modification to 3.2, Definitions

In Definition 3.2.16, replace the term with "information from the supplier".

5 Modification to Clause 4, List of hazards

Replace the title of Clause 4 with: "List of significant hazards"

Replace the clause content with:

"This clause contains the significant hazards, hazardous situations and events (see EN 1050:1996) as far as they are dealt with in this document, identified by risk assessment as significant for the machines as defined in the scope and which require action to eliminate or reduce the risk. This document deals with these significant hazards by defining safety requirements and/or measures or by reference to relevant standards.

These hazards are listed in Table 1 in accordance with Annex A of EN 1050:1996.

Table 1 — List of significant hazards

No	Hazards, hazardous situations and hazardous events	EN ISO 12100		Relevant sub- clause of this document	
		Part 1: 2003	Part 2: 2003		
1	Mechanical hazards related to:				
	- machine parts or workpieces:				

	a) shape;	4.2	4.2.1, 4.2.2, 5	5.1.11, 5.2.3, 5.2.5, 5.2.7, 5.2.8, 5.2.9		
	b) relative location;			5.1.2, 5.1.3, 5.2.5, 5.2.7, 5.2.8		
	c) mass and stability (potential energy of elements which may move under the effect of gravity)			5.2.6		
	d) mass and velocity (kinetic energy of elements in controlled or uncontrolled motion);			5.2.6		
	e) mechanical strength.			5.2.2, 5.2.3, 5.2.5, 5.2.6		
	- accumulation of energy inside the machinery:					
	f) elastic elements (springs), or	4.2	4.10, 5.5.4	5.2.8		
	g) liquids and gases under pressure;	4.2	4.10, 5.5.4	5.3.7, 5.3.8		
1.1	Crushing hazard	4.2.1	,	5.1.8, 5.1.11, 5.2.7, 5.2.8		
1.2	Shearing hazard			5.2.7		
1.3	Cutting or severing hazard			5.2.4, 5.2.7, 5.2.8, 5.2.9		
1.4	Entanglement hazard			5.2.7		
1.5	Drawing-in or trapping hazard			5.2.7, 5.2.9		
1.9	High pressure fluid injection or ejection hazard			5.3.7, 5.3.8		
2	Electrical hazards due to:					
2.1	Contact of persons with live parts (direct contact)	4.3	4.9, 5.5.4	5.3.4, 5.3.16		
2.2	Contact of persons with parts which have become live under faulty conditions (indirect contact)	4.3	4.9	5.3.4, 5.3.16		
4	Hazards generated by noise, resulting in:					
4.1	Hearing loss (deafness), other physiological disorders (loss of balance, loss of awareness)	4.5	4.2.2, 5	5.3.2		
4.2	Interference with speech communication, acoustic signals.			5.3.2		
6	Hazards generated by radiation					
6.5	Lasers	4.7		5.3.13		
7	Hazards generated by materials and substances (and their constituent elements) processed or used by the machinery					
7.1	Hazards from contact with or inhalation of harmful fluids and dusts	4.8	4.3b, 4.4	5.3.3		
7.2	Fire hazard	4.8	4.4	5.3.1, 5.3.3, 6.3		
8	Hazards generated by neglecting ergonomic principles in machinery design related to:					