

Irrigation techniques — Reel machine systems —

Part 4: Check list of users requirements

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 14, an inside back cover and a back cover.

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Regnereinzug - Teil 4: Unterlagen des Benutzers

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 334, Irrigation techniques, the Secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2000, and conflicting national standards shall be withdrawn at the latest by February 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Within its programme of work, Technical Committee CEN/TC 334, Irrigation techniques, charged CEN/TC 334/WG 1, Reel Machine Systems, to prepare the following standard:

- EN 12324-4, *Irrigation techniques - Reel machine systems - Part 4: Check list of user requirements.*

The increasing trend of the number of reel machines used by farmers showed the necessity to produce a form to specify and to present the characteristics of these machines

The purpose of this standard is to facilitate the understanding between users and installators while implementing field irrigation systems based on reel machines.

It shows the technical and operational characteristics that the user requests from the irrigation system to be implemented, to facilitate the selection of equipment and the design of the system.

It shows the estimate form of the corresponding system.

The other standards concerning the irrigation techniques are:

- EN 12324-1, *Irrigation techniques - Reel machine systems - Part 1: Size series;*
- EN 12324-2, *Irrigation techniques - Reel machine systems - Part 2: Specifications of polyethylene tubes for reel machines;*
- EN 12324-3, *Irrigation techniques - Reel machine systems - Part 3: Presentation of technical characteristics;*
- prEN ISO 8224-1, *Traveller irrigation machines - Part 1: Laboratory and field test methods.*

1 Scope

This European Standard specifies the standard layouts of documents intended to guide the users while establishing programmes of equipment for field equipment featuring one or more reel machine(s), and while reviewing estimates.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 12324-1, *Irrigation techniques - Reel machine systems - Part 1: Size series.*

EN 12324-2, *Irrigation techniques - Reel machine systems - Part 2: Specifications of polyethylene tubes for reel machines.*

EN 12324-3, *Irrigation techniques – Reel machine systems – Part 3: Presentation of technical characteristics.*

prEN 12734, *Irrigation techniques – Quick coupling pipes for movable irrigation supply.*

3 Terms and definitions

For the purpose of the present European Standard, the terms and definitions of EN 12324-1, EN 12324-2 and prEN ISO 8224-1 and the following terms and definitions apply.

3.1

evapotranspiration

quantity of water transferred from the soil to the atmosphere by evaporation and plant transpiration. It is measured in mm/h or mm/day

3.2

potential evapotranspiration (ET_{Ref} or ET₀)

maximum quantity of water capable of being evaporated in a given climate, by a continuous expanse of grass vegetation covering the whole ground and well supplied with water. It includes **evaporation** from the soil and **transpiration** from the vegetation in a specific region during a 24 hour period, expressed as a depth of water

3.3

maximum evapotranspiration (ET_M)

maximum quantity of water capable of being evapotranspired in a given climate by a given crop well supplied with water

4 Units

In the present standard, units are:

- ha (hectare) for agricultural surface areas;
- mm/cm (mm of water application depth per cm of soil), for available field capacity at different depths in the soil;
- mm for total field capacity of an agricultural soil;
- mm/h for infiltration rate of water into soil;
- m for dimensions of mechanical parts;
- mm for pipe and nozzle diameters;