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Põllumajandusmasinad. Tahke mineraalvääetise paiskelaoturid ja pidevlaiusega puistelaoturid. Keskkonnakaitse, Osa 2: Katsetusviisid

Agricultural machinery - Solid fertilizer broadcasters and full width distributors - Environmental protection - Part 2: Test methods

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EUROPEAN STANDARD

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Agricultural machinery - Solid fertilizer broadcasters and full width distributors - Environmental protection - Part 2: Test methods

Matériel agricole - Distributeurs d'engrais solides en nappe et centrifuges - Protection de l'environnement - Partie 2 : Méthodes d'essai

Landmaschinen - Ausleger- und Mineraldüngerstreuer - Umweltschutz - Teil 2: Prüfverfahren

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COMITÉ EUROPÉEN DE NORMALISATION
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Contents	Page
Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Test conditions	8
4.1 Machine for test	8
4.1.1 General.....	8
4.1.2 Transverse test	8
4.1.3 Rotating test	8
4.2 Test materials.....	8
4.3 Application rates.....	9
5 Test equipment	9
5.1 Accuracy in weighing measurements	9
5.2 Transverse test — Devices for receiving fertilizer for transverse distribution	10
5.3 Rotating test.....	10
5.3.1 Measurement of the angular position of the spreader.....	10
5.3.2 Data acquisition device	10
5.3.3 Devices for receiving fertilizer for spread pattern distribution.....	10
5.4 Test site	10
5.5 Handling of test materials during the tests.....	11
6 Test methods.....	11
6.1 Contact with obstacles.....	11
6.2 Estimation of hopper volume – Checking of the spillage	11
6.3 Adjustment of flow rate	11
6.4 Reduced working width or throwing width	12
6.5 Flow rate regulation system, when available (see example in Figure 2)	12
6.5.1 Deviations of the flow rate	12
6.5.2 Continuous mass flow measurements	12
6.6 Evenness of transversal distribution.....	13
6.6.1 Arrangement of containers.....	13
6.6.2 Procedure	14
6.7 Evenness of transverse distribution near the border	15
6.8 Evenness of transverse distribution when spreading with equipment for top-dressing.....	15
6.9 Deviation of the obtained flow rate from the intended flow rate	15
6.10 Evenness of obtained flow rate	15
6.10.1 Obtained flow rate on horizontal ground	15
6.10.2 Obtained flow rate on sloping ground.....	16
7 Calculation and presentation of test results.....	16
7.1 Transverse distribution.....	16
7.1.1 Determination of the fertiliser amount distributed.....	16
7.1.2 Working width	19
7.1.3 Degree of unevenness of transverse distribution.....	19
7.1.4 Equipment for spreading near the border.....	19
7.1.5 Top-dressing	21
7.2 Flow rate	21
7.2.1 Obtained flow rate on horizontal ground	21
7.2.2 Obtained flow rate on sloping ground.....	21

8 Test report.....	21
Annex A (normative) Determination and specification of physical properties of test materials	22
Annex B (informative) Example of a fertilizer – collecting container	23
Annex C (informative) Example of a test report.....	24
C.1 General	24
C.2 Features of the fertilizer distributor.....	24
C.2.1 General	24
C.2.2 Description.....	24
C.2.3 Dimensions and specifications.....	24
C.3 Physical properties of test material.....	27
C.4 Test conditions	27
C.5 Test equipment	27
C.6 Test results	28
C.6.1 Contact with obstacles	28
C.6.2 Estimation of hopper volume	28
C.6.3 Adjustment of flow rate.....	28
C.6.4 Reduced working width	28
C.6.5 Flow rate regulation system.....	28
C.6.6 Evenness of transverse distribution on level ground	29
C.6.7 Evenness of transverse distribution near the border.....	29
C.6.8 Evenness of transverse distribution when spreading with equipment for top-dressing — Statistical results	30
C.6.9 Deviation from intended flow rates	30
C.6.10 Evenness of flow rate.....	30
C.7 Inspections.....	30
C.7.1 General	30
C.7.2 Hopper filling opening	31
C.7.3 Hopper emptying	31
C.7.4 Hopper cleaning	31
C.7.5 Calibration aids.....	31
C.7.6 Feeding device.....	31
C.7.7 Spillage	31
C.7.8 Instruction handbook	31
C.8 Remarks	32
Bibliography	33

Foreword

This document (EN 13739-2:2011) 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 2012, and conflicting national standards shall be withdrawn at the latest by April 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13739-2:2003.

This 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.*

This document is a revision of EN 13739-2:2003 to take into account the fact that during last years a new concept of testing facility has been developed. The original document has been completed in order to describe how to test a spreader with the new facility and how to calculate the results in order to make them comparable to the ones which would have been obtained with the conventional facilities. Comparative tests carried out in 2007 by test houses and manufacturers have shown that the results obtained with conventional facility are strictly comparable to the ones obtained with new facility using the calculation methods of this document and allow verification.

The following changes were introduced compared to the previous version:

- updating of normative references;
- addition of definitions;
- addition of 4.1.3, 5.3, 6.6.1.2, 6.6.2.2 and 7.1.1.2 related to the "Rotating test".

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 the United Kingdom.

Introduction

The European Committee for Standardization (CEN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning (test bench CEMIB) given in 4.1.3, 5.3, 6.6.1.2, 6.6.2.2, 7.1.1.2.

CEN takes no position concerning the evidence, validity and scope of this patent right.

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1 Scope

This European Standard specifies methods to test mounted, trailed and self-propelled broadcasters and full width solid fertilizer distributors used in agriculture and horticulture.

This European 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 EN 13740-1:2003 and in EN 13740-2:2003).

If the term 'machine' is used it covers both full width distributors and broadcasters, except in the case of definitions in Part 1.

Two different methods are described in this European Standard to carry out the evaluation test: a transverse test and a rotating test. The rotating test is mainly adapted to centrifugal spreaders.

2 Normative references

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

EN 1235:1995, *Solid fertilizers — Test sieving (ISO 8397:1988 modified)*

EN 1236, *Fertilizers — Determination of bulk density (loose) (ISO 3944:1992 modified)*

EN 13299, *Fertilizers — Determination of flow rate*

EN 13739-1:2011, *Agricultural machinery — Solid fertilizer broadcasters and full width distributors — Environmental protection — Part 1: Requirements*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in EN 13739-1:2011 apply together with the following:

3.1 reference axis of spread pattern on the ground
half-line the origin of which is at the middle of the segment joining the centre of spreading discs parallel to the axis of symmetry of the spreader axis progress, and positive backwards

NOTE See Figure 1.

3.2 angular position of the spreader
angle between the reference axis of spread pattern on the ground and the row of collecting containers during the measurement