



**SLOVENSKI STANDARD**  
**SIST EN 848-2:2007+A1:2010/kFprA2:2012**  
**01-junij-2012**

---

**Varnost lesnoobdelovalnih strojev - Rezkalniki z vrtečim orodjem za enostransko obdelavo - 2. del: Enovretenski rezkalni stroji z ročnim/mehanskim podajanjem**

Safety of woodworking machines - One side moulding machines with rotating tool - Part 2: Single spindle hand fed/integrated fed routing machines

Sicherheit von Holzbearbeitungsmaschinen - Fräsmaschinen für einseitige Bearbeitung mit drehendem Werkzeug - Teil 2: Einspindelige Oberfräsmaschinen mit Handvorschub/mechanischem Vorschub

Sécurité des machines pour le travail du bois - Machines à fraiser sur une face à outil rotatif - Partie 2: Perceuses et défonceuses monobroche à avance manuelle/mécanisée

**Ta slovenski standard je istoveten z: EN 848-2:2007+A1:2009/FprA2**

---

**ICS:**

79.120.10      Lesnoobdelovalni stroji      Woodworking machines

**SIST EN 848-  
2:2007+A1:2010/kFprA2:2012**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**EN 848-2:2007+A1:2009**

**FprA2**

April 2012

---

ICS 79.120.10

English Version

## Safety of woodworking machines - One side moulding machines with rotating tool - Part 2: Single spindle hand fed/integrated fed routing machines

Sécurité des machines pour le travail du bois - Machines à fraiser sur une face à outil rotatif - Partie 2: Perceuses et défonceuses monobroche à avance manuelle/mécanisée

Sicherheit von Holzbearbeitungsmaschinen - Fräsmaschinen für einseitige Bearbeitung mit drehendem Werkzeug - Teil 2: Einspindelige Oberfräsmaschinen mit Handvorschub/mechanischem Vorschub

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 142.

This draft amendment A2, if approved, will modify the European Standard EN 848-2:2007+A1:2009. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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, 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.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

Page

Foreword.....	4
1 Modifications to Clause 1, Scope.....	5
2 Modifications to Clause 2, Normative references .....	5
3 Modification to 3.2, Definitions.....	6
4 Modifications to Clause 4, List of significant hazards.....	7
5 Modifications to 5.1, General.....	10
6 Modifications to 5.2.1.1, General.....	10
7 Modification to 5.2.1.2, Use of well tried components .....	11
8 Modification to 5.2.3, Starting.....	11
9 Modifications to 5.2.4, Normal stopping .....	11
10 Modifications to 5.2.5, Additional stop.....	11
11 Modifications to 5.2.6, Emergency stop .....	12
12 Modifications to 5.2.7, Mode selection .....	12
13 Modifications to 5.2.8, Spindle speed monitoring.....	12
14 Modification to 5.2.9, Integrated feed .....	13
15 Modification to 5.3.1, Stability .....	13
16 Modification to 5.3.3.1, Tools.....	13
17 Modifications to 5.3.3.3.2, Height adjustments.....	13
18 Modifications to 5.3.4.1, General.....	14
19 Modifications to 5.3.4.2, Brake release.....	14
20 Modification to 5.3.5, Device to minimise the possibility or the effect of ejection .....	15
21 Modification to 5.3.6.1, General.....	15
22 Modification to 5.3.6.2, Workpiece guiding for straight work .....	15
23 Modification to 5.3.6.3, Workpiece guiding for shaped work.....	16
24 Modification to 5.3.7.1.2, Ring guard .....	16
25 Modification to 5.3.7.1.4, Safeguarding for straight work .....	16
26 Modifications to 5.3.7.2, Guarding of drives .....	16
27 Modifications to 5.3.8, Characteristics of guards.....	17
28 Modification to 5.3.9, Clamping device .....	17
29 Modification to 5.3.10, Safety appliances.....	17
30 Modifications of 5.4.2.2, Noise emission measurement.....	17
31 Modifications to 5.4.3, Emission of chips and dust .....	17
32 Modifications to 5.4.4, Electricity .....	18
33 Modification to 6.2, Marking .....	18

