ANSI/ASABE AD26322-1:2008 NOV2016ED
Tractors for agriculture and forestry — Safety — Part 1: Standard tractors



American Society of
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Tractors for agriculture and forestry — Safety — Part 1: Standard tractors

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This standard was reviewed for adoption by the ASABE Power and Machinery Agricultural Machinery – Agricultural Tractor Technical subcommittee, and has been formerly approved by the Power and Machinery Division. Adopted by ASABE and approved as an American National Standard June 2012; revised November 2016; editorial revision February 2017.

Keywords: Clearance, Controls, Guarding, Hazard, Ladders, Noise, Operator's manual, Operator's workplace, Safety, Seat, Steps, Tractors

0 Foreword

0.1 ANSI/ASABE AD26322-1:2008 NOV2016, Tractors for agricultural and forestry – Safety – Part 1: Standard tractors, is an adoption with deviations of the identically titled ISO standard ISO 26322-1:2008, Tractors for agricultural and forestry – Safety – Part 1: Standard tractors. Deviations noted in the following Foreword sections pertain to those provisions where harmonization could not be achieved between ASABE and the International Standard.

Deviations from the subsequently printed international standard are noted with underscore (addition) or strikethrough (deletions) text. Deviations from the international standard figures and equations are clearly marked.

0.2 ANSI/ASABE AD26322-1:2008 NOV2016 specifies general safety requirements and their verification for the design and construction of standard tractors used in agriculture and forestry. These tractors have at least two axles for pneumatic-tyred wheels, with the smallest track gauge of the rear axle exceeding 1 150 mm, or tracks instead of wheels, with their unballasted tractor mass being greater than 600 kg.

NOTE: Tractors having an unballasted mass not greater than 600 kg and a smallest adjustable track gauge of the axle bearing the larger tyres of ≤1 150 mm are dealt with in ANSI/ASABE AD26322-2:2010.

In addition, ANSI/ASABE AD26322-1:2008 NOV2016 specifies the type of information on safe working practices (including residual risks) to be provided by the manufacturer, as well as technical means for improving the degree of personal safety of the operator and others involved in a tractor's normal operation, maintenance and use.

It is not applicable to vibration or braking.

0.3 Twenty Normative references are listed in ISO 26322-1:2008. The responsible ASABE committee has reviewed these references and approved the following deviations:

0.3.1 Replace ISO 500-1, Agricultural tractors — Rear-mounted power take-off types 1, 2 and 3 — Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone with ANSI/ASABE AD500-1:2014, Agricultural tractors — Rear-mounted power take-off types 1, 2, 3 and 4 — Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone. Any reference to ISO 500-1 in the printed portion of ISO 26322-1 shall be replaced by ANSI/ASABE AD500-1:2014.

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0.3.2 Replace ISO 3600, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manuals — Content and presentation, with ANSI/ASABE AD3600:2016, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manuals — Content and presentation. Any reference to ISO 3600 in the printed portion of ISO 26322-1 shall be replaced with ANSI/ASABE AD3600:2016.

0.3.3 Replace ISO 8759-1, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off and three-point linkage, with ANSI/ASABE AD8759-1:1998, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off and three-point linkage. Any reference to ISO 8759-1 in the printed portion of ISO 26322-1 shall be replaced with ANSI/ASABE AD8759-1:1998.

0.3.4 Replace ISO 11684, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles, with ANSI/ASABE AD 11684:1995; Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles. Any reference to ISO 11684 in the printed portion of ISO 26322-1 shall be replaced with ANSI/ASABE AD 11684:1995.

0.3.5 Correct ISO/OECD 3776-3, Tractors and machinery for agriculture — Seat belts — Part 3: Requirements for assemblies, to ISO 3776-3, Tractors and machinery for agriculture — Seat belts — Part 3: Requirements for assemblies. Any reference to ISO/OECD 3776-3 in the printed portion of ISO 26322-1 shall be replaced with ISO 3776-3.

0.3.6 Please note that Normative Reference ISO 3776-1, Tractors and machinery for agriculture — Seat belts — Part 1: Anchorage location requirements, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 3776-1:2013 MAY2012.

0.3.7 Please note that Normative Reference ISO 3776-2, Tractors and machinery for agriculture — Seat belts — Part 2: Anchorage strength requirements, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 3776-2:2013 FEB2016.

0.3.8 Please note that Normative Reference ISO 3776-3, Tractors and machinery for agriculture — Seat belts — Part 3: Requirements for assemblies, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 3776-3:2009 OCT2015.

0.3.9 Please note that Normative Reference ISO 4252, Agricultural tractors — Operator's workplace, access and exit — Dimensions, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 4252:2007 MAY2012.

