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Ketassaagimisseadmed. Osa 5:
Ketassaepingid/ülallõikamise järkamissaeseadmed
KONSOLIDEERITUD TEKST**

Safety of woodworking machines - Circular sawing machines
-Part 5: Circular sawbenches/up-cutting cross-cut sawing
machines CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1870-5:2002+A1:2009 sisaldab Euroopa standardi EN 1870-5:2002+A1:2009 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 30.10.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 09.09.2009.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1870-5:2002+A1:2009 consists of the English text of the European standard EN 1870-5:2002+A1:2009.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 30.10.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 09.09.2009.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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ICS 79.120.10

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NORME EUROPÉENNE

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English Version

**Safety of woodworking machines - Circular sawing machines -
Part 5: Circular saw benches/up-cutting cross-cut sawing
machines**

Sécurité des machines pour le travail du bois - Machines à
scier circulaires - Partie 5: Scies circulaires combinées à
table et à coupe transversale ascendante

Sicherheit von Holzbearbeitungsmaschinen -
Kreissägemaschinen - Teil 5: Kombinierte
Tischkreissägemaschinen/von unten schneidende
Kappsägemaschinen

This European Standard was approved by CEN on 8 November 2001 and includes Amendment 1 approved by CEN on 30 July 2009.

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Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Foreword.....	4
0 Introduction.....	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions.....	10
3.1 Terms.....	10
3.2 Definitions.....	10
4 List of significant hazards.....	15
5 Safety requirements and/or measures.....	18
5.1 Controls.....	18
5.1.1 Safety and reliability of control systems.....	18
5.1.2 Position of controls.....	19
5.1.3 Starting.....	19
5.1.4 Normal stopping.....	19
5.1.5 Failure of the power supply.....	20
5.1.6 Failure of the control circuits.....	20
5.2 Protection against mechanical hazards.....	20
5.2.1 Stability.....	20
5.2.2 Risk of break-up during operation.....	20
5.2.3 Tool holder and tool design.....	21
5.2.4 Braking.....	22
5.2.5 Devices to minimise the possibility or the effect of ejection.....	23
5.2.6 Workpiece supports and guides.....	30
5.2.7 Prevention of access to moving parts.....	34
5.2.8 Safety appliances.....	39
5.3 Protection against non-mechanical hazards.....	39
5.3.1 Fire and explosion.....	39
5.3.2 Noise.....	40
5.3.3 Emission of chips, dust and gases.....	41
5.3.4 Electricity.....	41
5.3.5 Ergonomics and handling.....	42
5.3.6 Lighting.....	42
5.3.7 Pneumatic.....	42
5.3.8 Hydraulic.....	42
5.3.9 Heat.....	42
5.3.10 Substances.....	42
5.3.11 Vibration.....	42
5.3.12 Radiation.....	43
5.3.13 Laser.....	43
5.3.14 Static electricity.....	43
5.3.15 Errors of fitting.....	43
5.3.16 Isolation.....	43
5.3.17 Maintenance.....	44
6 Information for use.....	44
6.1 Warning devices.....	44
6.2 Marking.....	44
6.2.1 Marking of the machine.....	44

6.2.2	Marking of riving knives	45
6.3	Instruction handbook	45
Annex A	(normative) Open frame machines stability test	49
Annex B	(normative) Dimensional tolerances of saw spindles	50
Annex C	(normative) Riving knife mounting strength test	51
Annex D	(normative) Riving knife lateral stability test	52
Annex E	(normative) Saw blade guard stability test	53
E.1	General	53
E.2	Machines with saw blade guards with lead-in	53
E.3	Machines with saw blade guards with in-feed rollers	53
Annex F	(informative) Safe working practice	54
Annex ZA	(informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives	56
	Bibliography	58

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Foreword

This document (EN 1870-5:2002+A1:2009) has been prepared by Technical Committee TC 142 "Woodworking machines - Safety", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1, approved by CEN on 2009-07-30.

This document supersedes EN 1870-5:2002.

The start and finish of text introduced or altered by amendment is indicated in the text by tags \square_{A1} \square_{A1} .

\square_{A1} 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(s), see informative Annexes ZA and ZB, which are integral parts of this document. \square_{A1}

Organisations contributing to the preparation of this European Standard include European Committee of Woodworking Machinery Manufacturers Association "EUMABOIS".

Annexes A, B, C, D and E are normative and \square_{A1} Annexes ZA and ZB \square_{A1} are informative.

\square_{A1} EN 1870 *Safety of woodworking machines — Circular sawing machines* consists of the following parts:

Part 1: Circular saw benches (with and without sliding table), dimension saws and building site saws

Part 3: Down cutting cross-cut saws and dual purpose down cutting cross-cut saws/circular saw benches

Part 4: Multi-blade rip sawing machines with manual loading and/or unloading

Part 5: Circular saw -benches/up-cutting cross-cut sawing machines

Part 6: Circular sawing machines for firewood and dual purpose circular sawing machines for firewood/circular saw benches, with manual loading and/or unloading

Part 7: Single blade log sawing machines with integrated feed table and manual loading and/or unloading

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

Part 9: Double blade circular sawing machines for cross-cutting with integrated feed and with manual loading and/or unloading

Part 10: Single blade automatic and semi-automatic up-cutting cross-cut sawing machines

Part 11: Semi-automatic and automatic horizontal cross-cut sawing machines with one saw unit (radial arm saws)

Part 12: Pendulum cross-cut sawing machines

Part 13: Horizontal beam panel sawing machines

Part 14: Vertical panel sawing machines

Part 15: Multi-blade cross-cut sawing machines with integrated feed of the workpiece and manual loading and/or unloading

Part 16: Double mitre sawing machines for V-cutting

Part 17: Manual horizontal cutting cross-cut sawing machines with one saw unit (manual radial arm saws) ^{A1}

The European Standards produced by CEN/TC 142 are particular to woodworking machines and complement the relevant A and B Standards on the subject of general safety (see introduction of ^{A1} EN ISO 12100-1:2003 ^{A1} for a description of A, B and C standards).

