ASABE/ISO 8210:2021 SEP2022
Equipment for harvesting — Combine harvesters — Test procedure and performance assessment

American Society of Agricultural and Biological Engineers

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ASABE/ISO 8210:2021 SEP2022
Approved as an American National Standard September 2022

Equipment for harvesting — Combine harvesters — Test procedure and performance assessment

This standard was reviewed and approved for adoption (ISO 8210:2021) by the ASABE Machinery System Harvest and Grain Harvesting subcommittees. Approved as an ASABE standard and approved by ANSI September 2022.

History of ANSI/ASAE S396.3 JUN2016 (R2020), Combine Capacity and Performance Test Procedure: Developed by the ASAE Grain Harvesting Committee; approved by the Power and Machinery Division Standards Committee; adopted by ASAE as a Tentative Standard March 1979; reaffirmed December 1979; reclassified as a full Standard February 1981; reaffirmed December 1985; revised March 1988; approved as an American National Standard August 1988; revised January 1991; reaffirmed December 1994, December 1995, December 1996, March 1998, December 2001, March 2004, February 2009, January 2014, revised June 2016; reaffirmed December 2020.. Replaced with identical adoption of ISO 8210:2021 September 2022.

Keywords: Capacity, Combine, Crop, Harvester, Harvesting. Loss levels, Performance testing, Residue, Test procedure

0 Foreword

0.1 ASABE/ISO 8210:2021 SEP2022, Equipment for harvesting — Combine harvesters — Test procedure and performance assessment, is an adoption without modification of the identically titled ISO standard ISO 8210:2021, Equipment for harvesting — Combine harvesters — Test procedure and performance assessment.

0.2 ASABE/ISO 8210:2021 SEP2022 specifies a test procedure for the measurement and testing of combine harvesters. It applies to either self-propelled or trailed type, either directly cutting the crop or picking it up from a windrow, for use in several crops.

This document specifies the terminology and methods to be used for measuring important characteristics of combine harvesters. It includes both functional and capacity tests, in other words, those conducted over an extended period when ease of operation, ease of adjustment, rate of work and general operating characteristics can be assessed, and those carried out on specific occasions for the determination of grain loss and capacity characteristics.

It applies to all types of combine harvesters.

0.3 Eight normative references are listed in ISO 8210:2021. These references have been reviewed and accepted as part of the adoption of ISO 8210:2021, Equipment for harvesting — Combine harvesters and functional components — Vocabulary.

0.3.1 Please note that Normative Reference ISO 5687, Equipment for harvesting — Combine harvesters — Determination and designation of grain tank capacity and unloading device performance, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 5687:2018.

0.3.2 Please note that Normative Reference ISO 6689, Equipment for harvesting — Combine harvesters and functional components — Vocabulary, has been identically adopted by ASABE. ASABE adoption number is ASABE/ISO 6689:2021.

0.4 This standard has been approved as an American National standard by ANSI (American National Standard Institute). The original content of ISO 8210 was not based on ASABE content or developed material. Royalty payments to ANSI are due upon all sales.

Text of ISO 8210:2021, Equipment for harvesting — Combine harvesters — Test procedure and performance assessment, follows.

1 Scope

This document specifies a test procedure for the measurement and testing of combine harvesters. It applies to either self-propelled or trailed type, either directly cutting the crop or picking it up from a windrow, for use in several crops.

This document specifies the terminology and methods to be used for measuring important characteristics of combine harvesters. It includes both functional and capacity tests, in other words, those conducted over an extended period when ease of operation, ease of adjustment, rate of work and general operating characteristics can be assessed, and those carried out on specific occasions for the determination of grain loss and capacity characteristics.

It applies to all types of combine harvesters.

2 Normative references

The following documents are referred 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 789-3, Agricultural tractors — Test procedures — Part 3: Turning and clearance diameters

ISO 4254-7, Agricultural machinery — Safety — Part 7: Combine harvesters, forage harvesters, cotton harvesters and sugar cane harvesters

ISO 5007, Agricultural wheeled tractors — Operator's seat — Laboratory measurement of transmitted vibration

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

ISO 5687, Equipment for harvesting — Combine harvesters — Determination and designation of grain tank capacity and unloading device performance

ISO 5702, Equipment for harvesting — Combine harvester component parts — Equivalent terms

ISO 6689, Equipment for harvesting — Combine harvesters and functional components — Vocabulary

ISO 14396, Reciprocating internal combustion engines — Determination and method for the measurement of engine power — Additional requirements for exhaust emission tests in accordance with ISO 8178