



SLOVENSKI STANDARD
SIST EN 1807:2000/kprA1:2009
01-maj-2009

Varnost lesnoobdelovalnih strojev - Tračne žage

Safety of woodworking machines - Band sawing machines

Sicherheit von Holzbearbeitungsmaschinen - Bandsägemaschinen

Sécurité des machines pour le travail du bois - Machines à scier à ruban

Ta slovenski standard je istoveten z: EN 1807:1999/prA1

ICS:

25.080.60	Strojne žage	Sawing machines
79.120.10	Lesnoobdelovalni stroji	Woodworking machines

SIST EN 1807:2000/kprA1:2009 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

FINAL DRAFT
EN 1807:1999

prA1

January 2009

ICS 79.120.10

English Version

Safety of woodworking machines - Band sawing machines

Sécurité des machines pour le travail du bois - Machines à
scier à ruban

Sicherheit von Holzbearbeitungsmaschinen -
Bandsägemaschinen

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 1807:1999. 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

Foreword.....	3
1 Modification to the Foreword	4
2 Modification to Clause 1, Scope.....	4
3 Modification to Clause 2, Normative references	4
4 Modification to 3.1, Definitions.....	6
5 Modification to Clause 4, List of hazards	6
6 Modification to Clause 5, Safety requirements and/or measures (hanging paragraph)	9
7 Modification to 5.1.1, Safety and reliability of control systems	9
8 Modification to 5.1.3, Starting.....	9
9 Modification to 5.1.4.1, All machines	9
10 Modification to 5.1.5, Emergency stop	9
11 Modification to 5.1.8, Control duplication	9
12 Modification to 5.1.9, Failure of the power supply	9
13 Modification to 5.2.1, Stability	9
14 Modification to 5.2.2.1, Characteristics of guards.....	10
15 Modification to 5.3.1, Fire/explosion.....	10
16 Modification to 5.3.2.2, Noise emission measurement	10
17 Modification to 5.3.2.3, Declaration.....	10
18 Modification to 5.3.4, Electricity	11
19 Modification to 5.3.5, Ergonomics and handling.....	11
20 Modification to 5.3.6, Lighting	11
21 Modification to 5.3.12, Laser.....	12
22 Modification to 5.3.15, Isolation	12
23 Modification to 5.3.16, Maintenance	12
24 Modification to 6.1, Warning devices.....	12
25 Modification to 6.2, Marking of the machine.....	12
26 Modification to 6.3, Instruction handbook	13
27 Modification to Annex A.....	17
28 Modification to Annex ZA	17
A29 Addition of Annex ZB	18

Foreword

This document (EN 1807:1999/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 and Out door Noise Directive.

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

EN 1807:1999/prA1:2009 (E)**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."

2 Modification to Clause 1, Scope

Replace the first paragraph with the following:

"This document deals with the significant hazards, hazardous situations and events as listed in Clause 4 which are relevant to stationary and displaceable band sawing machines with either manual or automatic loading and/or unloading, hereinafter referred to as "machines" designed to cut solid wood, chipboard, fibreboard, plywood and also these materials where they are covered with plastic laminate or edgings."

Delete the second paragraph.

Delete the first sentence of the third paragraph.

Replace in the fourth paragraph the first indent with:

"hand held motor-operated electric tools or any adaptation permitting their use in a different mode, i.e. bench mounting;"

Add a note: "NOTE 1 Hand-held motor operated electric tools are covered by the requirements of EN 60745-1:2006 together with EN 60745-2-20:2003."

Replace in the fourth paragraph the second indent with the following:

"transportable machines set up on a bench or a table similar to a bench, which are intended to carry out work in a stationary position, capable of being lifted by one person by hand."

Add a note: "NOTE 2 Transportable electrically driven machines are covered by the requirements of EN 61029-1:2000 together with EN 61029-2-5:2002."

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

Replace "EN 349:1992" with "EN 349:1993" throughout the document.

Delete reference to EN 418:1992 and add: "EN ISO 13850:2008, *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 60204-1:1992" with "EN 60204-1:2006" and replace in the title "(IEC 204:1992, modified)" with "(IEC 60204-1:2005, modified)".

Replace "EN 60825-1:1994" with "EN 60825-1:2007" and replace in the title "(IEC 60825:1993)" with "(IEC 60825:2007)".

Replace "EN 60947-4-1:1992" with "EN 60947-4-1:2001" throughout the document and replace in the title "(IEC 947-4-1:1990)" with "(IEC 60947-4-1:2000)".

Replace "EN 60947-5-1:1991" with "EN 60947-5-1:2004" throughout the document and replace in the title "(IEC 947-5-1:1990)" with "(IEC 60947-5-1:2003)".

Replace "EN 61029:1995" with "EN 61029-1:2000" throughout the document and replace in the title "(IEC 1029-1:1990 modified)" with "(IEC 61029-1:1990, modified)".

