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European foreword

This document (EN 15597-1:2020) has been prepared by Technical Committee CEN/TC 337 “Road operation equipment and products”, 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of an identical text or by endorsement, at the latest by September 2020, and conflicting national standards shall be withdrawn at the latest by September 2020.

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

This document supersedes EN 15597-1:2009.

EN 15597, *Winter maintenance equipment - Spreading and spraying machines*, is composed with the following parts:

- *Part 1: General requirements and definitions;*
- *Part 2: Requirements for distribution and their test.*

EN 15597-1:2020 includes the following significant technical changes with respect to EN 15597-1:2009:

- deletion of Annex A for static test, this is reported in EN 15597-2;
- deletion of the operating manual requirement as this is specified in EN 17106-3-2¹;
- a new figure for spraying machine has been added;
- the tolerances for dosage have been modified from 6 % to 6,5 %;
- the high of spreading trajectory has been modified from 600 mm to 700 mm.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

¹ Under preparation. Stage at the time of publication: FprEN 17106-3-2

Introduction

This document is meant to assess the demands made on mobile spreading/spraying/gritting machines operated in traffic.

For simplicity, in this document all machines are called “spreaders” also for liquid agent spraying and gritters.

Spreaders are bound 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.

In this document the following aspects are reported:

- type of spreading machines and their main performances;
- dosage tolerances admitted;
- main functions, applications;
- interface to be connected with external equipment.

This document does not refer to the yearly test done by the users on the machines in order to check the good status during their life.

1 Scope

This document specifies the requirements on design and construction of bulk spreaders and sprayers, trailer spreaders and towed spreaders with speed related spreading for winter service. This document also deals with information about the minimum content required for operating manuals.

The document is valid for machines, which are used to spread the following spreading agents:

- not pre-wetted and pre-wetted spreading agents;
- abrasive spreading agents;
- liquid spreading agents (brine).

This document is not applicable to:

- requirements for registration and approval;
- requirements made by automobile manufacturers;
- requirements on safety, which are dealt with in EN 17106-1² and EN 17106-3-2³.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 15144, *Winter maintenance equipment - Terminology - Terms for winter maintenance*

EN 15430-1, *Winter and road service area maintenance equipment - 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 60529, *Degrees of protection provided by enclosures (IP Code)*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

NOTE Spreader types are defined by using different spreading parameters and spreading agents according to Table 1 and Table 2.

² Under preparation. Stage at the time of publication: FprEN 17106-1

³ Under preparation. Stage at the time of publication: FprEN 17106-3-2