

**ASAE EP496.3 FEB2006 (R2015) Cor.1**  
**Agricultural Machinery Management**



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## ASAE EP496.3 FEB2006 (R2015) Cor.1

# Agricultural Machinery Management

*Proposed by the ASAE Farm Machinery Management Committee; approved by the Power and Machinery Division Standards Committee; adopted by ASAE December 1977 as EP391; revised editorially September 1979; reaffirmed December 1982; revised December 1983; reaffirmed December 1988; revised March 1990 and re-designated EP496; revised March 1993, March 1994; reaffirmed December 1998; revised editorially March 1999; reaffirmed December 1999, January 2001, December 2001, February 2003; revised February 2006; reaffirmed January 2011, December 2015; Corrigenda 1 approved April 2017.*

**Keywords:** Cost, Energy, Management, Power, Reliability, Tractor

## 1 Purpose and Scope

**1.1 Purpose.** This Engineering Practice is intended to provide those who manage agricultural machinery operations with assistance in using available data to determine optimum practices. It is intended that corresponding clauses in ASAE D497 be used in clauses 3, 4, 5, 6, 7, and 8 of this Engineering Practice. Terms used in this Engineering Practice are defined in ASAE S495.

**1.2 Scope.** This Engineering Practice includes information helpful in making management decisions involving machine power requirements, capacities, cost, selection, and replacement.

## 2 Normative References

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

**2.1** ANSI/ASAE S296.5, *General Terminology for Traction of Agricultural Traction and Transport Devices and Vehicles*

**2.2** ASAE S495.1 *Uniform Terminology for Agricultural Machinery Management*

**2.3** ASAE D497.5, *Agricultural Machinery Management Data*

## 3 Tractor Performance

**3.1** Tractors use internal combustion engines to power farm machines. Power losses are experienced in exerting power through the drive wheels, the PTO shaft, and the hydraulic system. Figure 1 illustrates the maximum mechanical power performance expected from a two-wheel, rear axle drive tractor with rubber tires on a level concrete surface.