



ASABE

Engineering a Sustainable Future

ASABE Updates: January 23, 2024

HIGHLIGHTS

BRAKING

- No activity.

TRACTORS AND SELF-PROPELLED EQUIPMENT

- No activity.

FRONT OR TOWED IMPLEMENTS

- ISO/FDIS 5674 Tractors and machinery for agriculture and forestry -- Guards for power take-off (PTO) drive-shafts -- Strength and wear tests and acceptance criteria. FDIS documents are ready. Waiting for HAS consultant review prior to balloting.
- ISO/FDIS 11471, Ag tractors and machinery -- Coding of remote hydraulic power services and controls. Waiting for HAS consultant review prior to balloting.
- ISO 6489-5 Amd 1, Ag vehicles — Mechanical connections between towed and towing vehicles — Part 5: Specifications for non-swivel clevis couplings. CD approved with comments. Moving to DIS after comments are addressed.

TILLAGE EQUIPMENT

- See other general areas for updates.

FORAGE WAGONS

- ISO/NP 4254-18, Agricultural machinery -- Safety -- Part 18: Forage loader and forage transport wagons. Project was cancelled because it ran out of time. It has been restarted.

ANHYDROUS AMMONIA

- Revision in progress to revise ANSI/ASABE S625.1, Drawbar Pin Dimensions and Requirements for Towing Machine with Clevis, to include 1" pin.

ROTARY MOWERS

- ISO/NWIP 4254-15, Ag machinery – Safety – Part 15: Large flail mowers. Basis for the document is ANSI/ASABE S639.2, Safety Standard for Large Row-Crop Flail Mowers. WG calls continue to explain the need and differences between this proposal and ISO 4254-12.

ROPS

- ISO/CD 5700, Tractors for agriculture and forestry - Roll-over protective structures - Static test method and acceptance conditions. DIS opens 2/9/2024.

STANDARDS ONGOING ACTIVITIES

LIGHTING AND MARKING

- Committee continues to work on revising S279 using ISO 16154 as a guide. This revision will also correct discrepancies between in S279 and S276 concerning SIS (Speed Identification Symbol) use at 40 mph and adding SMV: (Slow Moving Vehicle) emblem which is currently in S276. Technical changes are not expected.
- ISO 20383. Tractors and machinery for ag and forestry — Speed Identification Sign (SIS). CD comment resolutions are complete. Waiting for ISO action. Plans are to have the revision replace the current ISO national adoption.

DRAWBAR JACKS

- X12140-1 Agricultural trailers and trailed equipment — Drawbar jacks — Part 1: Design safety, test methods and acceptance criteria. Ballot for committee approval of an Identical US adoption closes 2/7/24.
- X12140-2 Agricultural trailers and trailed equipment — Drawbar jacks — Part 2: Application safety, test methods and acceptance criteria. Ballot for committee approval of an Identical US adoption closes 2/7/24.

CAB ENCLOSURES

- ISO/PWI 3020 Parts 1-5, Agricultural tractors and self-propelled sprayers -- Protection of the Operator (driver) against hazardous substances. WG 11 meet in Frankfurt on 9/13. Project Lead is Sean Merritts. NWPI will be submitted prior to moving to WD or CD stage to restart the timeline.

SAFETY LABELS

- X11684:2023 Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety labels —General principles. Identical US adoption ballot and the withdrawal of the current AD11684:1995 ballot will commence shortly.

OTHER AREAS OF INTEREST:

- X664, Direct to Consumption Specialty Crop Equipment Sanitary Design Requirements, is in early stage of draft development.
- X665 Crop Protection Equipment – Test methods for the evaluation of targeted spray application systems, is in early stage of draft development

- Three part series Singulating Seeding Equipment Test Methods, ASABE S658-1: Part 1: General Information, ASABE S658-2: Part 2: Monitoring Systems Performance and ASABE S658-3: Part 3: Seed Spacing Performance, have been approved and are in final stage of publication.

OTHER ISO STANDARDS WORK THAT MAY NOT APPLY TO FEMA MEMBERS

ISO TC 23/SC 2, Ag machinery – Common tests

- ISO/FDIS 14982 Electromagnetic compatibility Part 1: General EMC requirements and Part 2: EMC requirements for functional safety.). FDIS documents are ready. Waiting for HAS consultant review prior to balloting.

