

BS EN 1870-19:2013



BSI Standards Publication

Safety of woodworking machines — Circular sawing machines

Part 19: Circular saw benches (with and without sliding table) and building site saws

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National foreword

This British Standard is the UK implementation of EN 1870-19:2013. Together with BS EN 1870-18:2013, it supersedes BS EN 1870-1:2007+A1:2009 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MTE/23, Woodworking machines.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

**Safety of woodworking machines - Circular sawing machines -
Part 19: Circular saw benches (with and without sliding table)
and building site saws**

Sécurité des machines pour le travail du bois - Machines à scies circulaires - Partie 19: Scies circulaires à table de menuisier (avec et sans table mobile) et scies de chantier

Sicherheit von Holzbearbeitungsmaschinen - Kreissägemaschinen - Teil 19: Tischkreissägemaschinen (mit und ohne Schiebetisch) und Baustellenkreissägemaschinen

This European Standard was approved by CEN on 7 September 2013.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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-CENELEC Management Centre has the same status as the official versions.

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Foreword

This document (EN 1870-19:2013) 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of an identical text or by endorsement, at the latest by May 2014, and conflicting national standards shall be withdrawn at the latest by May 2014.

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 together with EN 1870-18 supersedes EN 1870-1:2007+A1:2009.

The major technical changes from the previous edition are the following:

- a) the exclusion of saw blade guard mounted on wall, ceiling or floor;
- b) introduction of PL;
- c) inclusion of a stability test for displaceable machines;
- d) more precise requirements for braking function;
- e) more precise requirement on chips and dust extraction connections;
- f) extension of usable safety appliances;
- g) more precise requirements to prevent crushing and shearing hazards.

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 Annex ZA, which is an integral part of this document.

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 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*

Organizations contributing to the preparation of this European Standard include 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 EN ISO 12100:2010 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, 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 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 authorized representatives of circular saw benches (with and without sliding table) and building site saws. They are also useful for designers.

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

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

1 Scope

This European Standard deals with all significant hazards, hazardous situations and events as listed in Clause 4 which are relevant to stationary and displaceable circular saw benches (with or without sliding table and/or demountable power feed unit) and building site saws, hereinafter referred to as “machines”, designed to cut solid wood, chipboard, fibreboard, plywood and also these materials, if 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.

Machines which are designed to cut wood-based material may also be used for cutting hardened plastic materials with similar physical characteristics as wood.

NOTE 1 For the definition of stationary and displaceable machine see 3.2.9 and 3.2.10.

NOTE 2 Circular saw benches are used for ripping, cross cutting, dimensioning and grooving. Building site saws are used for ripping, cross cutting and dimensioning.

The requirements of this document apply also to machines designed for grooving with a width not exceeding 20 mm in one pass by using a milling tool.

This document does not apply to:

- a) 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. The bench can also be an integrated part of the machine if it consists of hinged legs which can be extended down;
- b) hand held woodworking machines including any adaptation permitting their use in a different mode, i.e. bench mounting.

NOTE 3 Transportable motor-operated electric tools are covered by the requirements of EN 61029-1:2009 together with EN 61029-2-1:2012; a hand-held motor-operated electric tool and a saw bench to form an integrated whole are covered by EN 60745-1:2009 together with EN 60745-2-5: 2010.

For the purpose of this document, building site saws having a tiltable spindle are considered to be circular saw benches.

This document is not applicable to circular saw benches (with and without sliding table) and building site saws which are manufactured before the date of its publication as EN.

NOTE 4 Machines covered by this document are listed under 1.1 of Annex IV of the Machinery Directive.

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 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*