

**SLOVENSKI STANDARD**  
**SIST EN 1870-15:2005/kprA1:2009**  
**01-maj-2009**

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**Varnost lesnoobdelovalnih strojev - Krožne žage - 15. del: Večlistne krožne žage (čelilniki) z mehanskim pomikom obdelovanca in ročnim podajanjem in/ali odvzemom**

Safety of woodworking machines - Circular sawing machines - Part 15: Multiblade cross-cut sawing machines with integrated feed of the workpiece and manual loading and/or unloading

Sicherheit von Holzbearbeitungsmaschinen - Kreissägemaschinen - Teil 15: Mehrfachablängkreissäemaschinen mit mechanischem Vorschub für das Werkstück und Handbeschickung und/oder Handentnahme

Sécurité des machines pour le travail du bois - Machines à scier circulaires - Partie 15: Machines à scier multilames pour tronçonnage à avance mécanisée de la pièce et à chargement et/ou déchargement manuels

**Ta slovenski standard je istoveten z: EN 1870-15:2004/prA1**

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**ICS:**

25.080.60	Strojne žage	Sawing machines
79.120.10	Lesnoobdelovalni stroji	Woodworking machines

**SIST EN 1870-15:2005/kprA1:2009**      **en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**EN 1870-15:2004**

**prA1**

February 2009

ICS 79.120.10

English Version

**Safety of woodworking machines - Circular sawing machines -  
Part 15: Multiblade cross-cut sawing machines with integrated  
feed of the workpiece and manual loading and/or unloading**

Sécurité des machines pour le travail du bois - Machines à  
scier circulaires - Partie 15: Machines à scier multilames  
pour tronçonnage à avance mécanisée de la pièce et à  
chargement et/ou déchargement manuels

Sicherheit von Holzbearbeitungsmaschinen -  
Kreissägemaschinen - Teil 15:  
Mehrfachablängkreissäemaschinen mit mechanischem  
Vorschub für das Werkstück und Handbeschickung  
und/oder Handentnahme

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 1870-15:2004. 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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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 1870-15:2004/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 1870-15:2004/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."

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

*Delete all full stops at the end standard titles.*

*Delete reference to EN 418:1992 and add: "EN ISO 13850:2008, 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".*

*Delete the reference to EN 954-1:1996 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.*

*Replace "EN 614-1:1995" with "EN 614-1:2006" throughout the document.*

*Replace "EN 847-1:1997" with "EN 847-1:2005" throughout the document.*

*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)".*

*Delete reference to EN 61000-6-2:2001.*

*Add the following references:*

*"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 894-3:2000, 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 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 Clause 3, Terms and definitions**

*Definition 3.6, replace the term with "displaceable machine".*

*Definition 3.16, replace the term with "information from the supplier".*

### **4 Modification to 5.2.1, Safety and reliability of control systems**

*In the 3<sup>rd</sup> paragraph, b) and last paragraph before verification, replace "EN 60204-1:1997" twice with "EN 60204-1:2006".*

*In verification delete the second sentence and add the following NOTE:*

"NOTE For the component characteristics a confirmation from the manufacturer of the component can be useful."

### **5 Modification to 5.2.3, Starting**

*In the 6<sup>th</sup> paragraph, replace "EN 60204-1:1997" with "EN 60204-1:2006".*

### **6 Modification to 5.2.4, Normal stopping**

*In the 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs, replace "EN 60204-1:1997" twice with "EN 60204-1:2006".*

### **7 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".*

*In the 5<sup>th</sup> and 6<sup>th</sup> paragraphs, replace "EN 60204-1:1997" twice with "EN 60204-1:2006".*

### **8 Modification to 5.2.8, Failure of the power supply**

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

### **9 Modification to 5.2.9, Failure of the control circuits**

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

### **10 Modification to 5.3.1, Stability**

*Replace the second paragraph with: "Displaceable machines fitted with wheels shall have facilities to make them stable during cutting (see 6.4 f)). Such facilities are e.g.:".*

**EN 1870-15:2004/prA1:2009 (E)****11 Modification to 5.3.2, Risk of break-up during operation**

*In the last paragraph, Verification, replace "and for the tensile strength a confirmation from the manufacturer of the material" and add the following NOTE:*

"NOTE For the ultimate tensile strength a confirmation from the manufacturer of the material can be useful."