ISO/TC 23/SC 3, Safety

- ISO/DIS 3991 Agricultural machinery — Robotic feed systems — Safety. DIS ballot closed on 3/28/23, approved for FDIS.
- ISO/DIS 4254-19 Agricultural machinery -- Safety -- Part 19: Feed mixing machines. Second DIS ballot closed 8/11/23.

ISO TC 23/SC 4, Tractors

- ISO/CD 22471:2020 AMD 1, Permissible mechanical connection combinations between towed and towing vehicles. CD approved. Moving to DIS ballot.
- ISO/CD 20019, Ag vehicles – Mechanical connections on towed vehicles – Dimensions for hitch rings. CD approved. Moving to DIS ballot.

ISO TC 23/SC 6, Equipment for Crop Protection

- ISO/FDIS 16119-5 Agricultural and forestry machinery – Environmental requirements for sprayers – Part 5: Aerial spray, Published
- ISO/DIS 16122-P1-4, Agricultural and forestry machinery – Inspection of sprayers, US Approved all parts, in comment resolution.
- ISO/DIS 19932 P1-2, Equipment for crop protections- Knapsack sprayers, US Approved all parts, in comment resolution and HAS consultation.
- ISO/CD 22368-1, Crop protection equipment – Test methods for the evaluation of cleaning systems – Part 1: Internal cleaning of complete sprayers, US voted Approve, in comment resolution.
- ISO/DIS 23117-2, Agricultural and forestry machinery - Unmanned aerial spraying systems - Part 2: Test methods to assess the horizontal transverse spray deposition, US Approved with comments, Approved Internationally, in comment resolution.

ISO TC 23/SC 7, Equipment for harvesting and conservation

- ISO/DIS AMD 1 4254-7, Agricultural machinery -- Safety -- Part 7: Combine harvesters, forage harvesters, cotton harvesters and sugar cane harvesters. FDIS ballot coming.
- ISO/DIS 4254-20, Agricultural machinery - Safety - Part 20: Grape, olives and coffee harvesters. FDIS ballot will be after HAS consultant review.

ISO TC 23/SC 14, Operator controls, operator symbols and other displays, operator manuals

- ISO 3600:2022 Tractors, machinery for agriculture and forestry, powered lawn and garden equipment -- Operator's manuals -- Content and format. Published.
- ISO 11684:2023 Tractors, machinery for agriculture, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles. Published.
- ISO/CIB 3767-5 Tractors, machinery for agriculture and forestry, powered lawn and garden equipment -- Symbols for operator controls and other displays -- Part 5: Symbols for manual portable forestry machines. Current ballot is for cancelling the revision of ISO 3767-5, and to confirm the current 2016 edition of ISO 3767-5. Rationale: The revision project is virtually identical to the current 2016 publication. It would be best to restart the revision at a later date, and work on the symbols in the early phase of a future revision to avoid delays in the project's development. ISO ballot closed on 3/21/2023, US Approved.

ISO TC 23/SC 19, Agricultural electronics

- ISO/FDIS 18497-1 Agricultural machinery and tractors – Safety of partially automated, semi-autonomous and autonomous machinery -Part 1: Machine design principles and vocabulary. US and ISO approved. Processing for Publication
- ISO/FDIS 18497-2 Agricultural machinery and tractors – Safety of partially automated, semi-autonomous and autonomous machinery -Part 2: Design principles for obstacle protection systems. US and ISO approved. Processing for Publication
- ISO/FDIS 18497-3, Agricultural machinery and tractors - Safety of partially automated, semi-autonomous and autonomous machinery - Part 3: Design principles for autonomous operating zones. US and ISO approved. Processing for Publication
- ISO/FDIS 18497-4, Agricultural machinery and tractors - Safety of partially automated, semi-autonomous and autonomous machinery - Part 4: Verification methods and principles. US and ISO approved. Processing for Publication
- ISO/DIS 23285, Agricultural machinery, tractors, and earthmoving machinery – Safety of electrical and electronic components and systems operating at 32 to 75 VCC and 21 to 50 VAC. US approved, in comment resolution. Being prepped for ballot.
- ISO 22316 parts 6: Tractors and machinery for agriculture and forestry — Electrical high-power interface 700 V DC / 480 V AC; Published
- ISO/AWI 24882 Agricultural Machinery and Tractors – Cybersecurity engineering; new project registered