34	Modifications to 6.3, Instruction handbook .....	18
35	Deletion of Annex A .....	19
36	Addition of a new normative Annex C, Impact test method for guards .....	19
37	Deletion of Annex ZA .....	21
38	Modification to Annex ZB .....	21
39	Modifications to Bibliography .....	22

**EN 848-2:2007+A1:2009/FprA2:2012 (E)**

**Foreword**

This document (EN 848-2:2007+A1:2009/FprA2:2012) has been prepared by Technical Committee CEN/TC 142 "Woodworking machines - Safety", the secretariat of which is held by UNI.

This document is currently submitted to the Unique Acceptance Procedure.

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.

## 1 Modifications to Clause 1, Scope

*Add at the end of 1<sup>st</sup> paragraph "including reasonably foreseeable misuse".*

*Add after 1<sup>st</sup> paragraph: "Machines which are designed to work wood based materials may also be used for working hardened plastic materials with similar physical characteristics as wood".*

*Replace reference to EN 848-3:2007 with EN 848-3:2007+A2:2009.*

## 2 Modifications to Clause 2, Normative references

*Add the following reference:*

*"EN 61800-5-2:2007, Adjustable speed electrical power drive systems – Part 5-2: Safety requirements – Functional (IEC 61800-5-2:2007)",*

*"EN ISO 4413:2010, Hydraulic fluid power — General rules and safety requirements for systems and their components (ISO 4413:2010)*

*EN ISO 4414:2010, Pneumatic fluid power — General rules and safety requirements for systems and their components (ISO 4414:2010)".*

*Delete reference to EN 982:1996, EN 983:1996, EN ISO 11202:1995/AC:1997, EN ISO 11204:1995/AC 1997 and EN ISO 11688-1/1998/AC:1998.*

*Replace "EN ISO 3743-1:1995" with "EN ISO 3743-1:2010" and replace the title with "Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for small movable sources in reverberant fields — Part 1: Comparison method for a hard-walled test room (ISO 3743-1:2010)".*

*Replace "EN ISO 3744:1995" with "EN ISO 3744:2010" and replace the title with "Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010)".*

*Replace "EN ISO 3746:1995" with "EN ISO 3746:2010" and replace the title with "Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:2010)".*

*Replace "EN ISO 11202:1995" with "EN ISO 11202:2010" and replace the title with "Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections (ISO 11202:2010)".*

*Replace "EN ISO 11204:1995" with "EN ISO 11204:2010" and replace the title with "Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections (ISO 11204:2010)".*

*Replace "EN ISO 12100-1:2003" and "EN ISO 12100-2:2003" with "EN ISO 12100:2010, Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)".*

*Replace throughout the standard reference to:*

*"EN 847-1:2005" with "EN 847-1:2005+A1:2007",*

*"EN 894-1:1997" with "EN 894-1:1997+A1:2008",*

*"EN 894-2:1997" with "EN 894-2:1997+A1:2008",*

**EN 848-2:2007+A1:2009/FprA2:2012 (E)**

"EN 894-3:2000" with "EN 894-3:2000+A1:2008",  
 "EN 982:1996" with "EN ISO 4413:2010",  
 "EN 983:1996" with "EN ISO 4414:2010",  
 "EN 1005-1:2001" with "EN 1005-1:2001+A1:2008",  
 "EN 1005-2:2003" with "EN 1005-2:2003+A1:2008",  
 "EN 1005-3:2002" with "EN 1005-3:2002+A1:2008",  
 "EN 1005-4:2005" with "EN 1005-4:2005+A1:2008",  
 "EN 1037:1995" with "EN 1037:1995+A1:2008",  
 "EN 1088:1995" with "EN 1088:1995+A2:2008",  
 "EN 60439-1:1999" with "EN 60439-1:1999 and EN 60439-1:1999/A1:2004" in the text excluding Clause 2,  
 "EN 60529:1991" with "EN 60529:1991 and EN 60529:1991/A1 2000" in the text excluding Clause 2,  
 "EN ISO 3743-1:1995" with "EN ISO 3743-1:2010",  
 "EN ISO 3743-2:1996" with "EN ISO 3743-2:2009",  
 "EN ISO 3744:1995" with "EN ISO 3744:2010",  
 "EN ISO 3745:2003" with "EN ISO 3745:2009",  
 "EN ISO 3746:1995" with "EN ISO 3746:2010",  
 "EN ISO 4871:1996" with "EN ISO 4871:2009",  
 "EN ISO 9614-1:1995" with "EN ISO 9614-1:2009",  
 "EN ISO 11202:1995" with "EN ISO 11202:2010",  
 "EN ISO 11204:1995" with "EN ISO 11204:2010",  
 "EN ISO 11688-1:1998" with "EN ISO 11688-1:2009",  
 "EN ISO 12100-1:2003" and "EN ISO 12100-2:2003" with "EN ISO 12100:2010" and  
 "EN ISO 13850:2006" with "EN ISO 13850:2008".

