This is a free page sample. Access the full version online.

NSAI Standards

Irish Standard
I.S. EN 15597-1:2009

Winter maintenance equipment - Spreading machines (gritting machines) - Part 1: General requirements and definitions for spreading machines

© NSAI 2009 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15597-1

October 2009

ICS 13.030.40

English Version

Winter maintenance equipment - Spreading machines (gritting machines) - Part 1: General requirements and definitions for spreading machines

Équipement de viabilité hivernale - Épandeuses - Partie 1 : Exigences générales et définitions relatives aux épandeuses

Winterdienstausrüstung - Streumaschinen - Teil 1: Allgemeine Anforderungen und Angaben für Streumaschinen

This European Standard was approved by CEN on 29 September 2009.

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 CEN 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2009 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

This is a free page sample. Access the full version online.

Contents

Page

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Requirements 7
4.1 General 7
4.2 Requirements on dosage of spreading agents 8
4.3 Technical information 8
4.4 Requirements on drives for spreading machines 10
4.4.1 Drive by hydraulic unit of carrier vehicle 10
4.4.2 Drive by hinged wheel and carrier vehicle wheel-hub drive 10
4.5 Design requirements 10
4.5.1 Spreading device 10
4.5.2 Equipment for spreading agent pre-wetted 11
4.5.3 Stationary emptying 11
4.6 Operation and control system 12
4.6.1 Operating voltage 12
4.6.2 Degree of protection 12
4.6.3 Control related spreading 12
4.6.4 Adjustment steps 12
4.6.5 Control box 12
4.6.6 Control box alarms 12
4.6.7 Selection of spreading agent 13
4.6.8 Data recording 13
4.6.9 Emergency operation 13
4.6.10 Spreading in specific areas 13

5 Operating manual 13

ANNEX A (normative) **Static test method to check spreading dosage performances** 14
A.1 Short description 14
A.2 Applicable spreading agents 14
A.3 Technical means for testing 14
A.4 Testing procedures 14

ANNEX B (normative) **Automatic safety shut-off loading brine pump** 16

ANNEX C (informative) **Pre-wetted salt** 18
C.1 Visualization: Mass fractions of the system pre-wetted salt 18
C.2 Visualization: Three systems for pre-wetted salt, examples with setting 20 g/m² at the spreader control unit mass salt in brine is 23 % 18

Tables

Table 1 — Solid and pre-wetted thawing agent 7

Table 2 — Abrasive spreading agent 7

Table 3 — Liquid thawing spreading agent 7

Table 4 — Requirements on dosage of spreading agents 8

This is a free page sample. Access the full version online.

Figures

Figure 1 — Dimensions of spreading machines (G quote centre of gravity) 9

Figure 2 — Spreading device 11

Figure B.1 — Type connector 16

Figure B.2 — Schematic diagram spreader/loading brine plant 17

Figure C.1 — Visualization mass fractions 18

Figure C.2 — System 1 18

Figure C.3 — System 2 19

Figure C.4 — System 3 19

This is a free page sample. Access the full version online.

Foreword

This document (EN 15597-1:2009) has been prepared by Technical Committee CEN/TC 337 “Winter maintenance and road service area maintenance equipment”, 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 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

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.

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, 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.

This is a free page sample. Access the full version online.

Introduction

This document is meant to assess the demands made on mobile spreading machines operated in traffic. Spreaders/gritters are to be operated in such way that homogeneous distribution of spreading agents is given within the set spreading dosage, spreading width and spreading track asymmetry.

This is a free page sample. Access the full version online.

1 Scope

Demands on design and construction of bulk spreaders, trailer spreaders and towed spreaders with speed related spreading for winter service are determined by this document. At the same time, information is given on the minimum content required for operating manuals.

The standard is valid for machines which are used to spread the following media:

a) spreading agents with or without pre-wetted agent;

b) abrasive spreading agents;

c) brine.

The following points are not covered by this standard:

— requirements for registration and approval;

— requirements made by automobile manufacturers;

— requirements on safety – these are dealt with in EN 13021.

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 13021, *Winter service machines — Safety requirements*

EN 15144:2007, *Winter maintenance equipment — Terminology — Terms for winter maintenance*

EN 15430-1, *Winter and road service area maintenance equipments — Data acquisition and transmission — Part 1: In vehicle data acquisition*

EN 15431, *Winter and road service area maintenance equipments — Power system and related controls — Interchangeability and performance requirements*

EN 15432, *Winter and road service area maintenance equipments — Front-mounted equipments — Interchangeability*

EN 60529, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15144:2007 apply.

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation