

Irish Standard I.S. EN 13790-2:2003

Agricultural machinery - Sprayers -Inspection of sprayers in use - Part 2: Airassisted sprayers for bush and tree crops

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Foreword

This document (EN 13790-2:2003) 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of an identical text or by endorsement, at the latest by November 2003, and conflicting national standards shall be withdrawn at the latest by November 2003.

This standard consists of the following parts, under the general title *Agricultural machinery* — *Sprayers* - *Inspection of sprayers in use:*

- Part 1: Field crop sprayers
- Part 2: Air-assisted sprayers for bush and tree crops

Annexes A and B are informative.

During recent years, several countries have developed systems for inspection of air-assisted sprayers for bush and tree crops in use. Developments in this direction have been stimulated by public concern about risks, and the aim of reducing the use of crop protection products.

However, there are three main arguments for the inspection:

- test operator safety (minimum requirements are given concerning operator safety in the use of work equipment at work directive 95/63/CE, amending directive 89/655/CEE, and can be complimented by national regulations);
- less potential risk of environmental contamination by crop protection products;
- good control of the pest with the minimum possible input of crop protection product.

As the third argument above indicated, tests of sprayer function are of great importance for the efficiency of the treatment which consequently can also be very profitable for the user of the sprayer.

In order to use crop protection products in agricultural production in Europe safely, it is necessary to define the requirements and test methods for sprayers in use. This is a relevant step after having standardized the requirements for new equipment, in respect of safety hazards (see EN 907) and potential risks of environmental contamination (see EN 12761 Parts 1 to 3).

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

Standardising the requirements and methods for inspection of sprayers in use, takes into consideration not only the original performance of the spraying equipment, but also its use, care and maintenance. This is the logical link between new equipment of good quality and well educated and concerned users.

The inspection of sprayers in use can be done on a voluntary or mandatory basis. In both cases further official or legal specifications are necessary, e.g. on the execution management of the inspection, which organizations are authorized to carry out the inspection, time intervals between inspections etc. As the specifications of this European Standard are based on EN 907 and EN 12761, it may be the case that sprayers in use which were produced before EN 907 and EN 12761 came into force do not fulfil all the specifications given in this European Standard.

1 Scope

This European Standard specifies the requirements and methods of their verification for the inspection of airassisted sprayers for bush and tree crops in use. It relates mainly to the condition of the sprayer in respect of safety hazards for the test operator, the potential risk of environmental contamination and opportunities to achieve good application.

NOTE Minimum requirements are given concerning operator safety in the use of work equipment at work directive 95/63/CE, amending directive 89/655/CEE, and can be complimented by national regulations.

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 revisions 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 applies (including amendments).

EN 837-1, Pressure gauges – Part 1: Bourdon tube pressure gauges – Dimensions, metrology, requirements and testing.

ISO 5682-2:1997, Equipment for crop protection – Spraying equipment – Part 2: Test methods for hydraulic sprayers.

3 Inspection

The compliance with the requirements defined in the following clauses shall be checked by inspection, function tests and measurements.

NOTE Some of the tests specified in this standard involve processes which could lead to a hazardous situation. Any person performing tests in accordance with this standard should be appropriately trained in the type of work to be carried out. All national regulatory conditions and health and safety requirements should be followed.



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