Metsatöömasinad. Liikurmasinad. Ohutusnõuded KONSOLIDEERITUD TEKST

Forest machinery - Self propelled machinery - Safety requirements CONSOLIDATED TEXT

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14861:2004+A1:2009 sisaldab Euroopa standardi EN 14861:2004+A1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 14861:2004+A1:2009 consists of the English text of the European standard EN 14861:2004+A1:2009.
Standard on kinnitatud Eesti Standardikeskuse 31.12.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 21.10.2009.	Date of Availability of the European standard text 21.10.2009.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 65.060.80

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14861:2004+A1

October 2009

ICS 65.060.80

Supersedes EN 14861:2004

English Version

Forest machinery - Self propelled machinery - Safety requirements

Machines forestières - Machines automotrices - Prescriptions de securité

Forstmaschinen - Selbstfahrer - Sicherheitsanforderungen

This European Standard was approved by CEN on 1 April 2004 and includes Amendment 1 approved by CEN on 15 September 2009.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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 and United Kingdom.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 14861:2004+A1:2009: E

Contents

Page

Foreword

This document (EN 14861:2004+A1:2009) has been prepared by Technical Committee CEN/TC 144 “Tractors and machinery for agriculture and forestry”, the secretariat of which is held by AFNOR.

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 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

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 includes Amendment 1 approved by CEN on 2009-09-15.

This document supersedes EN 14861:2004.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ▌A1〉 〈A1▐.

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 EU Directive(s).

▌A1〉 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. 〈A1▐

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, 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 and United Kingdom.

0 Introduction

This document is a type C standard as stated in EN 1070.

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 type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

1 Scope

This document deals with all common significant hazards, hazardous situations and events of the following forestry machinery: fellers, bunchers, delimbers, forwarders, log loaders, skidders, processors and harvesters as defined in ISO 6814 and also multi-function versions of these machines, when they are used as intended and under the conditions foreseen by the manufacturer, see Clause 4.

The machines listed can be of the mobile, ride-on or self-propelled type or a combination of these types.

The following significant hazards are excluded:

— thrown objects, that may occur on a particular machine,

— noise,

— vibration.

NOTE Noise clauses including a noise test code will be developed as an amendment to this document.

The use of this document will therefore not alone be sufficient to cover all significant risks for a majority of machines covered by this document.

The list of significant hazards dealt with in this document is given in normative Annex A. This Annex is the list of significant hazards that have been identified as common to the covered mobile, ride-on and self-propelled forestry machines.

It is not applicable to environmental hazards.

This document is not applicable to machines, which are manufactured before the date of publication of this document by CEN.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 294:1992, *Safety of machinery – Safety distance to prevent danger zones being reached by the upper limbs.*

EN 1070:1998, *Safety of machinery – Terminology.*

EN 12643:1997, *Earth-moving machinery – Rubber-tyred machines – Steering requirements.* (ISO 5010:1992, modified).

EN 13510:2000, *Earth-moving machinery – Roll-over protective structures – Laboratory tests and performance requirements* (ISO 3471: 1994).

EN ISO 2860:1999, *Earth-moving machinery – Minimum access dimensions* (ISO 2860:1992).

EN ISO 2867:1998, *Earth-moving machinery – Access systems* (ISO 2867:1994).

EN ISO 3411:1999, *Earth-moving machinery – Human physical dimensions of operators and minimum operator space envelope* (ISO 3411:1995).

EN ISO 3450:1996, *Earth-moving machinery – Braking systems of rubber-tyred machines – Systems and performance requirements and test procedures* (ISO 3450:1996).

EN ISO 3457:2003, *Earth-moving machinery – Guards – Definitions and requirements* (ISO 3457:2003).

EN ISO 6682:1995, *Earth-moving machinery – Zones of comfort and reach for controls.* (ISO 6682:1986).

EN ISO 6683:1999, *Earth-moving machinery – Seat belts and seat belt anchorages.* (ISO 6683:1981).

EN ISO 12100-1:2003, *Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology (ISO 12100-1:2003)*.

EN ISO 12100-2:2003, *Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles (ISO 12100-2:2003).*

EN ISO 14982:1998, *Agricultural and forestry machinery – Electromagnetic compatibility – Test methods and acceptance criteria* (ISO 14982:1998).

ISO 3600:1996, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Operator's manuals – Content and presentation*.

ISO 3767-1:1998, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Symbols for operator controls and other displays – Part 1: Common symbols*.

ISO 3767-4:1993, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Symbols for operator controls and other displays – Part 4: Symbols for forestry machinery*.

ISO 3795:1989, *Road vehicles, and tractors and machinery for agriculture and forestry – Determination of burning behaviour of interior materials*.

ISO 4254-4:1990, *Tractors and machinery for agriculture and forestry – Technical means for ensuring safety – Part 4: Forestry winches*.

ISO 6405-1:1991, *Earth-moving machinery – Symbols for operator controls and other displays – Part 1: Common symbols.*

ISO 6750:1984, *Earth-moving machinery – Operation and maintenance – Format and content of manuals.*

ISO 6814:2000, *Machinery for forestry – Mobile and self-propelled machinery – Terms, definitions and classification.*

ISO 8082:2003, *Self-propelled machinery for forestry – Roll-over protective structures – Laboratory tests and performance requirements.*

ISO 8083:1989, *Machinery for forestry – Falling-object protective structures – Laboratory tests and performance requirements.*

ISO 8084:2003, *Machinery for forestry – Operator protective structures – Laboratory tests and performance requirements.*

ISO 9244:1995, *Earth-moving machinery – Safety signs and hazard pictorials – General principles.*

ISO 9533:1989, *Earth-moving machinery – Machine-mounted forward and reverse audible warning alarm – Sound test method.*

ISO 10263-2:1994, *Earth-moving machinery – Operator enclosure environment – Part 2: Air filter test.*

ISO 10263-5:1994, *Earth-moving machinery – Operator enclosure environment – Part 5: Windscreen defrosting system test method.*

ISO 10532:1995, *Earth-moving machinery – Machine mounted retrieval device – Performance requirements.*

ISO 10533:1993, *Earth-moving machinery – Lift-arm support devices.*

ISO 10570:1992, *Earth-moving machinery – Articulated frame lock – Performance requirements.*

ISO 11112:1995, *Earth-moving machinery – Operator's seat – Dimensions and requirements.*

ISO 11169:1993, *Machinery for forestry – Wheeled special machines – Vocabulary, performance test methods and criteria for brake systems.*

ISO 11512:1995, *Machinery for forestry – Tracked special machines – Performance criteria for brake systems.*

ISO 11684:1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Safety signs and hazard pictorials – General principles.*

ISO 13766:1999, *Earth-moving machinery – Electromagnetic compatibility.*

ISO 14269-4:1997, *Tractors and self-propelled machines for agriculture and forestry – Operator enclosure environment – Part 4 : Air filter element test method.*

ISO 15078:1998, *Machinery for forestry – Log loaders – Location and method of operation of two-lever operator controls.*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1070 and in ISO 6814 apply.

4 Safety requirements and/or protective measures

4.1 General

4.1.1 General design guidelines

Machinery shall comply with the safety requirements and/or protective measures of this document, Clause 4.

In addition, the machines shall be designed according to the principles of EN ISO 12100-1 and EN ISO 12100-2 for hazards relevant but not significant which are not dealt with in this document.

4.1.2 Safety distances, guards and shields

Unless otherwise specified in this document, safety distances shall comply with the requirements of Tables 1, 3, 4 and 6 of EN 294:1992. Guards and shields, including thermal guards, shall be in accordance with EN ISO 3457.