

Irish Standard I.S. EN 1870-8:2012

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

© CEN 2012

No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments/corrigenda/National Annexes issued since publication:		

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces: EN 1870-8:2001+A1:2009

This document is based on:

Published:

EN 1870-8:2012

11 December, 2012

This document was published under the authority of the NSAI and comes into effect on:

11 December, 2012

ICS number:

79.120.10

NSAI

T +353 1 807 3800

Sales:

1 Swift Square, Northwood, Santry F +353 1 807 3838 E standards@nsai.ie T +353 1 857 6730 F +353 1 857 6729

Dublin 9

W standards.ie

W NSAl.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1870-8

November 2012

ICS 79.120.10

Supersedes EN 1870-8:2001+A1:2009

English Version

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

Sécurité des machines pour le travail du bois - Machines à scies circulaires - Partie 8: Déligneuses mono-lames à déplacement mécanisé du groupe de sciage et à chargement et/ou déchargement manuel

Sicherheit von Holzbearbeitungsmaschinen -Kreissägemaschinen - Teil 8: Einblattbesäum- und Leistenkreissägemaschinen mit kraftbetätigtem Sägeaggregat und Handbeschickung und/oder Handentnahme

This European Standard was approved by CEN on 1 September 2012.

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 1870-8:2012 (E)

Cont	Contents			
Forewo	ord	4		
Introdu	iction	6		
1	Scope			
2	Normative references	7		
3	Terms and definitions	9		
4	List of significant hazards	13		
5	Safety requirements and/or measures			
5.1	General			
5.2	Controls			
5.2.1	Safety and reliability of control systems			
5.2.2	Position of controls			
5.2.3	Starting			
5.2.4	Normal stopping			
5.2.5	Emergency stop	19		
5.2.6	Integrated feed	19		
5.2.7	Saw blade changing			
5.2.8	Speed control	20		
5.2.9	Control duplication			
5.2.10	Failure of the power supply			
5.2.11	Powered movement of the saw blade and/or fences			
5.3	Protection against mechanical hazards			
5.3.1	Stability			
5.3.2	Risk of break-up during operation			
5.3.3	Tool holder and tool design			
5.3.4	Braking			
5.3.5	Devices to minimise the possibility or the effect of ejection			
5.3.6	Workpiece supports and guides			
5.3.7	Prevention of access to moving parts			
5.3.8	Workpiece clamping			
5.3.9	Safety appliances			
5.4	Protection against non-mechanical hazards			
5.4.1	Fire			
5.4.2	Noise			
5.4.3	Emission of chips and dust			
5.4.4	Electricity			
5.4.5	Ergonomics and handling			
5.4.6	Lighting			
5.4.7	Pneumatic			
5.4.8	Hydraulic			
5.4.9	Electromagnetic compatibility			
5.4.10	Laser			
5.4.11	Errors of fitting			
5.4.12	Isolation			
5.4.13	Maintenance	39		
6	Information for use	40		
6.1	General			
6.2	Warnings and warning devices			
6.3	Marking			

EN 1870-8:2012 (E)

6.3.1	Marking of riving knives	40
6.3.2	Marking of machine	
6.4	Instruction handbook	41
Annex	A (normative) Saw spindle dimensional tolerances	45
Annex	B (normative) Riving knife mounting strength test	46
Annex	C (normative) Lateral stability riving knife test	47
Annex	D (normative) Sectional safety curtain material rigidity test	48
	E (normative) Operating conditions for noise emission measurement	49
E.1	General	
E.2	Noise measurements	_
E.3	General data sheet	51
	F (normative) Braking tests	
F.1	Conditions for all tests	
F.2	Tests	
F.2.1	Un-braked run-down time	
F.2.2	Braked run-down time	55
	G (normative) Impact test method for guards	56
G.1	General	
G.2	Test method	
G.2.1	Preliminary remarks	
G.2.2	Testing equipment	
G.2.3 G.2.4	Projectile for guardsSampling	
G.2.4 G.2.5	Test procedure	
G.2.3 G.3	Results	
G.4	Assessment	
G.5	Test report	_
G.6	Test equipment for impact test	
Annex	ZA (informative) Relationship between this European Standard and the Essential	
.	Requirements of EU Directive 2006/42/EC	59
Diblica	graphy	60
DIDHUU	IFADILA	h l

Foreword

This document (EN 1870-8:2012) 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 May 2013, and conflicting national standards shall be withdrawn at the latest by May 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 supersedes EN 1870-8:2001+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 the Machinery Directive.

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

The main modifications to the previous version concern inclusion of performance levels (PL).

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

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 sawbenches/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 (the present document);
- 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;

EN 1870-8:2012 (E)

- 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 (at Formal Vote stage at the time of publication of the present document);
- Part 19: Circular saw benches (with and without sliding table) and building site saws (at Enquiry stage at the time of publication of the present document).

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.

EN 1870-8:2012 (E)

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 covered are indicated in the scope of this document.

The requirements of this document are directed to manufacturers and their authorised representatives of single blade edging circular rip sawing machines with power driven saw unit and manual loading and/or unloading. This document is also useful for designers and importers.

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.

This document also includes 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 single blade edging circular rip sawing machines with power driven saw unit and manual loading and/or unloading, hereinafter referred to as "machines", designed to cut solid wood, chipboard, fibreboard and plywood when they are used as intended and under the conditions foreseen by the manufacturer including reasonably foreseeable misuse.

This document applies to machines where the workpiece is stationary, the vertical and horizontal movements of the saw unit are power driven, and where the machine is provided with workpiece clamping. The workpiece may or may not be clamped during cutting.

This document does not apply to machines:

- where the workpiece is fed to the saw blade during cutting;
- designed for cutting veneers;
- provided with a device situated behind the line of cut, which moves in a direction parallel to the line of cut, for automatically unloading the workpiece during the return of the saw unit to the rest position.

This document is not applicable to machines manufactured before its date of publication as EN.

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 349:1993+A1:2008, Safety of machinery —Minimum gaps to avoid crushing of parts of the human body

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

EN 614-2:2000+A1:2008, Safety of machinery — Ergonomic design principles — Part 2: Interactions between the design of machinery and work tasks

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

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

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



This is a free preview	 Purchase the entire 	e publication at the link below:
------------------------	---	----------------------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation