# Agricultural machinery - Solid fertilizer broadcasters and full width distributors - Environmental protection - Part 1: Requirements

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#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13739-1:2003 sisaldab Euroopa standardi EN 13739-1:2003 + AC:2003 ingliskeelset teksti.

Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13739-1:2003 consists of the English text of the European standard EN 13739-1:2003 + AC:2003.

This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard specifies requirements for the environmental protection for design and construction of mounted, trailed and self-propelled full width solid fertilizer distributors and solid fertilizer broadcasters used in agriculture and horticulture. It also gives the requirements for the minimum content of the instruction handbook

#### Scope:

This European Standard specifies requirements for the environmental protection for design and construction of mounted, trailed and self-propelled full width solid fertilizer distributors and solid fertilizer broadcasters used in agriculture and horticulture. It also gives the requirements for the minimum content of the instruction handbook

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**Võtmesõnad:** agricultural machines, agriculture, cantilevers, definition, definitions, ejector, fertilizers, forest equipment, forestry, forestry equipment, mineral fertilizer distributor, pollution control, specification (approval), specifications

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### English version

## Agricultural machinery - Solid fertilizer broadcasters and full width distributors - Environmental protection - Part 1: Requirements

Matériel agricole - Distributeurs d'engrais solides en nappe et centrifuges - Protection de l'environnement - Partie 1: Prescriptions

Landmaschinen - Ausleger- und Wurf-Mineraldüngerstreuer - Umweltschutz - Teil 1: Anforderungen

This European Standard was approved by CEN on 20 December 2002.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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

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#### **Foreword**

This document (EN 13739-1:2003) 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 2003, and conflicting national standards shall be withdrawn at the latest by September 2003.

This European Standard consists of the following parts under the general title *Agricultural machinery – Solid fertilizer broadcasters and full width distributors – Environmental protection:* 

- Part 1: Requirements
- Part 2: Test methods

Annex A is informative.

This document includes a Bibliography.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

#### Introduction

The objective of this European Standard is to specify requirements for fertilizer distributors used according to the instruction handbook, so that:

- unintentional spreading of fertilizers is avoided;
- an even distribution of fertilizer with the desired application rate is achieved.

This standard does not include any direct requirements for the longitudinal distribution. The requirements for evenness of flow rate will partly cover that subject.

#### 1 Scope

This European Standard specifies requirements for the environmental protection for design and construction of mounted, trailed and self-propelled full width solid fertilizer distributors and solid fertilizer broadcasters used in agriculture and horticulture. It also gives the requirements for the minimum content of the instruction handbook.

The standard does not apply to machines which are:

- combined grain and fertilizer drills; or
- equipment for distributing granulated pesticides; or
- solid fertilizer line-distributors (which are dealt with in prEN 13740-1 and in prEN 13740-2).

Personal safety aspects have not been considered in this standard; they are dealt with in prEN 14017.

If the term 'machine' is used it covers both full width distributors and broadcasters, except in the terms and definitions.

#### 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 revision 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 apply (including amendments).

EN 13739-2:2003, Agricultural machinery – Solid fertilizer broadcasters and full width distributors - Environmental protection – Part 2: Test methods.

#### 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply (see Figure 1).

#### 3.1

#### solid fertilizer distributor

machine which spreads fertilizer in a continuous way on the soil surface and in the crop

#### 3.1.1

#### solid full width fertilizer distributor

solid fertilizer distributor which spreads fertilizer over the whole surface and which has a working width which is roughly the same as the machine width

#### 3.1.2

#### solid fertilizer broadcaster

solid fertilizer distributor which spreads fertilizer over the whole surface and which has a working width which is essentially wider than the machine width

#### 3.1.3

#### solid fertilizer line-distributor

solid fertilizer distributor which spreads fertilizer in bands separated by bands without fertilizer and which has a working width which is roughly the same as the machine width

#### 3.2

#### combined grain and fertilizer drill

machine which simultaneously applies seed and fertilizer

#### 3.3

#### border

line that surrounds the area within which fertilizer is to be applied

#### 3.4

#### working width

distance between two adjacent tramlines

#### 3.5

#### throwing width

distance between the left and the right end of a single pattern

#### 3.6

#### border distance

distance selected from the border to the edge tramline

#### 3.7

#### edge width

first five meters from the border inside the area within which fertilizer is to be applied

#### 3.8

#### transition width

distance from the border to the centre between the first and second field spreading tramline

#### 3.9

#### fertilizer limit

line measured from the border beyond which no fertilizer is found continuously