**12 Modification to 5.3.3.3, Strength**

*In the last paragraph, Verification, delete "and steel manufacturer's confirmation" and add the following NOTE:*

"NOTE For the ultimate tensile strength a confirmation from the manufacturer of the material can be useful."

**13 Modification to 5.3.3.5, Spindle locking**

*In the last paragraph, Verification, delete "confirmation from the steel bar manufacturer" and add the following NOTE:*

"NOTE For the ultimate tensile strength a confirmation from the manufacturer of the material can be useful."

**14 Modification to 5.4.1, Fire**

*In the first sentence to delete: "avoid or".*

**15 Modification to 5.4.4, Electricity**

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

*In the last paragraph, Verification, delete ", manufacturer's confirmation", replace "EN 60204-1:1997" with "EN 60204-1:2006" and add the following NOTE:*

"NOTE For electrical components characteristics the information from the electrical component supplier can be useful."

**16 Modification to 5.4.5, Ergonomics and handling**

*Add the following text:*

"The machine and its controls shall be designed according to ergonomic principles in accordance with EN 1005-4:2005 for work posture which is not fatiguing.

The positioning, marking and illumination (if necessary) of control devices, and facilities for materials and tool set handling shall be in accordance with ergonomic principles in accordance with EN 894-1:1997, EN 894-2:1997, EN 894-3:2000, EN 1005-1:2001, EN 1005-2:2003 and EN 1005-3:2002.

Tanks containing compressed air drainers and oilers shall be placed or oriented in such a way that the filler and drain pipes can be easily reached.

Machine components with a mass exceeding 25 kg shall include necessary attachments to accommodate the fitting of a lifting device e.g. lugs positioned such as to avoid their overturn or fall or move in an uncontrolled way during transport, assembly, dismantling, disabling and scrapping.



If the machine is fitted with a movable control panel, this panel shall be fitted with a facility to move it in the desired position.

If graphical symbols related to the operation of actuators are used, they shall be in accordance with Table A.1 of EN 61310-1:2008.

NOTE Further guidance is given in EN 60204-1:2006, EN 614-1:2006 and EN 614-2:2000."

## **17 Modification to 5.4.6, Lighting**

*In the 1<sup>st</sup> paragraph, replace "16.2 of EN 60204-1:1997" with "15.2 of EN 60204-1:2006".*

## **18 Modification to 5.4.9, Electromagnetic compatibility**

*Replace the first paragraph with:*

"The machine shall have sufficient immunity to electromagnetic disturbances to enable it to operate correctly in accordance with EN 60439-1:1999, EN 50370-1:2005 and EN 50370-2:2003."

## **19 Modification to 5.4.10, Laser**

*In the last paragraph, Verification, replace ", inspection and confirmation from the manufacturer of the laser" with "and inspection" and add the following NOTE:*

"NOTE For the laser characteristics a confirmation from the manufacturer of the laser can be useful."

## **20 Modification to 5.4.13, Isolation**

*Replace the first paragraph with: "The requirements of Clause 5 of EN 1037:1995 apply and in addition:".*

*In the 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs, replace "EN 60204-1:1997" twice with "EN 60204-1:2006".*

## **21 Modification to 5.4.14, Maintenance**

*Add a first paragraph:*

"The basic principles of 4.15 of EN ISO 12100-2:2003 shall be observed and in addition:".

## **22 Modification to 6.1, General**

*Replace the text with:*

"The basic principles of Clause 6 of EN ISO 12100-2:2003 shall be observed."