საქართველოს სტანდარტი

ხის გადამამუშვაბელი მანქანა-დანადგარების უსაფრთხოება - ნაწილი 12:წრიული სახერხი მანქანები- ქანქარით ჯვარედინი სახერხი მანქანა-დანადგარები

საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტო თბილისი

საინფორმაციო მონაცემები

- 1 **შემუშავებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ
- 2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 20 დეკემბრის № 102 განკარგულებით
- 3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 1870-12:2013 "ხის გადამამუშვაბელი მანქანა-დანადგარების უსაფრთხოება ნაწილი 12:წრიული სახერხი მანქანები- ქანქარით ჯვარედინი სახერხი მანქანა-დანადგარები"

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 20 დეკემბერი №268-1.3-016746

დაუშვებელია წინამდებარე სტანდარტის სრული ან ნაწილობრივი კვლავწარმოება, ტირაჟირება და გავრცელება სსიპ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1870-12

October 2013

ICS 79.120.10

Supersedes EN 1870-12:2003+A1:2009

English Version

Safety of woodworking machines - Circular sawing machines - Part 12: Pendulum cross-cut sawing machines

Sécurité des machines pour le travail du bois - Machines à scies circulaires - Partie 12: Tronçonneuses pendulaires

Sicherheit von Holzbearbeitungsmaschinen -Kreissägemaschinen - Teil 12: Pendelkreissägemaschinen

This European Standard was approved by CEN on 21 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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Cont	Contents Page		
Foreword4			
Introdu	Introduction6		
1	Scope	7	
2	Normative references		
3	Terms and definitions		
-	List of significant hazards		
4	•		
5 5.1	Safety requirements and/or measures		
5.2	Controls		
5.2.1	General		
5.2.1	Position of controls		
5.2.3	Starting		
5.2. 3 5.2.4	Normal stopping		
5.2. 4 5.2.5	Emergency stop		
5.2.5 5.2.6	Workpiece positioning		
5.2.6 5.2.7	Mode selection		
5.2. <i>1</i> 5.2.8	Failure of the power supply		
5.2.6 5.2.9	Failure of the control circuits		
5.2.9 5.3			
5.3.1	Protection against mechanical hazards		
5.3.2	Stability		
	Risk of break up during operation		
5.3.3 5.3.4	Saw blade fixing and spindle design		
5.3.4 5.3.5	Braking		
	Measures to minimise the possibility or effect of ejection		
5.3.6	Workpiece supports and guides	. 23	
5.3.7	Prevention of access to moving parts		
5.3.8	Clamping devices		
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	Pneumatics		
5.4.7	Hydraulics		
5.4.8	Electromagnetic compatibility		
5.4.9	Laser		
5.4.10	Static electricity		
5.4.11	Errors of Fitting		
5.4.12	Supply disconnection (Isolation)		
5.4.13	Maintenance	. 34	
6	Information for use	. 34	
6.1	General		
6.2	Warning devices		
6.3	Marking		
6.4	Instruction handbook		
_			
	A (normative) Impact test method for guards		
A.1	General	. 39	

A.2	Test method	39
A.2.1	Preliminary remarks	
A.2.2	Testing equipment	39
A.2.3	Projectile for guards	
A.2.4	Sampling	
A.2.5	Test procedure	
A.3	Results	
A.4	Assessment	
A.5	Test report	40
A.6	Test equipment for impact test	
Annex B.1 B.2 B.2.1 B.2.2 B.2.3	B (normative) Braking tests	42 42 42
Annex	C (normative) Dimensional tolerances of saw spindles	43
Annex	ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	44
Biblio	graphy	45

Foreword

This document (EN 1870-12:2013) 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 April 2014 and conflicting national standards shall be withdrawn at the latest by April 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 supersedes EN 1870-12:2003+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, 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: 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

The following technical modifications have been introduced during the revision:

- deletion of automatic machines:
- deletion of displaceable machines;
- introduction of PL;
- more precise requirements for access for saw blade change;
- more precise requirements for braking;
- addition of provisions to prevent saw unit accelerating or lifting-up during cutting.

Organisations 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 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 C type 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 pendulum cross-cut sawing machines. It is also useful for designers.

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

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