**3 Modification to 3.2, Definitions**

Add the following term and definition:

**"3.2.19****performance level PL**

discrete level used to specify the ability of safety-related parts of control systems to perform a safety function under foreseeable conditions

[EN ISO 13849-1:2008, 3.1.23]".

#### 4 Modifications to Clause 4, List of significant hazards

Replace in the brackets of 1<sup>st</sup> paragraph "EN 1050:1996" with "EN ISO 12100:2010".

Delete in 1<sup>st</sup> paragraph the words "as far as they are dealt with in this document".

Replace NOTE with a new paragraph:

"These hazards are listed in Table 1:".

Replace Table 1 with:

**"Table 1 — List of significant hazards**

No	Hazards, hazardous situations and hazardous events	EN ISO 12100:2010	Relevant clauses of this document
1	Mechanical hazards related to: -machine parts or workpiece due to		
	a) shape	6.2.2.1, 6.2.2.2, 6.3	5.3.3, 5.3.6, 5.3.7, 5.4.10
	b) relative location		5.2.2, 5.3.5, 5.3.7, 5.3.9
	c) mass and stability (potential energy of elements which may move under the effect of gravity)		5.2.10, 5.3.1, 5.3.3, 5.3.5
	d) mass and velocity (kinetic energy of elements in controlled or uncontrolled motion)		5.2.5, 5.3.3
	e) mechanical strength		5.3.2, 5.3.3, 5.3.7, 5.3.8
	- accumulation of potential energy:		
	f) elastic elements (springs), or	6.2.10, 6.3.5.4	5.3.3, 5.3.6.2
	g) liquids or gases under pressure		5.4.6, 5.4.7
<i>(to be continued)</i>			

Table 1 — List of significant hazards (continued)

No	Hazards, hazardous situations and hazardous events	EN ISO 12100:2010	Relevant clauses of this document
1.1	Crushing hazard		5.3.7, 5.3.10
1.2	Shearing hazard		5.3.7, 5.3.10
1.3	Cutting or severing hazard		5.3.7
1.4	Entanglement hazard		5.3.7, 5.4.3
1.5	Drawing in or trapping hazard		5.3.7
1.6	Impact hazard		5.3.5
1.9	High pressure fluid injection or ejection hazard	6.2.10, 6.3.5.4	5.4.6, 5.4.7
2. Electrical hazards			
2.1	contact of persons with live parts (direct contact)	6.2.9, 6.3.5.4	5.4.4
2.2	contact of persons with parts which have become live under faulty conditions ( indirect contact)	6.2.9	5.4.4
4. Hazards generated by noise, resulting in:			
4.1	Hearing loss (deafness), other physiological disorders (loss of balance, loss or awareness)	6.2.2.2, 6.3	5.4.2
4.2	Interference with speech communication, acoustic signals		5.4.2
7. Hazards generated by materials and substances ( and their constituent)processed, or used by the machinery:			
7.1	Hazards from contact or inhalation of harmful fluids and dusts	6.2.3, 6.2.4	5.4.3
7.2	Fire hazard	6.2.4	5.3.6.2, 5.4.1, 5.4.9
<i>(to be continued)</i>			