

ASAE S495.1 NOV2005 (R2015)
Uniform Terminology for Agricultural Machinery Management



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Developed by the ASAE Farm Machinery Management Committee; approved by the Power and Machinery Division Standards Committee; adopted by ASAE June 1969 as ASAE S322; reaffirmed December 1974, December 1979; revised December 1983; reaffirmed December 1988; revised March 1990 and redesignated ASAE S495; reaffirmed December 1994, December 1999, January 2001, December 2001, February 2003; revised November 2005; reaffirmed January 2011, December 2015.

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1 Purpose and Scope

1.1 This Standard is intended to establish uniform use of machinery management terms.

2 Terms used Primarily for System Analysis

2.1 efficiency

2.1.1 **field:** [E] Ratio of effective field capacity to theoretical field capacity, expressed as decimal value

2.1.2 **functional:** Ratio of the actual effectiveness of a machine to its theoretical effectiveness, expressed in percent. Threshing efficiency of a combine is an example of a functional efficiency

2.2 field capacity

2.2.1 **effective:** Actual rate of land or crop processed in a given time

2.2.2 **theoretical:** Rate of performance obtained if a machine performs its function 100% of the time at a given operating speed using 100% of its theoretical width

2.3 **field speed:** Average rate of machine travel in the field during an uninterrupted period of functional activity. For example, functional activity would be interrupted when the implement is raised out of the soil.

2.4 **field time:** The time a machine spends in the field measured from the start of functional activity to the time the functional activity for the field is completed

2.5 **life of machine, economic [L]:** The useful service life of a machine before it becomes unprofitable for its original purpose due to obsolescence or wear

2.6 **load factor, field:** The ratio of engine power used in performing an operation to engine power available

2.7 management phases

2.7.1 **planning:** Defining an objective for the system, selecting system components and predicting the expected performance of the system

2.7.2 **scheduling:** Determining the time when the various operations are to be performed. Availability of time, labor supply, job priorities, and crop requirements are some important factors