



**NSAI**  
Standards

Irish Standard  
I.S. EN 847-1:2017

# Tools for woodworking - Safety requirements - Part 1: Milling tools, circular saw blades

**I.S. EN 847-1:2017**

*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/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 847-1:2017

*Published:*

2017-11-01

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

2017-11-29

ICS number:

79.120.10

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

## National Foreword

I.S. EN 847-1:2017 is the adopted Irish version of the European Document EN 847-1:2017, Tools for woodworking - Safety requirements - Part 1: Milling tools, circular saw blades

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

For relationships with other publications refer to the NSAI web store.

**Compliance with this document does not of itself confer immunity from legal obligations.**

*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

This page is intentionally left blank

**EUROPEAN STANDARD**

**EN 847-1**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

November 2017

ICS 79.120.10

Supersedes EN 847-1:2013

English Version

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

Outils pour le travail du bois - Prescriptions de sécurité  
- Partie 1 : Outils de fraisage, lames de scies circulaires

Maschinen-Werkzeuge für Holzbearbeitung -  
Sicherheitstechnische Anforderungen - Teil 1: Fräs-  
und Hobelwerkzeuge, Kreissägeblätter

This European Standard was approved by CEN on 21 August 2017.

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, Serbia, 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**

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>
<b>Introduction .....</b>	<b>4</b>
<b>1 Scope .....</b>	<b>5</b>
<b>2 Normative references.....</b>	<b>5</b>
<b>3 Terms, definitions, symbols and abbreviations.....</b>	<b>6</b>
3.1 Terms and definitions .....	6
3.2 Symbols and abbreviations for cutting materials .....	11
<b>4 List of significant hazards .....</b>	<b>14</b>
<b>5 Design requirements .....</b>	<b>14</b>
5.1 General requirements for milling tools and circular saw blades .....	14
5.2 Special requirements for milling tools for machines with hand feed .....	22
<b>6 Tool identification .....</b>	<b>28</b>
6.1 Marking of milling tools for integrated feed other than shank mounted tools or integrated tools.....	28
6.2 Marking of milling tools for machines with hand feed other than shank mounted tools or integrated tools .....	28
6.3 Marking of integrated tools .....	28
6.4 Marking of shank mounted tools.....	29
6.5 Marking of tool sets .....	29
6.6 Marking of circular saw blades .....	30
6.7 Marking of cutting parts and deflectors.....	30
<b>7 Information for use .....</b>	<b>31</b>
7.1 General.....	31
7.2 Safe working practice .....	31
7.3 Maintenance of tools.....	32
7.4 Handling .....	32
<b>Annex A (informative) Maintenance and modification of milling tools and related components.....</b>	<b>34</b>
A.1 General.....	34
A.2 Minimum dimensions.....	34
A.3 Retipping, exchange of tips on composite tools and circular saw blades .....	34
A.4 Milling tools marked with MAN.....	34
A.5 Balance of milling tools.....	34
A.6 Marking.....	34
A.7 Information .....	34
<b>Annex B (normative) Palmqvist Toughness Test.....</b>	<b>35</b>
<b>Bibliography.....</b>	<b>36</b>

## **European foreword**

This document (EN 847-1:2017) 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 2018, and conflicting national standards shall be withdrawn at the latest by May 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 847-1:2013.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **EN 847-1:2017 (E)**

### **Introduction**

The extent to which hazards are covered is indicated in the scope of this document.

The requirements of this document concern designers, manufacturers, suppliers and importers of tools for cutting wood and materials with similar physical characteristics to wood.

This document also includes information that the manufacturer will provide to the user.



## 1 Scope

This European Standard specifies all hazards arising from the use of tools for woodworking machines, and describes the methods for the elimination or reduction of these hazards by tool design and by the provision of information. This European Standard deals with milling tools (bore mounted, shank mounted) and circular saw blades, designed for chip removal machining (cutting) of wood and materials with similar physical characteristics to wood, hereinafter referred to as “tools”. The hazards are listed in Clause 4.

This European Standard does not cover any hazard related to the strength of shank of shank mounted milling tools.

This European Standard does not apply to boring bits, eccentric single router cutters, cutters with cutting circle less than 16 mm and to tools used in rotary knife lathes and copying lathes where the hazard of ejection and contact with the tool is always prevented by a system of fixed guards and/or movable guards interlocked with guard-locking and/or self-closing guards.

This European Standard is not applicable for tools according to this scope, which are manufactured before the date of its publication.

NOTE For woodworking machines and materials with similar physical characteristics to wood, see ISO 19085-1.

## 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 847-2:2017, *Tools for woodworking - Safety requirements - Part 2: Requirements for the shank of shank mounted milling tools*

EN 23878, *Hardmetals - Vickers hardness test (ISO 3878)*

ISO 286-2, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 2: Tables of standard tolerance classes and limit deviations for holes and shafts*

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

[Product Page](#)

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