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I.S. EN 1870-13:2007+A2:2012

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

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Foreword

This document (EN 1870-13:2007+A2:2012) has been prepared by Technical Committee CEN/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of an identical text or by endorsement, at the latest by September 2012, and conflicting national standards shall be withdrawn at the latest by September 2012.

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 2009-08-13, and Amendment 2, approved by CEN on 2012-01-30.

This document supersedes ^{A2} EN 1870-13:2007+A1:2009 ^{A2}.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ^{A1} ^{A1} and ^{A2} ^{A2}.

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.

^{A2} For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document. ^{A2}

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

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 ^{A2} EN ISO 12100:2010 ^{A2} for a description of A, B and C standards).

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;*

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

— *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);*
- *Part 18: Dimension saws;*
- *Part 19: Circular saw benches (with and without sliding table) and building site saws.* 

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, Croatia, 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, Turkey and the United Kingdom.

Introduction

This document 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 document is a type C standard as defined in  EN ISO 12100:2010 .

The machinery concerned and the extent to which hazards, hazardous situations and 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 other standards, for machines that have been designed and built according to the provisions of this type C standard.

The requirements of this document are directed to manufacturers and their authorised representatives of horizontal beam panel sawing machines. This document is also useful for designers and importers.

This document also includes provision and examples of information to be provided by the manufacturer to the user.

Common requirements for tooling are given in  EN 847-1:2005+A1:2007 .

1 Scope

This document deals with A_1 all significant hazards A_1 , hazardous situations and events as listed in Clause 4 which are relevant to horizontal beam panel sawing machines A_2 where the saw unit of the front cutting line is mounted A_2 below the workpiece support and which are manually or mechanically loaded and / or unloaded, fitted with:

- a side pressure device and / or
- the facility for scoring and / or
- the facility for post-formed / soft-formed edge pre-cutting and / or
- a panel turning device and / or
- a pushing out device and / or
- pneumatic clamping of the saw blade and / or
- a powered panel loading device and / or
- a grooving device and / or
- additional cutting line(s) inside the machine for longitudinal and / or head cut (before transversal cutting line) and / or
- workpiece vacuum clamping as part of a panel turning device or of a panel loading device,

hereinafter referred to as "machines" when they are used as intended and under the conditions foreseen by the manufacturer A_2 including reasonably foreseeable misuse A_2 .

The machines are designed for cutting panels consisting of:

- a) wood based materials such as chipboard, fibreboard, plywood and also these materials where they are covered with plastic/light alloy laminates which can be cut easily;
- b) solid wood;
- c) hardened rubber and hardened plastic material;
- d) non ferrous materials e.g. light alloy;
- e) gypsum boards, gypsum bounded fibreboards;
- f) composite boards made from the materials listed above.

This document does not deal with specific hazards related to:

- 1) specific features which differ from the list above;
- 2) the machining of panels with grooving tools;
- 3) mechanical unloading of panels;
- 4) the combination of a single machine being used with any other machine (as part of a line).

This document is not applicable to horizontal beam panel sawing machines which are manufactured before the date of its publication as EN.

NOTE Machines covered by this standard if manually loaded and / or unloaded are listed under **A2** 1.4 **A2** of Annex IV of the Machinery Directive.

2 Normative references

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 *deleted text **A1***

A2 EN 614-1:2006+A1:2009 **A2**, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

A2 EN 847-1:2005+A1:2007 **A2**, *Tools for woodworking — Safety requirements — Part 1: Milling tools, circular saw blades*

A2 EN 894-1:1997+A1:2008 **A2**, *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*

A2 EN 894-2:1997+A1:2008 **A2**, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays*

A2 EN 894-3:2000+A1:2008 **A2**, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators*

A2 *deleted text **A2***

A2 EN 1005-1:2001+A1:2008 **A2**, *Safety of machinery — Human physical performance — Part 1: Terms and definitions*

A2 EN 1005-2:2003+A1:2008 **A2**, *Safety of machinery — Human physical performance — Part 2: Manual handling of machinery and component parts of machinery*

A2 EN 1005-3:2002+A1:2008 **A2**, *Safety of machinery — Human physical performance — Part 3: Recommended force limits for machinery operation*

A2 EN 1005-4:2005+A1:2008 **A2**, *Safety of machinery — Human physical performance — Part 4: Evaluation of working postures and movements in relation to machinery*

A2 EN 1037:1995+A1:2008 **A2**, *Safety of machinery — Prevention of unexpected start-up*

A2 EN 1088:1995+A2:2008 **A2**, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

A2 EN 1760-3:2004+A1:2009 **A2**, *Safety of machinery — Pressure sensitive protective devices — Part 3: General principles for the design and testing of pressure sensitive bumpers, plates, wires and similar devices*

EN 50178:1997, *Electronic equipment for use in power installations*

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

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