

<b>STN</b>	<b>Pol'nohospodárske a lesnícke stroje Kontrola postrekovačov v prevádzke Časť 1: Všeobecne (ISO 16122-1: 2024, opravená verzia 2025-05)</b>	<b>STN EN ISO 16122-1</b>  27 5005
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Agricultural and forestry machinery - Inspection of sprayers in use - Part 1: General (ISO 16122-1:2024, including corrected version 2025-05)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/26

Obsahuje: EN ISO 16122-1:2025, ISO 16122-1:2024

Oznámením tejto normy sa ruší  
STN EN ISO 16122-1 (27 5005) zo septembra 2015

**141938**

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2026  
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.



EUROPEAN STANDARD

**EN ISO 16122-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2025

ICS 65.060.40

Supersedes EN ISO 16122-1:2015

English Version

**Agricultural and forestry machinery - Inspection of  
sprayers in use - Part 1: General (ISO 16122-1:2024,  
including corrected version 2025-05)**

Matériel agricole et forestier - Contrôle des  
pulvérisateurs en service - Partie 1: Généralités (ISO  
16122-1:2024, y compris version corrigée 2025-05)

Land- und Forstmaschinen - Kontrolle von in Gebrauch  
befindlichen Pflanzenschutzgeräten - Teil 1:  
Allgemeines (ISO 16122-1:2024, einschließlich  
korrigierte Fassung 2025-05)

This European Standard was approved by CEN on 29 December 2024.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN ISO 16122-1:2025 (E)**

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## **European foreword**

This document (EN ISO 16122-1:2025) has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" in collaboration with 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 April 2026, and conflicting national standards shall be withdrawn at the latest by April 2026.

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 ISO 16122-1:2015.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, 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, Türkiye and the United Kingdom.

## **Endorsement notice**

The text of ISO 16122-1:2024, including corrected version 2025-05 has been approved by CEN as EN ISO 16122-1:2025 without any modification.

## Annex ZA (informative)

### Relationship between this European Standard and the essential health and safety and environmental requirements of Directive 2009/128/EC

This European Standard has been prepared under Commission's standardization request "M/435 Mandate to CEN, CENELEC and ETSI for the development of a standard on inspection of pesticide application equipment in use" to provide one voluntary means of conforming to **health and safety and environmental** requirements of the Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides [OJ L 309].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding **health and safety and environmental** requirements, of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and annex II of EU Directive 2009/128/EC [OJ L 309]**

Health and safety and environmental requirements of Directive 2009/128/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Annex II	<u>6</u>	
— The pesticide application equipment must function reliably and be used properly for its intended purpose ensuring that pesticides can be accurately dosed and distributed.	<u>6</u>	
— The equipment must be in such a condition as to be filled and emptied safely, easily and completely and prevent leakage of pesticides.	<u>6</u>	
— It must permit easy and thorough cleaning.	<u>6</u>	
— It must also ensure safe operations, and be controlled and capable of being immediately stopped from the operator's seat.	<u>5.3, 6</u>	
— Where necessary, adjustments must be simple, accurate and	<u>6</u>	

Health and safety and environmental requirements of Directive 2009/128/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
capable of being reproduced.		
1. Power transmission parts	<u>5.3.3</u> , <u>5.3.4</u> , <u>5.3.5</u>	
2. Pump	<u>6</u>	
3. Agitation	<u>6</u>	
4. Spray liquid tank	<u>6</u>	
5. Measuring systems, control and regulation systems	<u>6</u>	
6. Pipes and hoses	<u>5.3.5</u> , <u>6</u>	
7. Filtering	<u>6</u>	
8. Spray boom	<u>5.3.6</u> , <u>5.3.7</u> , <u>6</u>	
9. Nozzles	<u>6</u>	
10. Distribution	<u>6</u>	
11. Blower	<u>5.3.8</u> , <u>6</u>	

**Table ZA.2 — Applicable Standards to confer presumption of conformity as described in this Annex ZA**

Column 1 Reference in <u>Clause 2</u>	Column 2 International Standard Edition	Column 3 Title	Column 4 Corresponding European Standard Edition
ISO 16122-2	ISO 16122-2:2024	Agricultural and forestry machinery – Inspection of sprayers in use – Part 2: Horizontal boom sprayers	EN ISO 16122-2:2025
ISO 16122-3	ISO 16122-3:2024	Agricultural and forestry machinery – Inspection of sprayers in use – Part 3: Sprayers for bush and tree crops	EN ISO 16122-3:2025
ISO 16122-4	ISO 16122-4:2024	Agricultural and forestry machines – Inspection of sprayers in use – Part 4: Fixed and semi-mobile sprayers	EN ISO 16122-4:2025
ISO 16122-5	ISO 16122-5:2021	Agricultural and forestry machines – Inspection of sprayers in use – Part 5: Aerial spray systems	EN ISO 16122-5:2025

**EN ISO 16122-1:2025 (E)**

The documents listed in the Column 1 of Table [ZA.2], in whole or in part, are normatively referenced in this document, i.e. are indispensable for its application. The achievement of the presumption of conformity is subject to the application of the edition of Standards as listed in Column 4 or, if no European Standard Edition exists, the International Standard Edition given in Column 2 of Table [ZA.2].

