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Terminology and Definitions for Planters, Drills and Seeders

Proposed by the Cultural Practices Equipment technical committee; approved by the Power and Machinery Division October 2010; reaffirmed December 2014.

Keywords: Definition, Drill, Planter, Seeder, Terminology

1 Purpose and Scope

1.1 The purpose of the Standard is to provide uniform terminology and definitions for planters, drills and seeders.

1.2 Dimensions, spacings, depths of operations, widths or velocities may be used as a part of the implement specifications. These should not be considered as performance specifications for any type of design or publication.

1.3 This Standard is limited to those machines and machine components used for the establishment of field crops.

1.4 This Standard is intended to be consistent with terminology in other ASABE standards including ASABE Standard S414.1, Terminology and Definitions for Agricultural Tillage Implements, ASABE Engineering Practice EP291, Terminology and Definitions for Soil Tillage and Soil-Tool Relationships, and ASABE Standard S477, Terminology for Soil-Engaging Components for Conservation — Tillage Planters, Drills and Seeders.

2 Definitions

2.1 Planters, drills, and seeders: There are three basic categories of machines for placing seed into the soil; planters, drills, and seeders (ASABE Standard S477). Within each of these basic categories there are two sub-categories: 1) those which utilize mechanical (non-pneumatic) metering systems and 2) those which utilize air pressure differentials to singulate and /or convey seed.

2.1.1 Planters: Machines with multiple row-seeding units that are individually suspended from a main frame. Planters utilize singulating seed metering devices and disc-type, hoe-type or runner-type ground openers to place the seed in rows. Seeding depth is typically set by depth-controlling components on each row unit.

2.1.1.1 Singulating Seed Meter: A device for metering individual seeds from a seed hopper and sequentially delivering them to a seed delivery tube.

2.1.1.2 Row unit: The row unit is typically a combination of ground engaging tool and depth control components for each seed row, and typically has a singulating seed meter for each row unit (Figure 1).

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