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Agricultural irrigation equipment — Sprayers — General requirements and test methods

*Matériel agricole d'irrigation — Diffuseurs — Exigences générales et
méthodes d'essai*



Reference number
ISO 8026:1995(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8026 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 18, *Irrigation and drainage equipment and systems*.

This second edition cancels and replaces the first edition (ISO 8026:1985), of which it constitutes a technical revision.

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Agricultural irrigation equipment — Sprayers — General requirements and test methods

1 Scope

This International Standard specifies the general requirements and test methods for irrigation sprayers.

It applies to sprayers intended for assembly in pipeline networks for irrigation and for operation with irrigation water.

2 Normative references

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

ISO 7-1:1994, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation.*

ISO 2859-1:1989, *Sampling procedures for inspection by attributes — Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection.*

ISO 3951:1989, *Sampling procedures and charts for inspection by variables for percent nonconforming.*

ISO 7749-2:1990, *Irrigation equipment — Rotating sprinklers — Part 2: Uniformity of distribution and test methods.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 irrigation sprayer: Device which sprays water, without rotational movement of the sprayer parts, in the form of fine jets or in a fan shape.

3.2 regulated sprayer; pressure-compensated sprayer: Sprayer with a relatively constant flowrate at varying water pressures at the sprayer inlet within the limits specified by the manufacturer as the regulating range (3.5).

3.3 non-regulated sprayer; non-pressure-compensating sprayer: Sprayer with a variable flowrate at varying water pressures at the sprayer inlet.

3.4 nominal flowrate: Quantity of water discharged by a sprayer with a certain nozzle per unit of time at ambient temperature at the test pressure declared by the manufacturer in the manufacturer's data sheets.

3.5 regulating range: Range of pressure at the inlet of a regulated sprayer within which the sprayer is designed to operate and discharge within 5 % of its nominal flowrate (3.4).

3.6 test pressure, p

(1) 200 kPa at the sprayer inlet.

(2) Any pressure at the sprayer inlet, specifically declared by the manufacturer to be a test pressure.

3.7 minimum effective pressure, $p_{\min}$: Lowest working pressure declared by the manufacturer measured near the base of the sprayer at a point situated about 0,2 m below the main nozzle of the sprayer but with the pressure gauge situated in the same plane as the main nozzle. (See figure 1).