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Palgilõhkumismasinate ohutus. Osa 2: Kruvilõhestaja
KONSOLIDEERITUD TEKST**

Agricultural and forestry machinery - Safety of log splitters -
Part 2: Screw splitter CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 609-2:2000+A1:2009 sisaldab Euroopa standardi EN 609-2:1999+A1:2009 ingliskeelset teksti.

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English Version

**Agricultural and forestry machinery - Safety of log splitters - Part
2: Screw splitters**

Matériel agricole et forestier - Sécurité des fendeuses de
bûches - Partie 2 : Fendeuses à vis

Land- und Forstmaschinen - Sicherheit von
Holzspaltmaschinen - Teil 2: Schraubenspaltmaschinen

This European Standard was approved by CEN on 27 August 1999 and includes Amendment 1 approved by CEN on 27 July 2009.

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Foreword

This document (EN 609-2:1999+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of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

This document includes Amendment 1, approved by CEN on 2009-07-27.

This document supersedes EN 609-2:1999.

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

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

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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 screw splitters with horizontal screws, 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 saws 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 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 60204-1:1997, *Safety of machinery - Electrical equipment of machines; Part 1: General requirements (IEC 60204-1: 1997)*

EN 60529:1991, *Degree of protection provided by enclosure (IP code) (IEC 529: 1989)*

EN 60947-4-1:1992, *Low-voltage switchgear and controlgear; Part 4: Contactors and motor-starters; Section 1: Electromechanical contactors and motor-starters (IEC 60947-4-1: 1990)*

EN 60947-5-1:1997, *Low-voltage switchgear and controlgear; Part 5-1: Control circuit devices and switching elements; Electromechanical control circuit devices (IEC 60947-5-1 : 1997)*

prEN 1553:1999, *Agricultural machinery - Agricultural self propelled, mounted, semi-mounted or 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*

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 shall apply together with the following definition:

3.1

Screw splitter

A log splitting machine where the log is split by the action of a rotating, conical screw. To achieve splitting the log is pressed against the point of the screw (see figures 1a and 1b for an example).

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 also 6.3 s) of this standard for the use of a portable residual current device (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:

- starting;
- normal stopping;
- interlocking devices;
- interlocking with guard locking;
- initiation of the braking system.