0.3.10 Please note that Normative Reference ISO 15077, Tractors and self-propelled machinery for agriculture — Operator controls — Actuating forces, displacement, location and method of operation, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 15077:2008 OCT2008 (R2013).

0.3.11 Please note that Normative Reference ISO 23205, Agricultural tractors — Instructional seat, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 23205:2014 FEB2016.

0.4 This standard has been approved as an American National standard by ANSI (American National Standards institute).

0.5 This standard deviates from ISO 26322-1:2008 as follows:

0.5.1 See Section 0.3 for Normative reference deviations.

0.5.2 In the first sentence of the Scope, replace "This part of ISO 26322" with "ANSI/ASABE AD26322-1:2008 NOV 2016."

0.5.3 In the Scope note, replace ISO 26322-2 with ANSI/ASABE AD26322-2:2010.

0.5.4 In the third paragraph of the Scope change "this part of ISO 26322" with "ANSI/ASABE AD26322-1:2008 NOV2016."

0.5.5 In 4.1.2 change "this part of ISO 26322" with "ANSI/ASABE AD26322-1:2008 NOV2016."

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0.5.6 In Bibliography, replace ISO 26322-2, with ANSI/ASABE AD26322-2:2010.

Text of ISO 26322-1:2008, Tractors for agricultural and forestry — Safety — Part 1: Standard tractors, with deviations noted, follows.

1 Scope

~~This part of ISO 26322~~ ANSI/ASABE AD26322-1:2008 NOV2016 specifies general safety requirements and their verification for the design and construction of standard tractors used in agriculture and forestry. These tractors have at least two axles for pneumatic-tyred wheels, with the smallest track gauge of the rear axle exceeding 1 150 mm, or tracks instead of wheels, with their unballasted tractor mass being greater than 600 kg.

NOTE: Tractors having an unballasted mass not greater than 600 kg and a smallest adjustable track gauge of the axle bearing the larger tyres of ≤1 150 mm are dealt with in ~~ISO 26322-2~~ ANSI/ASABE AD26322-2:2010.

In addition, ~~this part of ISO 26322~~ ANSI/ASABE AD26322-1:2008 NOV2016 specifies the type of information on safe working practices (including residual risks) to be provided by the manufacturer, as well as technical means for improving the degree of personal safety of the operator and others involved in a tractor's normal operation, maintenance and use.

It is not applicable to vibration or braking.

2 Normative references

The following referenced documents are indispensable for the application 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 500-1, Agricultural tractors — Rear-mounted power take-off types 1, 2 and 3 — Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone~~

ANSI/ASABE AD500-1:2014, Agricultural tractors — Rear-mounted power take-off types 1, 2, 3 and 4 — Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone

ISO 3463, Tractors for agriculture and forestry — Roll-over protective structures (ROPS) — Dynamic test method and acceptance conditions

~~ISO 3600, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manuals — Content and presentation~~

ANSI/ASABE AD3600:2016, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manuals — Content and presentation

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

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

~~ISO/OECD 3776-3, Tractors and machinery for agriculture — Seat belts — Part 3: Requirements for assemblies~~ [1)]

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

ISO 3795, Road vehicles, and tractors and machinery for agriculture and forestry — Determination of burning behaviour of interior materials

~~1) To be published.~~

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ISO 4252, Agricultural tractors — Operator's workplace, access and exit — Dimensions

ISO 4413:1998, Hydraulic fluid power — General rules relating to systems [2)]

ISO 5131:1996, Acoustics — Tractors and machinery for agriculture and forestry — Measurement of noise at the operator's position — Survey method

ISO 5700, Tractors for agriculture and forestry — Roll-over protective structures (ROPS) — Static test method and acceptance conditions

ISO 7216, Acoustics — Agricultural and forestry wheeled tractors and self-propelled machines — Measurement of noise emitted when in motion

~~ISO 8759-1, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off and three-point linkage~~

ANSI/ASABE AD8759-1:1998, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off and three-point linkage

ISO 10998, Agricultural tractors — Requirements for steering

~~ISO 11684, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles~~

ANSI/ASABE AD11684:1995; Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles

ISO 12100-1:2003, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology

ISO 13854:1996, Safety of machinery — Minimum gaps to avoid crushing of parts of the human body

ISO 13857:2008, Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs

ISO 15077, Tractors and self-propelled machinery for agriculture — Operator controls — Actuating forces, displacement, location and method of operation

ISO 23205, Agricultural tractors — Instructional seat

3 Terms and definitions

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

3.1

normal operation and service

use of the tractor for the purpose intended by the manufacturer by an operator familiar with the tractor characteristics and complying with the information for operation, service and safe practices, as specified by the manufacturer in the operator's manual and by signs on the tractor

3.2

three-point contact support

system which permits a person to simultaneously use two hands and a foot or two feet and one hand when boarding, or dismounting from, a tractor

[2)] Under revision.

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