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Procedure for Calibrating Granular Applicators



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Keywords: Applicators, Calibrating, Granular, Safety, Safety signs, Spreaders

1 Purpose and Scope

1.1 This Engineering Practice is intended as a guide for those who calibrate granular applicators, prepare calibration instructions for equipment and granular products, or prepare calibration training programs. The purpose is to encourage practices that will improve uniformity and accuracy of application with granular applicators.

1.2 This Engineering Practice pertains to the calibration of gravity flow and positive displacement granular applicators that are generally used for directed and banded application to row crops. Refer to ASAE S341 when calibrating broadcast spreaders.

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.

ASAE S281.3 DEC98, *Capacity Designation for Fertilizer and Pesticide Hoppers and Containers*

ASAE S327.2 JAN01, *Terminology and Definitions for Agricultural Chemical Application*

ASAE S341.3 FEB99, *Procedure for Measuring Distribution Uniformity and Calibrating Granular Broadcast Spreaders*

ASAE EP363.1 DEC97, *Technical Publications for Agricultural Equipment*

3 General

3.1 Terminology. Refer to ASAE S327 for definitions of the following key words: application rate, agitator, adjustable orifice, banded application, directed application, drop tube, granule flow rate, granular applicator, gravity flow, positive displacement, rotor.

3.2 Safety. Calibration instructions shall be prepared in accordance with all applicable sections of ASAE EP363, especially the guidelines relative to safety information. The safety information should include, but not necessarily be limited to, the following: