



**SLOVENSKI STANDARD**  
**SIST EN 1870-16:2005/kprA1:2009**  
**01-maj-2009**

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**Varnost lesnoobdelovalnih strojev - Krožne žage - 16. del: Dvojne zajeralne žage za V-rezanje**

Safety of woodworking machines - Circular sawing machines - Part 16: Double mitre sawing machines for V-cutting

Sicherheit von Holzbearbeitungsmaschinen - Kreissägemaschinen - Teil 16: Klinkschnittkreissägemaschinen

Sécurité des machines pour le travail du bois - Machines à scier circulaires - Partie 16: Tronçonneuses doubles à coupe en V

**Ta slovenski standard je istoveten z: EN 1870-16:2005/prA1**

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**ICS:**

25.080.60	Strojne žage	Sawing machines
79.120.10	Lesnoobdelovalni stroji	Woodworking machines

**SIST EN 1870-16:2005/kprA1:2009**      **en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**FINAL DRAFT**  
**EN 1870-16:2005**

**prA1**

February 2009

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ICS 79.120.10

English Version

## Safety of woodworking machines - Circular sawing machines - Part 16: Double mitre sawing machines for V-cutting

Sécurité des machines pour le travail du bois - Machines à  
scier circulaires - Partie 16: Tronçonneuses doubles à  
coupe en V

Sicherheit von Holzbearbeitungsmaschinen -  
Kreissägemaschinen - Teil 16:  
Klinschnittkreissägemaschinen

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 A1, if approved, will modify the European Standard EN 1870-16:2005. 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.

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COMITÉ EUROPÉEN DE NORMALISATION  
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## Contents

Page

Foreword.....	3
1 <b>Modification to the Foreword</b> .....	4
2 <b>Modification to Clause 2, Normative references</b> .....	4
3 <b>Modification to 3.3, Definitions</b> .....	7
4 <b>Modification to 5.2.1.2, Use of well tried components</b> .....	7
5 <b>Modification to Table 1, List of significant hazards</b> .....	7
6 <b>Modification to 5.2.3, Starting</b> .....	7
7 <b>Modification to 5.2.4.2, Manual machines</b> .....	7
8 <b>Modification to 5.2.4.3, Semi-automatic and automatic machines</b> .....	7
9 <b>Modification to 5.2.5, Emergency stop</b> .....	7
10 <b>Modification to 5.2.7, Failure of the power supply</b> .....	7
11 <b>Modification to 5.2.8, Failure of the control circuits</b> .....	8
12 <b>Modification to 5.3.2, Hazards of break-up during operation</b> .....	8
13 <b>Modification to 5.4.1, Fire</b> .....	8
14 <b>Modification to 5.4.2.1, Noise reduction at the design stage</b> .....	8
15 <b>Modification to 5.4.4, Electricity</b> .....	8
16 <b>Modification to 5.4.5, Ergonomics and handling</b> .....	8
17 <b>Modification to 5.4.7, Electromagnetic compatibility</b> .....	9
18 <b>Modification to 5.4.9, Supply disconnection (Isolation)</b> .....	9
19 <b>Modification to 5.4.10, Maintenance</b> .....	9
20 <b>Modification to 6.1, General</b> .....	9
21 <b>Modification to 6.2, Marking</b> .....	9
22 <b>Modification to 6.3, Instruction handbook</b> .....	10
23 <b>Modification to Annex B</b> .....	10
24 <b>Modification to Annex ZA</b> .....	10
25 <b>Addition of Annex ZB</b> .....	10
26 <b>Modification to Bibliography</b> .....	14

## Foreword

This document (EN 1870-16:2005/prA1:2009) 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 Annexes ZA and ZB, which are integral parts of this document.

**EN 1870-16:2005/prA1:2009 (E)****1 Modification to the Foreword**

*Replace the fourth paragraph with the following:*

"For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document."

*Add the following new standards list: "*

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 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 (manual radial arm saws)".*

**2 Modification to Clause 2, Normative references**

*Delete the reference to EN 294:1992 and add "EN ISO 13857:2008, Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)" and replace "EN 294:1992" with "EN ISO 13857:2008" throughout the document.*

Delete the reference to EN 418:1992 and add "EN ISO 13850:2006, Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)" and replace "EN 418:1992" in 5.2.5, 1<sup>st</sup> paragraph, with "EN ISO 13850:2006".

Delete the reference to EN 954-1:1996 and prEN ISO 13849-12004 and add "EN ISO 13849-1:2008, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)" and replace "EN 954-1:1996" with "EN ISO 13849-1:2008" throughout the document and

replace "EN ISO 13849-1:2003" with "EN ISO 13849-1:2008" in the NOTE of term 3.3.18,

delete "or prEN ISO 13849-1:2004" in the 1<sup>st</sup> paragraph of 5.2.1.1,

delete "or 6.3 of prEN ISO 13849-1:2004" in the NOTE of 5.2.1.1,

replace "6.2.2" with "6.2.4" in the 1<sup>st</sup> paragraph of 5.2.1.2,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 1<sup>st</sup> paragraph of 5.2.1.3.1,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 2<sup>nd</sup> paragraph of 5.2.1.3.1,

replace "pr EN ISO 13849-:2004" with "EN ISO 13849-1:2008" in the 3<sup>rd</sup> paragraph of 5.2.1.3.1,

delete "and/or prEN ISO 13849-1:2004" in the 1<sup>st</sup> paragraph of 5.2.1.3.2.1,

delete "or prEN ISO 13849-1:2004" in the 3<sup>rd</sup> paragraph of 5.2.1.3.2.1,

delete "or prEN ISO 13849-1:2004" in the last paragraph (before Verification) of 5.2.1.3.2.1,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 7<sup>th</sup> paragraph, d), of 5.2.3,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 4<sup>th</sup> paragraph, f), of 5.2.4.2,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 2<sup>nd</sup> paragraph, g), of 5.2.4.3,

replace "pr EN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 4<sup>th</sup> paragraph, b), of 5.2.6,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 6<sup>th</sup> paragraph, b), of 5.3.7.1,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 6<sup>th</sup> paragraph, b), of 5.3.7.2,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 4<sup>th</sup> paragraph, b), of 5.3.7.3,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 4<sup>th</sup> paragraph, b), of 5.3.7.4,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 2<sup>nd</sup> paragraph, b), of 5.3.7.5,