**WARNING 1** Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** Other Union legislation may be applicable to the product(s) falling within the scope of this standard.



# International Standard

**ISO 16122-1**

## **Agricultural and forestry machinery — Inspection of sprayers in use —**

### **Part 1: General**

*Matériel agricole et forestier — Contrôle des pulvérisateurs en service —*

*Partie 1: Généralités*

**Second edition  
2024-12**

**Corrected version  
2025-05**

## ISO 16122-1:2024(en)



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Published in Switzerland

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**ISO 16122-1:2024(en)****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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at [www.iso.org/patents](http://www.iso.org/patents). ISO shall not be held responsible for identifying any or all such patent rights.

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 6, *Equipment for crop protection*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 144, *Tractors and machinery for agriculture and forestry*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 16122-1:2015), which has been technically revised.

The main changes are as follows:

- removed errors and resolved contradictions to the ISO 16119 series which specifies environmental requirements for new sprayers;
- updated the normative references;
- modified pre-inspection in [5.3](#);
- modified inspection clause;
- modified the test report.

A list of all parts in the ISO 16122 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

This corrected version of ISO 16122-1:2024 incorporates the following corrections:

- in [Clause 2](#), normative references to ISO 16122-2:2024, ISO 16122-3:2024, ISO 16122-4:2024 and ISO 16122-5:2020 have been reinstated;
- in [Clauses 4](#), [6](#) and [7](#), references to the ISO 16122 series have been replaced with references to ISO 16122-2:2024, ISO 16122-3:2024, ISO 16122-4:2024 and ISO 16122-5:2020.

**ISO 16122-1:2024(en)****Introduction**

There are two main reasons for the inspection of sprayers:

- reducing the potential risk of environmental contamination by plant protection products;
- good control of the pest with the minimum possible input of plant protection product.

In order to use plant protection products in agricultural production safely, it is necessary to define the requirements and test methods for sprayers in use. This is a relevant step after having standardized minimum requirements for new sprayers, in respect of safety hazards (see ISO 4254-6) and potential risks of environmental contamination (see ISO 16119 series).

Standardising the requirements and methods for inspection of sprayers in use takes into consideration not only the original performance of the sprayer but also its use, care, and maintenance. This is a logical link to ensure the continued benefit arising from the supply of new sprayers of good quality.

The inspection of sprayers in use can be a mandatory requirement or adopted on a voluntary basis. In both cases, further requirements outside the scope of this document are necessary for the management of inspections. These include, for example, requirements for the competence of persons carrying out inspections and the frequency of inspections.

NOTE National or local regulations concerning the qualifications and competence of inspectors can apply.

# Agricultural and forestry machinery — Inspection of sprayers in use —

## Part 1: General

### 1 Scope

This document defines the general requirements to be fulfilled for the inspection of all types of sprayers for plant protection products used in agriculture, horticulture, forestry and other areas, except knapsack sprayers.

NOTE For knapsack sprayers, see ISO/FDIS 19932-3:—.

The specific requirements for the different types of sprayers are defined in the relevant specific parts of the ISO 16122 series. When used in conjunction with the relevant sprayer specific part (see [Annex A](#)), this document specifies the requirements and test methods for the inspection of sprayers in use.

The requirements relate mainly to the condition of the sprayer with respect to potential risks for the environment and its performance to achieve a good application.

This document also includes minimum requirements for the preparation of the sprayer for the inspection and the minimum safety requirements with respect to the safety of the inspector (test operator) during the inspection.

### 2 Normative references

The following document is 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.

ISO 5681:2020, *Equipment for crop protection — Vocabulary*

ISO 16122-2:2024, *Agricultural and forestry machinery — Inspection of sprayers in use — Part 2: Horizontal boom sprayers*

ISO 16122-3:2024, *Agricultural and forestry machinery — Inspection of sprayers in use — Part 3: Sprayers for bush and tree crops*

ISO 16122-4:2024, *Agricultural and forestry machinery — Inspection of sprayers in use — Part 4: Fixed and semi-mobile sprayers*

ISO 16122-5:2020, *Agricultural and forestry machines — Inspection of sprayers in use — Part 5: Aerial spray systems*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**