# Põllumajandus- ja metsatöömasinad. Reasniitmismehhanismid. Ohutus

Agricultural and forestry machinery - Inter-row mowing units - Safety



# EESTI STANDARDI EESSÕNA

# NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13448:2002 sisaldab Euroopa standardi EN 13448:2001 ingliskeelset teksti. Käesolev dokument on jõustatud 19.06.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13448:2002 consists of the English text of the European standard EN 13448:2001. This document is endorsed on 19.06.2002 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This standard specifies the safety requirements and test methods for the design and construction of inter-row mowing units with vertical spindles mounted on grass cutting machines such as the flail mowers, used in agriculture, forestry and landscaping to cut the grass in the area between two successive obstruction. It describes methods for 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. Environmental aspects have not been considered in this standard.	Scope: This standard specifies the safety requirements and test methods for the design and construction of inter-row mowing units with vertical spindles mounted on grass cutting machines such as the flail mowers, used in agriculture, forestry and landscaping to cut the grass in the area between two successive obstruction. It describes methods for 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. Environmental aspects have not been considered in this standard.
ICS 65.060.50	

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Võtmesõnad: equipment safety, instructions, instructions for use, machines, maintenance instructions, marking, mechanical engineering, mowers, occupational safety, safety, safety devices, safety requirements, specification (approval), specifications, testing, workplace safety

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# EN 13448

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English version

# Agricultural and forestry machinery - Inter-row mowing units -Safety

Matériel agricole et forestier - Faucheuses interlignes -Sécurité

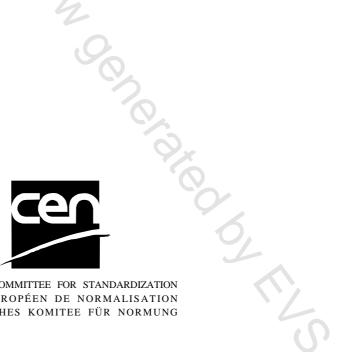
Land- und forstwirtschaftliche Maschinen -Zwischenreihenmäher - Sicherheit

This European Standard was approved by CEN on 3 October 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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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 June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

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 EC Directive(s).

For relationship with EC Directive(s), see informative annex ZA, which is an integral part of this document.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

# Introduction

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

The machinery concerned and the extent to which hazards are covered is indicated in the scope of this standard. These hazards are specific to inter-row mowing units.

The hazards that are common to all agriculture machines (self-propelled, mounted, semi-mounted and trailed) are dealt with in EN 1553:1999.

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 European Standard specifies the safety requirements and test methods for the design and construction of inter-row mowing units with vertical spindles mounted on grass cutting machines such as flail mowers, used in agriculture, forestry and landscaping to cut the grass in the area between two successive obstruction.

It describes methods for 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.

This standard is not applicable to rotary mowers and flail-mowers which are covered by EN 745.

Environmental aspects have not been considered in this standard.

This European Standard is not applicable to inter-row mowing units which are manufactured before the date of publication of this document by CEN.

# 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 (including amendments).

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 amendment A1:1995).

EN 294:1994, Safety of machinery – Safety distances to prevent danger zones being reached by the upper limbs.

EN 745, Agricultural machinery – Rotary mowers and flail mowers – Safety.

EN 1070, Safety of machinery – Terminology.

EN 1553:1999, Agricultural machinery – Agricultural self-propelled, mounted, semi-mounted and trailed machines – Common safety requirements.

EN ISO 3457:1995, Earth-moving machinery – Guards and shields – Definitions and specifications.

# 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 1070 apply together with the following:

# 3.1

# inter-row mowing unit

rotary mower with vertical spindles equipped with pivoting boom, which allows grass cutting in the area between two successive obstructions (e.g. trees, posts, etc.) (see Figure 1)

# 3.2

### pivoting boom

device which allows the inter-row mowing unit to perform lateral translation movements parallel to the ground, thus allowing cutting within the area between two successive obstructions which would not be possible using fixed mowing machines (see Figure 1)

# 3.3

sensor

device controlling boom movement, mounted forward of the inter-row mowing unit

NOTE The device may be formed of a metal rod which, when pushed backwards on encountering an obstruction, sends a command causing the boom to retract. Immediately after the obstacle has been passed, the sensor returns to its original position, and the boom returns to the working position.

#### 3.4

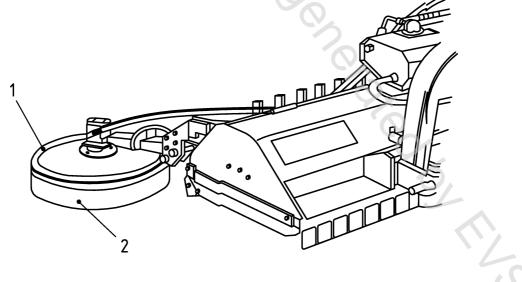
#### target

device which registers the number of impacts of objects propelled by the mowing unit

#### 3.5

#### danger zone

area surrounding the machine with a radius of 50 m as measured from the centre of the unit



#### Key

- 1 Blade enclosure
- 2 Lateral protection

