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Palgilõhkumismasinate ohutus. Osa 1: Kiil-lõhkujad
KONSOLIDEERITUD TEKST**

Agricultural and forestry machinery - Safety of log splitters -
Part 1: Wedge splitters CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 609-1:1999+A2:2009 sisaldab Euroopa standardi EN 609-1:1999+A2:2009 ingliskeelset teksti.

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English Version

Agricultural and forestry machinery - Safety of log splitters - Part 1: Wedge splitters

Matériel agricole et forestier - Sécurité des fendeuses de
bûches - Partie 1 : Fendeuses à coin

Land- und Forstmaschinen - Sicherheit von
Holzspaltmaschinen - Teil 1: Keilspaltmaschinen

This European Standard was approved by CEN on 20 February 1999 and includes Amendment 1 approved by CEN on 3 November 2003 and Amendment 2 approved by CEN on 27 July 2009.

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Foreword

This European Standard 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of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

This document includes Amendment 1, approved by CEN on 2003-11-03 and Amendment 2, approved by CEN on 2009-07-27.

This document supersedes EN 609-1:1999.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

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This European Standard 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).

A2 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A2**

The annex A is normative and contains the "List of Hazards".

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.

Introduction

The extent to which hazards are covered is indicated in the scope of this standard. In addition, machinery shall comply as appropriate with EN 292-1 and EN 292-2 for hazards which are not covered by this standard.

1 Scope

This European Standard specifies safety requirements, and their verification for the design and construction of wedge splitters, designed to be used by one operator for splitting wood, irrespective of the nature of the power source used.

On a dual purpose circular saw for firewood/log splitting machine only the log splitter part of the machine is covered by this standard. For circular saws for firewood see prEN 1870-6:1997.

This standard describes methods for the elimination or reduction of risks arising from their use. In addition, it specifies the type of information on safe working practices to be provided by the manufacturer.

The list of significant hazards dealt with is given in annex A. Annex A also indicates the hazards which have not been dealt with.

This European Standard applies primarily to machines which are manufactured after the date of issue of the standard.

2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN 292-1:1991, *Safety of machinery - Basic concepts, general principles for design – Part 1: Basic terminology, methodology.*

EN 292-2:1991, *Safety of machinery - Basic concepts, general principles for design – Part 2: Technical principles and specifications (including EN 292-2/A1:1995).*

EN 574:1996, *Safety of machinery - Two-hand control devices – Functional aspects - Principles for design.*

EN 953:1997, *Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards.*

EN 954-1:1996, *Safety of machinery - Safety-related parts of control systems – Part 1: General principles for design.*

EN 982:1996, *Safety of machinery - Safety requirements for fluid power systems and their components – Hydraulics.*

EN 1088:1995, *Safety of machinery - Interlocking devices associated with guards - Principles for design and selection.*

EN 60204-1:1992, *Safety of machinery - Electrical equipment of machines – Part 1: General requirements.*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code).*

EN 60947-4-1:1992, *Low-voltage switchgear and controlgear – Part 4: Contactors and motor-starters - Section 1: Electromechanical contactors and motorstarters.*

EN 60947-5-1:1991, *Low-voltage switchgear and controlgear – Part 5: Control circuit devices and switching elements - Section 1: Electromechanical control circuit devices.*

prEN 1553:1998, *Agricultural and machinery - Agricultural self-propelled, mounted, semi-mounted and trailed machines - Common safety requirements.*

prEN 1870-6:1997, *Safety of woodworking machines - Circular sawing machines – Part 6: Firewood sawing machine/circular saw bench with manual loading and/or unloading.*

prEN 12965:1997, *Tractors and machinery for agriculture and forestry – Power take-off drive shafts and their guards – Safety.*

HD 21.1 S1:1997, *Polyvinyl chloride insulated cables Polyvinyl of rated voltages up to and including 450/750 V; Part 1: General requirements.*

HD 22.1 S3:1997, *Rubber insulated cables - Rated voltages up to and including 450/750 V – Part 1: General requirements.*

3 Definitions

For the purposes of this European Standard, the definitions given in EN 292-1 apply together with the following definition:

3.1

wedge splitter

a log splitting machine in which the log is pressed against a fixed plate by means of a splitting wedge (see figures 1 to 3 for examples), or in which a log is split by being pressed against a fixed splitting wedge by a pressure plate

4 Safety requirements

4.1 Electrical equipment

The electrical equipment of electrically driven machines shall comply with EN 60204-1.

The degree of protection of all electrical components shall be a minimum of IP 54 in accordance with EN 60529.

See 6.3 s) for the use of PRCD.

4.2 Safety and reliability of control systems

Control systems shall be at least category 1 according to 6.2.2 of EN 954-1:1996.

For the purpose of this standard, "safety related control systems" means the system from and including the initial manual control or position detector to the point of input to the final actuator or element, e.g. motor. Safety related control systems of this machine include the following: