

**Põllumajandus- ja metsatöömasinad.  
Palgilõhkumismasinate ohutus. Osa 2:  
Kruvilõhestaja**

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 609-2:2000 sisaldab Euroopa standardi EN 609-2:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 08.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 609-2:2000 consists of the English text of the European standard EN 609-2:1999.</p> <p>This document is endorsed on 08.08.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>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.</p> <p>This standard describes methods for the elimination or reduction of the risks arising from their use. In addition it specifies the type of information on safe working practices to be provided by the manufacturer.</p>	<p><b>Scope:</b></p> <p>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.</p> <p>This standard describes methods for the elimination or reduction of the risks arising from their use. In addition it specifies the type of information on safe working practices to be provided by the manufacturer.</p>
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**Võtmesõnad:**

**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 1999-08-27.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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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 April 2000, and conflicting national standards shall be withdrawn at the latest by April 2000.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the 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 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.