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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.

0 Introduction

This European Standard has been prepared to be a harmonised standard to provide one means of conforming to the essential safety requirements of the Machinery Directive, and associated EFTA regulations. This European Standard is a type "C" standard as defined in [EN ISO 12100-1:2003](#).

The extent to which hazards are covered is indicated in the scope of this European Standard.

The requirements of this European Standard concern designers, manufacturers, suppliers and importers of circular saw benches/up-cutting cross-cut sawing machines.

This European Standard also includes information to be provided by the manufacturer to the user.

Common requirements for tooling are given in [EN 847-1:2005](#).

Electrically driven machines excluded by the scope of this European Standard are covered by the requirements of [EN 61029-1:2000](#).

1 Scope

A1 This document deals with all significant hazards, hazardous situations and events as listed in Clause 4 which are relevant to circular saw benches/up-cutting cross-cut sawing machines, hereinafter referred to as “machines”, designed to cut solid wood, chipboard, fibreboard, plywood and also these materials where they are covered with plastic edging and/or plastic/light alloy laminates. **A1**

This European Standard does not apply to:

- **A1** hand-held motor-operated electric tools or any adaptation permitting their use in a different mode, i.e. bench mounting; **A1**
- **A1** NOTE 1 Hand-held motor-operated electric tools and saw benches to form an integrated whole with a hand-held motor-operated electric tools are covered by EN 60745-1:2006 together with EN 60745-2-5:2007. **A1**
- **A1** machines set up on a bench or a table similar to a bench, which is intended to carry out work in a stationary position, capable of being lifted by one person by hand. **A1**.

A1 NOTE 2 Transportable motor-operated electric tools are covered by the requirements of EN 61029-1:2000 together with EN 61029-2-1:2002. **A1**

A1 *deleted text* **A1**

For Computer Numerically Controlled (CNC) machines this European Standard does not cover hazards related to Electro-Magnetic Compatibility (EMC).

This European Standard is primarily directed at machines which are manufactured after the date of issue of this European Standard.

A1 NOTE 3 **A1** Circular saw benches are dealt with in EN 1870-1:1999.

2 Normative references

A1 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. **A1**.

A1 *deleted text* **A1**

A1 EN 614-1:2006, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles* **A1**

A1 EN 847-1:2005, *Tools for woodworking — Safety requirements — Part 1: Milling tools, circular saw blades* **A1**

A1 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* **A1**

A1 deleted text **A1**

EN 982:1996, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

EN 983:1996, *Safety of machinery — Safety requirements for fluid power systems and their components — Pneumatics*

A1 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* **A1**

EN 1088:1995, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

A1 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* **A1**

A1 EN 60204-1:2006 **A1**, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements* **A1** (IEC 60204-1:2005, modified) **A1**

A1 EN 60439-1:1999, *Low-voltage switchgear and controlgear assemblies — Part 1: Type-tested and partially type-tested assemblies (IEC 60439-1:1999)* **A1**

EN 60529, *Degree of protection provided by enclosures (IP code) (IEC 60529:1989)*

A1 EN 60825-1:2007, *Safety of laser products — Part 1: Equipment classification and requirements (IEC 60825-1:2007)* **A1**

A1 EN 60497-4-1:2001 **A1**, *Low voltage switchgear and control gear — Part 4: Contactors and motor starters - Section 1: Electromechanical contactors and motor starters* **A1** (IEC 60947-4-1:2000) **A1**

A1 EN 60947-5-1:2004 **A1**, *Low voltage switchgear and control gear — Part 5: Control circuit devices and switching elements Section 1: Electromechanical control circuit devices* **A1** (IEC 60947-5-1:2003) **A1**

A1 EN 61029-1:2000 **A1**, *Safety of transportable motor operated electric tools — Part 1: General requirements* **A1** (IEC 61029-1:1990, modified) **A1**

A1 EN 61310-1:2008, *Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1:2007)* **A1**

EN ISO 3743-1, *Acoustics — Determination of sound power levels of noise sources — Engineering methods for small, moveable sources in reverberant fields — Part 1: Comparison method for hard walled test rooms (ISO 3743-1:1994)*

EN ISO 3743-2, **A1** *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)* ^{A1}

EN ISO 3744, ^{A1} *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994)* ^{A1}

^{A1} 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)* ^{A1}

EN ISO 3746:1995, ^{A1} *Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:1995)* ^{A1}

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

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

EN ISO 11202:1995, ^{A1} *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)* ^{A1}

EN ISO 11204:1995, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a workstation and at other specified positions — Method requiring environmental corrections (ISO 11204:1995)*

EN ISO 11688-1, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)*

^{A1} EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology and 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)* ^{A1}

^{A1} EN ISO 13849-1:2008, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)* ^{A1}

^{A1} EN ISO 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)* ^{A1}

^{A1} *deleted text* ^{A1}

ISO 7960:1995, *Airborne noise emitted by machine tools — Operating conditions for woodworking machines*

^{A1} HD 21.1 S4:2002, *Cables of rated voltages up to and including 450/750 V and having thermoplastic insulation — Part 1: General requirements* ^{A1}

^{A1} 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* ^{A1}

^{A1} HD 22.4 S4:2004, *Cables of rated voltages up to and including 450/750 V and having crosslinked insulation — Part 4: Cords and flexible cables* ^{A1}