Põllumajandusmasinad. Lauplaadurid. Ohutus

Agricultural machinery - Front loaders - Safety



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12525:2000+A2:2010 sisaldab Euroopa standardi EN 12525:2000+A2:2010 ingliskeelset teksti.

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EUROPEAN STANDARD

EN 12525:2000+A2

NORME EUROPÉENNE EUROPÄISCHE NORM

March 2010

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Supersedes EN 12525:2000

English Version

Agricultural machinery - Front loaders - Safety

Matériel agricole - Chargeurs frontaux - Sécurité

Landmaschinen - Frontlader - Sicherheit

This European Standard was approved by CEN on 22 November 1999 and includes Amendment 1 approved by CEN on 16 March 2006 and Amendment 2 approved by CEN on 24 January 2010.

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

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Foreword

This document (EN 12525:2000+A2:2010) 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of an identical text or by endorsement, at the latest by September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

This document includes Amendment 1, approved by CEN on 2006-03-16 and Amendment 2, approved by CEN on 2010-01-24.

This document supersedes EN 12525:2000.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] and A_2 A_2 .

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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).

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

- 1 The following changes were introduced compared to the previous version:
- technical changes of Clauses 1, 4.5.1, 7.1.5 and Table A.2;
- minor changes of Clauses 2, 3 and 4, 7.2 and Table A.1;
- editorial modifications of Annex ZA;
- addition of Annex ZB. (A2)

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, Croatia, 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. 2

A2 deleted text (A2

Introduction

The extent to which hazards are covered is indicated in the scope of this standard.

This document is a type C standard as stated in EN ISO 12100. The machinery concerned and the extent to which hazards, hazardous situations and hazardous 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. (2)

1 Scope

This Puropean Standard 2 specifies safety requirements and their verification for the design and construction of front loaders designed to be mounted on agricultural and forestry wheeled tractors (as defined in the Directive 2003/37/EC 20).

Hazards related to mounting the lifting arms to the frame mounted on the tractor, and also hazards related to devices for mounting attachments to the arm are covered.

Hazards related to mounting the frame to the tractor (carried out by the dealer of the loader and/or of the tractor), the mounted attachments and hazards due to loss of mechanical strength of the structure are excluded.

A1) deleted text (A1)

Hazards related to the transport of passengers are not covered.

This 🗗 European Standard 🔁 describes methods and requirements for the elimination or reduction of risks which need specific requirements to front loaders. 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 in this standard is given in annex A. Annex A also indicates the hazards which have not been dealt with.

This European Standard is not applicable to front loaders which are manufactured before the date of its publication as EN. 🔁

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. (4)

A₂ deleted text (A₂

EN 982, Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics

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) [A2]

ISO 8935, Tractors for agriculture and forestry — Mountings and apertures for external equipment controls

ISO 10448:1994, Agricultural tractors — Hydraulic pressure for implements

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

3 Definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003 apply.

3.1

front loader

detachable unit consisting of lifting arms and fastening devices designed to be mounted on a frame on the front of a tractor and equipped with devices for mounting various allowable attachments

NOTE See figure 1.

3.2

allowable attachment

working attachment, approved by the front loader manufacturer for mounting and operating with specified front loaders (and tractors)

3.3

supporting device

device for supporting the lifting arms in a stable position when it is dismounted from the tractor

NOTE For example, for storage, see figure 1.

3.4

manual controls of the front loader

control equipment supplied with the front loader to enable the loader and attachments to be operated from the driving position of the tractor