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 2<sup>nd</sup> paragraph, d), of 5.3.7.6 and

replace "prEN ISO 13849-1:2004" with "EN ISO 13849-1:2008" in the 5<sup>th</sup> paragraph, b), of 5.3.7.7.1.

Replace "EN 60204-1:1997" with "EN 60204-1:2006" and replace in the title "(IEC 60204-1:1997)" with "(IEC 60204-1:2005, modified)".

Replace "EN 60947-4-1:1992" with "EN 60497-4-1:2001" throughout the document and replace in the title "(IEC 60947-4-1:1990)" with "(IEC 60947-5-1:2000)".

**EN 1870-16:2005/prA1:2009 (E)**

Replace "CLC/TS 61496-2:2004" with "CLC/TS 61496-2:2006" in Clause 2 and the 3<sup>rd</sup> element of the title with "Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) (IEC 61496-2:2006)".

Replace "prEN 62061:2003" with "EN 62061:2005" and "(CDV IEC 62061, edition 1 (document 44/441/CDV))" with "(IEC 62061:2005)" and

replace "3.2.4 of prEN 62061:2003 (CDV IEC 62061 edition 1 (document 44/441/CDV))" with "3.4 of EN 62061:2005" in definition of term 3.3.15 and in definition of term 3.3.17,

replace "3.2.49 of prEN 62061:2003 (CDV IEC 62061 edition 1 (document 44/441/CDV))" with "3.2.47 of EN 62061:2005" in NOTE 1 of term 3.3.16 and

replace "3.2.48 of prEN 62061:2003 (CDV IEC 62061:2003) edition 1 (document 44/441/CDV)" with "3.2.46 of EN 62061:2005".

Replace reference to "HD 21-1 S3:1997" with "HD 21.1 S4:2002, Cables of rated voltages up to and including 450/750 V and having thermoplastic insulation — Part 1: General requirements" and replace "HD 21-1 S3:1997" with "HD 21.1 S4:2002" throughout the document.

Replace reference to "HD 22-1 S3:1997" with "HD 22.1 S4:2002, Cables of rated voltages up to and including 450/750 V and having cross-linked insulation — Part 1: General requirements" and replace "HD 22-1 S3:1997" with "HD 22.1 S4:2002" throughout the document.

Add the following references:

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

"EN 894-1:1997, 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, Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays

EN 894-3:2000, Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators",

"EN 1005-1:2001, Safety of machinery — Human physical performance — Part 1: Terms and definitions

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

EN 1005-3:2002, Safety of machinery — Human physical performance — Part 3: Recommended force limits for machinery operation

EN 1005-4:2005, Safety of machinery — Human physical performance — Part 4: Evaluation of working postures and movements in relation to machinery

EN 1037:1995, Safety of machinery — Prevention of unexpected start-up",

"EN 50370-1:2005, Electromagnetic compatibility (EMC) — Product family standard for machine-tools — Part 1: Emission

EN 50370-2:2003, Electromagnetic compatibility (EMC) — Product family standard for machine-tools — Part 2: Immunity",

"EN 60439-1:1999, Low-voltage switchgear and controlgear assemblies — Part 1: Type-tested and partially type-tested assemblies (IEC 60439-1:1999)" and



"EN 61310-1:2008, *Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, auditory and tactile signals (IEC 61310-1:2007)*".

### **3 Modification to 3.3, Definitions**

*Replace term in definition 3.3.19 with: "information from the supplier".*

### **4 Modification to 5.2.1.2, Use of well tried components**

*In the 1<sup>st</sup> paragraph, c), replace "EN 60204-1:1997" with "EN 60204-1:2006".*

### **5 Modification to Table 1, List of significant hazards**

*In row 1 e), delete "inadequacy of ".*

*In the row below, delete "e.g.".*

*In row 4.2, delete ", etc.".*

*In row 8, delete "as, e.g. hazards from".*

*In row 8.2, delete "Inadequate consideration of".*

*In row 8.7, delete "Inadequate ".*

### **6 Modification to 5.2.3, Starting**

*In the 1<sup>st</sup> and 3<sup>rd</sup> paragraphs, replace "EN 60204-1:1997" twice with "EN 60204-1:2006".*

### **7 Modification to 5.2.4.2, Manual machines**

*In the 1<sup>st</sup> and 2<sup>nd</sup> paragraphs, replace "EN 60204-1:1997" twice with "EN 60204-1:2006".*

### **8 Modification to 5.2.4.3, Semi-automatic and automatic machines**

*In the 1<sup>st</sup> paragraph, replace "EN 60204-1:1997" with "EN 60204-1:2006".*

### **9 Modification to 5.2.5, Emergency stop**

*In the 2<sup>nd</sup> paragraph, 1<sup>st</sup> sentence, replace "EN 60204-1:1997" with "EN 60204-1:2006".*

*In the 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence, replace "10.7.5 of EN 60204-1:1997" with "10.7.4 of EN 60204-1:2006".*

### **10 Modification to 5.2.7, Failure of the power supply**

*In the 1<sup>st</sup> paragraph, replace "EN 60204-1:1997" with "EN 60204-1:2006".*