Replace reference to prEN 60129-2-5 with "EN 61029-2-5:2002, *Safety of transportable motor-operated electric tools — Part 2: Particular requirements for band saws (IEC 61029-2-5:1993+A1:2001, modified)*".

Replace "prEN 61496-2" with "CLC/TS 61496-2:2006" in Clause 2 and "prEN 61496-2" with "CLC/TS 61496-2" throughout the document and the 3rd element of the title with "Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) (IEC 61496-2:2006)".

Delete reference to ISO 3745:1997 and add: "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 3745:1977" 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.

Replace reference to prEN 1760-1 with "EN 1760-1:1997, *Safety of machinery — Pressure sensitive protective devices — Part 1: General principles for the design and testing of pressure sensitive mats and pressure sensitive floors*".

Delete reference to ISO/TR 11688-1:1995 and add: "EN ISO 11688-1:1998, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)*" and replace "ISO/TR 11688-1:1995" with "EN ISO 11688-1:1998" throughout the text.

Replace reference to ISO 1940-1:1986 with "ISO 1940-1:2003, *Mechanical vibration — Balance quality requirements for rotors in a constant (rigid) state — Part 1: Specification and verification of balance tolerances*" and replace "ISO 1940-1:1986" with "ISO 1940-1:2003" throughout the text

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 1807:1999/prA1:2009 (E)

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 ISO 4871:1996, *Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*" and

"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 3.1, Definitions

Definition 3.1.20, replace the term with "displaceable machine".

Definition 3.1.22, 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 work-pieces:			
	a) shape;	4.2	4.2.1, 4.2.2, 5	5.2.2, 5.2.3.1, 5.2.6, 5.2.7.1.2, 5.2.7.2, 5.2.7.3, 5.2.8
	b) relative location;			5.1.2, 5.1.4, 5.2.3.1, 5.2.3.2, 5.2.7.1.2, 5.2.7.4, 5.2.8, 5.2.9
	c) mass and stability (potential energy of elements which may move under the effect of gravity);			5.2.5
	d) mass and velocity (kinetic energy of elements in controlled or uncontrolled motion);			5.2.1, 5.2.7.1.2, 5.2.7.3
	e) mechanical strength.			5.2.2.1, 5.2.6.2
	- accumulation of energy inside the machinery:			
	f) elastic elements (springs), or	4.2	4.10, 5.5.4	5.2.6
	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	
1.2	Shearing hazard			5.2.8, 5.2.9
1.3	Cutting or severing hazard			5.2.7
1.4	Entanglement hazard			5.2.7, 5.2.8
1.5	Drawing-in or trapping hazard			5.2.7, 5.2.8, 5.2.9
1.6	Impact hazard			5.2.7
1.7	Stabbing or puncture hazard			5.2.2
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, 5.3.15, 5.3.16

EN 1807:1999/prA1:2009 (E)

2.2	Contact of persons with parts which have become live under faulty conditions (indirect contact)	4.3	4.9	5.3.4, 5.3.15, 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
6	Hazards generated by radiation			
6.5	Lasers	4.7		5.3.12
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
8	Hazards generated by neglecting ergonomic principles in machinery design related to:			
8.1	Unhealthy postures or excessive effort	4.9	4.7, 4.8.2, 4.11.12, 5.5.5, 5.5.6	5.1.2
8.2	Hand-arm or foot-leg anatomy	4.9	4.8.3	5.1.2
8.4	Local lighting		4.8.6	6.3
8.6	Human error, human behaviour		4.8, 4.11.8, 4.11.10, 5.5.2, 6	6.3
8.7	Design, location or identification of manual controls		4.8.7, 4.11.8	5.1.2
8.8	Design or location of visual display units		4.8.8, 6.2	5.1.2
10	Unexpected start up, unexpected overrun/overspeed (or any similar malfunction) from:			
10.1	Failure/disorder of the control system		4.11, 5.5.4	5.1.1
10.2	Restoration of energy supply after an interruption	4.9	4.11.4	5.1.1, 5.1.9
10.3	External influences on electrical equipment		4.11.11	5.1.1
10.6	Errors made by the operator (due to mismatch of machinery with human characteristics and abilities, see 8.6)		4.8, 4.11.8, 4.11.10, 5.5.2, 6	5.1.1, 5.3.5, 6.3
11	Impossibility of stopping the machine in the best possible conditions		4.11.1, 4.11.3, 5.5.2	5.1.2, 5.1.4, 5.2
13	Failure of the power supply		4.11.1, 4.11.4	5.1.9
14	Failure of the control circuit		4.11, 5.5.4	5.1.1
15	Errors of fitting	4.9	4.7, 6.5	5.1.8
16	Break-up during operation	4.2.2	4.3	5.2.2
17	Falling or ejected objects or fluids	4.2.2	4.3, 4.10	5.2.2, 5.2.3, 5.2.9
18	Loss of stability / overturning of machinery	4.2.2	5.2.6	5.2.1

".