

**BS EN 1870-18:2013**

*Incorporating Corrigendum May 2013*



BSI Standards Publication

# Safety of woodworking machines — Circular sawing machines

Part 18: Dimension saws

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**National foreword**

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 Together with BS EN 1870-19, it supersedes BS EN 1870-1:2007+A1:2009 which will be withdrawn on publication of BS EN 1870-19.

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.

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Published by BSI Standards Limited 2013

ISBN 978 0 580 83232 1

ICS 79.120.10

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2013.

**Amendments/corrigenda issued since publication**

Date	Text affected
30 June 2013	Addition of supersession details

EUROPEAN STANDARD

**EN 1870-18**

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2013

ICS 79.120.10

Supersedes EN 1870-1:2007+A1:2009

English Version

**Safety of woodworking machines - Circular sawing machines -  
Part 18: Dimension saws**Sécurité des machines pour le travail du bois - Machines à  
scies circulaires - Partie 18: Scies au formatSicherheit von Holzbearbeitungsmaschinen -  
Kreissägemaschinen - Teil 18: Formatkreissägemaschinen

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

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## Contents

Page

Foreword.....	4
Introduction .....	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions .....	10
4 List of significant hazards .....	14
5 Safety requirements and/or measures .....	17
5.1 General .....	17
5.2 Controls .....	17
5.2.1 Safety and reliability of control systems.....	17
5.2.2 Position of controls.....	18
5.2.3 Starting .....	20
5.2.4 Normal stopping.....	20
5.2.5 Emergency stop .....	21
5.2.6 Mode selection .....	21
5.2.7 Speed control .....	22
5.2.8 Power operated adjustment of the saw blade(s) and/or fence(s).....	23
5.2.9 Interlocking of guards, movements and functions.....	24
5.2.10 Failure of the power supply .....	24
5.2.11 Failure of the control circuits .....	24
5.3 Protection against mechanical hazards .....	24
5.3.1 Stability.....	24
5.3.2 Hazard of break up during operation .....	25
5.3.3 Tool holder and tool design.....	25
5.3.4 Braking .....	29
5.3.5 Devices to minimise the possibility or the effect of kickback.....	30
5.3.6 Workpiece supports and guides.....	35
5.3.7 Prevention of access to moving parts .....	39
5.3.8 Powered workpiece clamping.....	49
5.3.9 Safety appliances.....	50
5.4 Protection against non-mechanical hazards .....	53
5.4.1 Fire.....	53
5.4.2 Noise.....	53
5.4.3 Emission of chips and dust .....	54
5.4.4 Electricity.....	55
5.4.5 Ergonomics and handling.....	56
5.4.6 Pneumatics.....	57
5.4.7 Electromagnetic compatibility.....	57
5.4.8 Laser .....	57
5.4.9 Static electricity.....	57
5.4.10 Errors of fitting.....	58
5.4.11 Supply disconnection (Isolation).....	58
5.4.12 Maintenance .....	58
6 Information for use.....	59
6.1 General .....	59
6.2 Marking.....	59
6.2.1 Marking of the machine .....	59
6.2.2 Marking of riving knives .....	60

<b>6.3</b>	<b>Instruction handbook</b> .....	<b>60</b>
<b>Annex A</b>	<b>(normative) Saw spindle dimensional tolerances</b> .....	<b>65</b>
<b>Annex B</b>	<b>(normative) Riving knife mounting strength test</b> .....	<b>66</b>
<b>Annex C</b>	<b>(normative) Riving knife lateral stability test</b> .....	<b>67</b>
<b>Annex D</b>	<b>(normative) Minimum dimensions of the machine table, extension table</b> .....	<b>68</b>
<b>Annex E</b>	<b>(normative) Saw blade guard stability test</b> .....	<b>69</b>
<b>E.1</b>	<b>General</b> .....	<b>69</b>
<b>E.2</b>	<b>Separately from riving knife mounted saw blade guards</b> .....	<b>69</b>
<b>E.2.1</b>	<b>Saw blade guards with lead-in</b> .....	<b>69</b>
<b>E.2.2</b>	<b>Saw blade guards with in-feed rollers</b> .....	<b>70</b>
<b>E.3</b>	<b>Riving knife mounted saw blade guards</b> .....	<b>71</b>
<b>Annex F</b>	<b>(normative) Impact test method for guards</b> .....	<b>73</b>
<b>F.1</b>	<b>General</b> .....	<b>73</b>
<b>F.2</b>	<b>Test method</b> .....	<b>73</b>
<b>F.2.1</b>	<b>Preliminary remarks</b> .....	<b>73</b>
<b>F.2.2</b>	<b>Testing equipment</b> .....	<b>73</b>
<b>F.2.3</b>	<b>Projectile for guards</b> .....	<b>73</b>
<b>F.2.4</b>	<b>Sampling</b> .....	<b>73</b>
<b>F.2.5</b>	<b>Test procedure</b> .....	<b>73</b>
<b>F.3</b>	<b>Results</b> .....	<b>74</b>
<b>F.4</b>	<b>Assessment</b> .....	<b>74</b>
<b>F.5</b>	<b>Test report</b> .....	<b>74</b>
<b>F.6</b>	<b>Test equipment for impact test</b> .....	<b>74</b>
<b>Annex G</b>	<b>(normative) Braking tests</b> .....	<b>76</b>
<b>G.1</b>	<b>Conditions for all tests</b> .....	<b>76</b>
<b>G.2</b>	<b>Tests</b> .....	<b>76</b>
<b>G.2.1</b>	<b>Un-braked run-down time</b> .....	<b>76</b>
<b>G.2.2</b>	<b>Braked run-down time</b> .....	<b>76</b>
<b>Annex ZA</b>	<b>(informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC</b> .....	<b>77</b>
	<b>Bibliography</b> .....	<b>80</b>

## Foreword

This document (EN 1870-18:2013) 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 October 2013, and conflicting national standards shall be withdrawn at the latest by October 2013.

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 1870-19, supersedes EN 1870-1:2007+A1:2009.

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.

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: Multiblade 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 (radial arm saws);*
- *Part 18: Dimension saws (the present document);*
- *Part 19: Circular saw benches (with and without sliding table) and building site saws.*

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 organisations 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 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 dimension 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 847-1:2005+A1:2007.



## 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 dimension 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 work wood based materials may also be used for working rigid plastic materials with similar physical characteristics as wood.

The machine may have any of the following features:

- a) facility for the saw blade and scoring saw blade (if any) to be raised and lowered;
- b) facility to tilt the main saw blade and scoring saw blade (if any) for angled cutting;
- c) facility for scoring;
- d) facility for grooving with milling tool;
- e) demountable power feed unit;
- f) post-formed edge pre-cutting unit;
- g) power operated sliding table;
- h) workpiece clamping.

NOTE 1 For the definition of stationary and displaceable machine, see 3.10 and 3.11.

NOTE 2 Dimension saws are used for ripping, cross cutting, dimensioning and grooving.

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 is not applicable to dimension saws which are manufactured before the date of its publication as a European Standard.

NOTE 3 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 847-1:2005+A1:2007, *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*