Irish Standard
I.S. EN 1870-3:2014

Safety of woodworking machines - Circular sawing machines - Part 3: Down cutting cross-cut saws and dual purpose down cutting cross-cut saws/circular saw benches

I.S. EN 1870-3:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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English Version

Safety of woodworking machines - Circular sawing machines - Part 3: Down cutting cross-cut saws and dual purpose down cutting cross-cut saws/circular saw benches

Sécurité des machines pour le travail du bois - Machines à scies circulaires - Partie 3: Tronçonneuses à coupe descendante et tronçonneuses mixtes à coupe descendante et à scies circulaires à table de menuisier

Sicherheit von Holzbearbeitungsmaschinen - Kreissägemaschinen - Teil 3: Von oben schneidende Kappsägemaschinen und kombinierte Kapp- und Tischkreissägemaschinen

This European Standard was approved by CEN on 11 October 2014.

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Foreword

This document (EN 1870-3:2014) 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of an identical text or by endorsement, at the latest by May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

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

The main modifications compared to EN 1870-3:2001+A1:2009 relate to the introduction of performance levels (PL) for control systems and to the following items:

— clarification of controls positions in 5.2.2;

— addition of PL where missing;

— addition of requirements on mode selection in 5.2.7 and on prevention of automatic restart in 5.2.8;

— deletion of material requirements on flanges in 5.3.3.3;

— addition of requirements on braking system in 5.3.4;

— up-date of references;

— addition of requirements in 5.4.3 on chips and dust performances;

— limitation of tightening torque for riving knife mounting screws in Annex B.

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

EN 1870, Safety of woodworking machines — Circular sawing machines, consists of the following parts:

— 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 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, Former Yugoslav Republic of Macedonia, 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 harmonized 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 12100:2010.

The extent to which hazards are covered is 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 authorized representatives of down cutting cross-cut saws and dual purpose down cutting cross -cut saws/circular saw benches. They are also useful for designers.

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

Common requirements for tooling are given in EN 847-1:2013.

Electrically driven machines excluded by the scope of this document are covered by the requirements of EN 61029-1:2000, EN 61029-2-9:2009 and EN 61029-2-11:2009.

1 Scope

This European Standard deals with all significant hazards, hazardous situations and events as listed in Clause 4 which are relevant to down cutting cross-cut saws and dual purpose down cutting cross-cut saws/circular saw benches, herein after 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 when they are used as intended and under the conditions foreseen by the manufacturer including reasonably foreseeable misuse.

NOTE 1 For the definition of down cutting cross-cut saws and dual purpose down cutting cross -cut saws/circular saw benches, see 3.2.2, 3.2.3 and 3.2.4, and for the definition of displaceable machine, see 3.2.8.

This document does not apply to:

— machines for cross cutting logs;

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

NOTE 2 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 60745-1:2009 together with EN 60745-2–5:2010.

— 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 i.e. maximum mass ≤ 25 kg.

NOTE 3 Transportable motor-operated electric tools are covered by the requirements of EN 61029-1:2009 together with EN 61029-2–9:2009 and EN 61029-2–11:2009.

This document is not applicable to down cutting cross-cut saws and dual purpose down cutting cross-cut saws/circular saw benches which are manufactured before the date of its publication as European Standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 574:1996+A1:2008, *Safety of machinery - Two-hand control devices - Functional aspects - Principles for design*

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

EN 847-1:2013, *Tools for woodworking - Safety requirements - Part 1: Milling tools, circular saw blades*

EN 894-1:1997+A1:2008, *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+A1:2008, *Safety of machinery - Ergonomics requirements for the design of displays and control actuators - Part 2: Displays*

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

EN 953:1997+A1:2009, *Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards*