TECHNICAL SPECIFICATION

ISO/TS 22763

First edition
2002-08-01

Crop protection equipment — Sprayers — Demonstration track for field crop sprayers

Matériel de protection des cultures — Pulvérisateurs — Piste de démonstration pour les pulvérisateurs

Reference number
ISO/TS 22763:2002(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

— an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;

— an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years with a view to deciding whether it should be confirmed for a further three years, revised to become an International Standard, or withdrawn. In the case of a confirmed ISO/PAS or ISO/TS, it is reviewed again after six years at which time it has to be either transposed into an International Standard or withdrawn.

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

ISO/TS 22763 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 6, *Equipment for crop protection.*

Introduction

The movement of the spray boom is an important performance criterion for field crop sprayers. During practical demonstrations, the sprayers are driven on demonstration tracks to give a visual impression of the boom movement. The tracks used are very different.

This Technical Specification specifies a uniform track that can be used for practical demonstrations. As the intention is to show the boom movement visually (and not to measure it), and due to the conditions under which practical demonstrations are normally performed, it gives the main characteristics — but not all details — required in, for example, carrying out laboratory measurements.

Crop protection equipment — Sprayers — Demonstration track for field crop sprayers

1 Scope

This International Standard specifies a uniform demonstration track for showing the spray boom movement of field crop sprayers in, for example, practical demonstrations. The track specified can be used in demonstrations of mounted, trailed or self-propelled sprayers.

2 Terms and definitions

For the purposes of this Technical Specification, the following terms and definitions apply.

2.1
break-back test obstacle
moveable device showing the break-back operation of the outer spray boom section when coming into contact with obstacles in the field

2.2
bump test object
section higher than the ground surface, representing, for example, the potato dam

2.3
furrow test object
section deeper than the ground surface, representing, for example, hollows or the furrow

3 Specifications

3.1 General

3.1.1 The demonstration track shall be such as to ensure equal conditions for all sprayers independently when the sprayers are passing over the track. Therefore, the ground of the demonstration track and the objects shall be firm and shall keep the shape and specified height/depth. The conditions shall be monitored during the demonstration.

3.1.2 The sequence of the sprayers passing over the demonstration track should be determined by drawing lots.

3.1.3 The ground surface shall be even along the whole boom width.

3.1.4 All sprayers shall have the same track setting, the same height of boom and the same volume of liquid in the tank.

3.1.5 The tyre pressure shall be as recommended by the manufacturer.

3.1.6 Devices for keeping distance between the boom end and the ground shall not be fitted.

3.2 Shape and positioning

The demonstration track shall include the following sections:

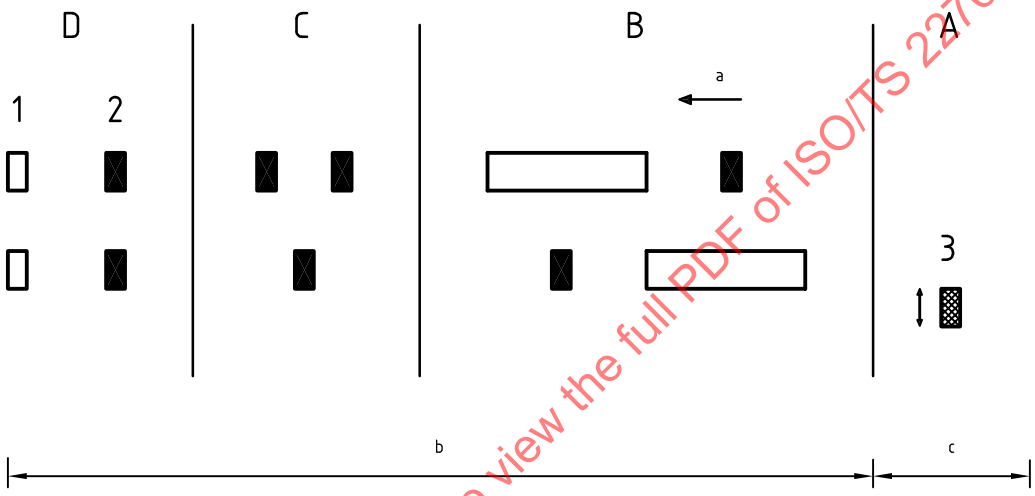
— hitting an object (section A);

— following the furrow (section B);

— passing field irregularities (section C);

— crossing bump and furrow (section D).

The number and arrangement of the bump and furrow test objects shall correspond to the example shown in Figure 1. Objects may be freely located.



NOTE D, C, B and A refer to the track sections.

Key

1 Furrow test object
2 Bump test object
3 Break-back test object

a Driving direction
b 6 km/h to 8 km/h
c 4 km/h

Figure 1 — Demonstration track — Example

3.3 Objects

The objects shall be non-deformable, have a rectangular shape and be

— 5 cm to 15 cm high, and

— 5 cm to 15 cm deep.