



**SLOVENSKI STANDARD**  
**oSIST prEN ISO 4254-20:2022**

**01-oktober-2022**

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**Kmetijski stroji - Varnost - 20. del: Stroji za obiranje grozdja, oljk in kave (ISO/DIS 4254-20:2022)**

Agricultural machinery - Safety - Part 20: Grape, olives and coffee harvesters (ISO/DIS 4254-20:2022)

Landmaschinen - Sicherheit - Teil 20: Trauben-, Oliven- und Kaffee-Erntemaschinen (ISO/DIS 4254-20:2022)

Matériel agricole - Sécurité - Partie 20: Machines à vendanger, de récolte des olives et du café (ISO/DIS 4254-20:2022)

**Ta slovenski standard je istoveten z: prEN ISO 4254-20**

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**ICS:**

65.060.50 Oprema za spravilo pridelkov Harvesting equipment

**oSIST prEN ISO 4254-20:2022**

**en,fr,de**



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## Agricultural machinery — Safety —

### Part 20: Grape, olives and coffee harvesters

ICS: 65.060.50

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## 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 documents 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)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 7, *Equipment for harvesting and conservation*.

This is the first edition.

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).

## ISO/DIS 4254-20:2022(E)

### European Foreword

NOTE European Foreword is not included in the final ISO publication.

This document (EN ISO 4254-20:YEAR) 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 Date1 and conflicting national standards shall be withdrawn at the latest by Date2.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This is the first edition.

For relationship with EU Directive(s), see informative [Annex ZA](#), which is an integral part of this document.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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## Introduction

This document is a type-C standard as stated in ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (for example trade unions, organizations for people with special needs);
- service providers, for example for maintenance (small, medium and large enterprises);
- consumers (in the case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery and systems concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the Scope of this document. These hazards are specific to combine harvesters, forage harvesters, cotton harvesters and sugar cane harvesters.

Significant hazards that are common to all the agricultural machines (self-propelled ride-on, mounted, semi-mounted and trailed) are dealt with in ISO 4254-1:2013 and ISO 4254-1:2013/AMD1:2021.



# Agricultural machinery — Safety —

## Part 20: Grape, olives and coffee harvesters

### 1 Scope

This document, when used together with ISO 4254-1:2013 and ISO 4254-1:2013/AMD1:2021, specifies the safety requirements and their verification for the design and construction of trailed and self-propelled harvesters for grapes, olives and coffee. It describes methods for the elimination or reduction of hazards arising from the intended use of these machines by one person (the operator) in the course of normal operation and service. In addition, it specifies the type of information on safe working practices to be provided by the manufacturer.

When provisions of this document are different from those which are stated in ISO 4254-1:2013 and ISO 4254-1:2013/AMD1:2021, the provisions of this document take precedence over the provisions of ISO 4254-1:2013 and ISO 4254-1:2013/AMD1:2021 for machines that have been designed and built according to the provisions of this document.

This document, taken together with ISO 4254-1:2013 and ISO 4254-1:2013/AMD1:2021, deals with all the significant hazards, hazardous situations and events relevant to trailed and self-propelled harvesters for grapes, olives and coffee, when they are used as intended and under the conditions of misuse that are reasonably foreseeable by the manufacturer. It is not applicable to hazards arising from the presence of persons other than the operator, hazards related to vibrations and moving parts for power transmission, except for strength requirements for guards and barriers.

This document does not deal with environmental hazards, except noise.

In respect of steering of self-propelled machines, it is applicable only to the ergonomic aspects (for example location of the steering wheel); no other aspects related to steering are covered.

NOTE Specific requirements related to road traffic regulations are not taken into account in this document.

This document is not applicable to machines manufactured before the date of its publication.

### 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.

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 4254-1:2013, *Agricultural machinery — Safety — Part 1: General requirements*

ISO 4254-1:2013/AMD 1:2021, *Agricultural machinery — Safety — Part 1: General requirements — Amendment 1*

ISO 16231-1:2013, *Self-propelled agricultural machinery — Assessment of stability — Part 1: Principles*

ISO 16231-2:2015, *Self-propelled agricultural machinery — Assessment of stability — Part 2: Determination of static stability and test procedures*

ISO 5700:2013, *Tractors for agriculture and forestry — Roll-over protective structures — Static test method and acceptance conditions*

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ISO 3776-1:2006, *Tractors and machinery for agriculture — Seat belts — Part 1: Anchorage location requirements*

ISO 3776-2:2013, *Tractors and machinery for agriculture — Seat belts — Part 2: Anchorage strength requirements*

ISO 3776-3:2009, *Tractors and machinery for agriculture — Seat belts — Part 3: Requirements for assemblies*

ISO 13850:2015, *Safety of machinery — Emergency stop function — Principles for design*

ISO 9533:2010, *Earth-moving machinery — Machine-mounted audible travel alarms and forward horns — Test methods and performance criteria*

ISO 9244:2008, *Earth-moving machinery — Machine safety labels — General principles*

ISO 9244:2008/AMD 1:2016, *Earth-moving machinery — Machine safety labels — General principles — Amendment 1*

ISO 3600:2015, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manuals — Content and format*

ISO 7000:2019, *Graphical symbols for use on equipment — Registered symbols*

**3 Terms and definitions**

For the purposes of this document, the terms and definitions given in ISO 4254-1:2013 and ISO 4254-1:2013/AMD1:2021, ISO 12100:2010 and the following apply.

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

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

**3.1****grape harvester****olive harvester**

mobile harvesting machine for picking up grape berries or olives, separating, cleaning and conveying them into a tank which is part of the harvester, or into an external tank, and depositing harvest residue onto the ground

**3.2****coffee harvester**

mobile harvesting machine for picking up coffee cherries (or drupes), separating, cleaning and conveying them into a tank and depositing harvest residue onto the ground

**3.3****shaker**

device of the harvester which removes the fruits from the tree by contact and vibration on the branches

**3.4****conveyor**

device or combination of devices of the harvester which transfer the harvested product through the sections of the machine until unloading it

**3.5****extractor****blower**

device or combination of devices of the harvester which separate the fruits from leaves and branches