

INTERNATIONAL STANDARD

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Tractors and machinery for agriculture and forestry — Technical means for ensuring safety —

Part 3: Tractors

*Tracteurs et matériels agricoles et forestiers — Dispositifs techniques
permettant d'assurer la sécurité —*

Partie 3: Tracteurs



Reference number
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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.

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.

International Standard ISO 4254-3 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Sub-Committee SC 3, *Safety and comfort of the operator*.

ISO 4254 consists of the following parts, under the general title *Tractors and machinery for agriculture and forestry — Technical means for ensuring safety*:

- *Part 1: General*
- *Part 2: Anhydrous ammonia applicators*
- *Part 3: Tractors*
- *Part 4: Forestry winches*
- *Part 5: Power-driven soil-working equipment*
- *Part 6: Equipment for crop protection*
- *Part 7: Combine harvesters, forage and cotton harvesters*
- *Part 9: Equipment for sowing, planting and distributing fertilizers*

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Tractors and machinery for agriculture and forestry — Technical means for ensuring safety —

Part 3: Tractors

1 Scope

This part of ISO 4254 provides guidelines regarding the prevention of accidents arising from the use of tractors and indicates appropriate parameters to be met when designing tractors.

It also specifies technical means of improving the degree of personal safety of operators and others involved in the course of normal running, maintenance and use of agricultural tractors. These are additional to the requirements of ISO 4254-1 to which reference should also be made.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 4254. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 4254 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 730-1:1990, *Agricultural wheeled tractors — Rear-mounted three-point linkage — Part 1: Categories 1, 2 and 3*.

ISO 3600:1981, *Tractors and machinery for agriculture and forestry — Operator manuals and technical publications — Presentation*.

ISO 4252:1983, *Agricultural tractors — Access, exit and the operator's workplace — Dimensions*.

ISO 4254-1:1989, *Tractors and machinery for agriculture and forestry — Technical means for ensuring safety — Part 1: General*.

ISO 5353:1978, *Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point*.

ISO 8759-2:1985, *Agricultural wheeled tractors — Front-mounted linkage and power take-off — Part 2: Front linkage*.

3 Requirements

3.1 Three-point linkages

The hazards of coupling implements with three-point linkages can be reduced by the use of semi-automatic implement couplers (quick-coupling devices).

3.1.1 Three-point linkage at rear

3.1.1.1 Forward of a plane passing through the median plane of the pivot points of the lifting rods in a three-point coupling system, a minimum safety margin of 25 mm shall be maintained between the moving parts at each point of the lifting device's travel. This does not however apply for the extreme upper and lower range of travel $0,1n$ which are defined in a) below and illustrated in figure 1. A minimum clearance of 25 mm or a minimum angle of 30° shall be maintained between parts in shear where the angle can change (see figure 2).

a) For the total movement range, n , the lower position A of the lower hitch point is limited by the dimension in definition 3.2.14 and [14] in figure 2 of ISO 730-1:1990, while the upper pos-