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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 32250.1-2022

**Agricultural and forestry machinery - Inspection of sprayers in
use - Part 1: General**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is part 1 of GB/T 32250 "Detection of Sprayers in Use for Agricultural and Forestry Machinery". GB/T 32250 has been released to the next part.

--- Part 1. General;

--- Part 2. Horizontal boom sprayers;

--- Part 3. Sprayers for shrub and tree crops;

--- Part 4. Stationary and semi-mobile sprayers.

This document is equivalent to ISO 16122-1:2015 "Testing of agricultural and forestry machinery in-use sprayers - Part 1. General provisions".

Please note that some content of this document may involve patents, and the issuing authority of this document does not assume responsibility for identifying patents.

Introduction

The sprayer is mainly used for spraying insecticides, herbicides, fungicides, defoliants and other plant protection products to prevent and control crop diseases, pests and weeds, improve

High yield per unit area plays an irreplaceable and important role, and it is widely used and

involves a wide variety of products.

The sprayer sprays the plant protection product on the target with the goal of spraying only the amount required by the target, contaminating operators and off-target streams

The amount of drug lost to the environment is kept to a minimum. Under normal use and regular maintenance, a well-designed and well-made sprayer can

Work continuously. However, after the sprayer is used in the field, it often produces serious abrasion and damage, even if the level of agricultural production technology is relatively advanced.

It is also difficult to achieve sufficient maintenance in the area where we enter. Therefore, clarifying the use requirements and testing methods of the sprayer in use is conducive to the use of sprayers in use.

The test of fog machine, prolong the normal continuous operation time of the spray machine in use, reduce the use of pesticides, improve the safety and work efficiency.

At present, in terms of the safety of plant protection machinery and the potential risks of environmental pollution, there are GB 10395.6 "Agriculture and Forestry Tractors and Machinery

Machinery Safety Technical Requirements Part 6.Plant Protection Machinery, GB/T 39515 Environmental Requirements for Agricultural and Forestry Machinery Sprayers, etc.

Standard, the design and manufacture requirements and performance test methods of sprayer products are specified. However, standardizing the testing requirements and methods for in-use sprayers does not

Only the initial performance of the sprayer needs to be considered, but also factors such as use, maintenance and repair to ensure that the sprayer continues to perform in good condition.

According to the structure and product type of international standards, GB/T 32250 "Detection of Agricultural and Forestry Machinery In-Use Sprayers" is currently organized by 4 departments.

Components.

- Part 1.General;
- Part 2.Horizontal boom sprayers;
- Part 3.Sprayers for shrub and tree crops;
- Part 4.Stationary and semi-mobile sprayers.

This document is Part 1 of GB/T 32250.The special requirements for different types of sprayers are covered by other parts of GB/T 32250

Regulation.

Inspection of agricultural and forestry machinery in-use sprayers

Part 1.General

WARNING. The tests specified in this document involve operations that could result in a hazardous situation. Inspectors should be assessed in relation to the type of work performed.

Get proper training. National or local regulations regarding health and safety may also apply.

Note. The inspector should also take into account the possible dangers when the test is carried out under the highest working pressure of the system to determine whether the test can be carried out.

1 Scope

This document specifies that all types of pesticides used in agriculture, horticulture, forestry and other fields except knapsack sprayers (apparatus) are in use.

General requirements for testing of sprayers (hereinafter referred to as sprayers).

Note. Knapsack sprayer (device) requirements can refer to ISO.19932-1 and ISO.19932-2.

Special requirements for different types of sprayers are given in other parts of GB/T 32250. This document and other GB/T 32250

Part (see Appendix A) used together, specifies the technical requirements and test methods for testing in-use sprayers. Mainly related to the state of the sprayer,

Potential risks of environmental contamination and performance requirements to achieve good operational results. This document also specifies the preparation of the test sprayer.

Minimum requirements and minimum safety requirements for inspectors during testing.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

Note. GB/T 20085-2006 Plant Protection Machinery Vocabulary (ISO 5681.1992, MOD)

3 Terms and Definitions

Terms and definitions defined in ISO 5681 apply to this document.

Note. Terms and definitions for specific types of sprayers are defined by other parts of GB/T 32250.

4 Classification of sprayers

In order to clarify the scope of application of each part of GB/T 32250, Appendix A gives the classification of sprayers.

5.1 General requirements

The owner/operator of the sprayer should participate in the inspection and ensure that known faults are repaired prior to testing. All necessary test equipment (such as Flow meters, pressure gauges, forward speed sensors, etc.) should be calibrated regularly, usually at least once a year with calibrated equipment, and test equipment should be within the validity period of the calibration.