Põllumajandusmasinad. Sõnnikulaoturid. Keskkonnakaitse. Nõuded ja katsetusviisid

Agricultural machinery - Manure spreaders - Environmental protection - Requirements and test methods

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13080:2006 sisaldab Euroopa standardi EN 13080:2002 ingliskeelset teksti.	This Estonian standard EVS-EN 13080:2006 consists of the English text of the European standard EN 13080:2002.
Standard on kinnitatud Eesti Standardikeskuse 18.02.2003 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 18.02.2003 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 20.11.2002.	Date of Availability of the European standard text 20.11.2002.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 65.060.25

Võtmesõnad: katsetulemused, keskkonnakaitse, põllumajandusmasinad, sõnnikulaoturid

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13080

November 2002

ICS 65.060.25

English version

Agricultural machinery - Manure spreaders - Environmental protection - Requirements and test methods

Matériel agricole - Epandeurs de fumier - Protection de l'environnement - Prescriptions et méthodes d'essai

Landmaschinen - Stalldungstreuer - Umweltschutz - Anforderungen und Prüfmethoden

This European Standard was approved by CEN on 23 September 2002.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 13080:2002 E

Contents

Foreword **3**
Introduction **4**
1 Scope **5**
2 Terms and definitions **5**
3 Requirements **6**
4 Verification **7**
5 Instruction handbook **16**
6 Test report **17**
Annex A (normative) **Characterisation and determination of physical properties of manure** **18**
Annex B (informative) **Filtering of data collected in the longitudinal distribution tests** **21**
Bibliography **23**

Foreword

This document EN 13080:2002 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

Annex A is normative and gives information on a method for the characterisation and determination of physical properties of manure.

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

Introduction

The objective of this standard is to specify test methods and requirements that, as far as possible, allow uniform testing and evaluation of manure spreaders.

The methods and requirements aim at evaluating the manure spreaders regarding the user's ability, when he uses the machine according to the manufacturer instruction handbook, to:

— control the application rate;

— attain an even distribution of the manure;

— reduce the load on the external environment, for example by not unintentionally spreading manure outside the target area.

It should be noted that there is often a great number of varieties of a machine type. This should be considered when selecting the machine configuration for the tests, with the aim of reducing the necessary number of machines to be tested.

1 Scope

This European Standard specifies test methods and requirements for the design and construction of manure spreaders for spreading manure in agriculture and horticulture with the intention of minimising the environmental damage.

It specifies requirements for the transverse and longitudinal spreading characteristics such as working widths, characteristic application rate, characteristic flow, the stretch within the tolerance zone and the coefficient of variation for the longitudinal spreading.

These requirements are valid only according to the tests with manure as described in Table A.1.

This standard is not applicable to manure band-spreaders or to sludge spreaders.

NOTE Sludge spreaders can be dealt with in a future revision when there is sufficient data available to determine their classification and to set the limits for the machine requirements.

Personal safety aspects have not been considered in this standard. These aspects are covered by EN 690.

2 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

2.1
manure spreader
machine for transporting and spreading manure on the field surface

2.2
manure band-spreader
manure spreader which spreads the manure in bands separated by bands with no manure

2.3
sludge spreader
machine for transporting and spreading sludge on the field surface

2.4
working width
distance between the centre of two adjacent bouts

2.5
throwing width
distance between the left and the right end of a transverse distribution

2.6
mass of manure spread
mass of manure spread between the start of the test and the end of the test when the flow is less than 1kg/s during 5 s or when no mass change of 10 kg is registered during 10 s

2.7
unloading time
time needed to empty the first 95 % of the mass of manure spread

2.8
characteristic flow
average flow calculated over a specified part of the unloading time