
International Standard



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Sowing equipment — Test methods — Part 1: Single seed drills (precision drills)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

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It has been approved by the member bodies of the following countries:

Australia	France	Romania
Austria	Germany, F.R.	South Africa, Rep. of
Belgium	India	Spain
Brazil	Iran	Sweden
Bulgaria	Iraq	Switzerland
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China	Korea, Dem. P. Rep. of	USA
Denmark	New Zealand	USSR
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The member bodies of the following countries expressed disapproval of the document on technical grounds:

Czechoslovakia
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0 Introduction

The aim of this part of ISO 7256 is to make available to test offices and other interested organizations a standardized test method permitting reproducibility of tests when they are carried out in geographically remote areas and/or in different climatic conditions; the main objective being comparability for any one model of equipment.

This condition of reproducibility limits the number of mandatory tests which can be used and eliminates mandatory tests in the field. However, these tests may be carried out optionally at the instigation of the test office or at the request of the manufacturer.

1 Scope and field of application

This part of ISO 7256 specifies test methods for single seed drills (precision drills).

2 Reference

ISO 7424, *Agricultural equipment — Matching of wheeled tractors and rear mounted implements — Code numbering system*.

NOTE — A future International Standard will deal with classification and terminology of equipment for sowing and planting.

3 Definitions

For the purpose of this part of ISO 7256 the following definitions apply.

3.1 single seed drills (precision drills): Drills whose metering mechanism distributes seeds singly by means of a burying device at predetermined intervals to form a sowing line.

NOTE — As the great majority of sowing equipment has equidistant spacings, the tests refer only to this type of equipment.

3.2 sowing unit (for seed): Unit generally comprising the metering mechanism and the burying device.

3.3 metering mechanism (for seed): Mechanism which takes seeds from a batch leaving the hopper individually or in groups and deposits them in a line (or row).

3.4 burying device: Device generally comprising a coulter, a device to regulate the ground penetration depth of the coulter and a unit that covers the seed.

3.5 coulter: Device for opening a furrow in the ground in which the seeds leaving the metering mechanism are placed.

3.6 flow rate: Amount of seed distributed, expressed as a number, mass or volume of seed per unit of time.¹⁾

3.7 application rate: Amount of seed distributed, expressed as a number, mass or volume of seed per unit of length or surface.¹⁾

3.8 spacing: The distance between two successive seeds in the row.

theoretical spacing: Spacing set on the control mechanism and stated by the manufacturer.

3.9 miss: For a single seed drill, the absence of a seed where there should be one theoretically. In practice, by analogy with statistical evaluation of results, all spaces larger than 1,5 times the theoretical seed spacing are considered to be misses (see 6.1.1).

3.10 multiples: For a single seed drill, the presence of two seeds or more where there should only be one. In practice, by analogy with statistical evaluation of results, all spacings less than 0,5 times the theoretical seed spacing are considered to be multiples (see 6.1.1).

1) For precision drills, only the number is to be taken into consideration for flow rate and application rate measurements.