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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Basic parameters and technical requirements for irrigation
filters**

(English Translation)

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Table of Contents

1 Scope...	5
2 Normative References...	5
3 Terms and Definitions...	5
4 Classification...	8
5 Model...	8
6 Marking...	9
7 Basic Requirements...	10
7.1 Appearance...	10
7.2 Material...	10
7.3 Technology...	10
8 Sampling and Acceptance Rules...	11
8.1 Sampling Method...	11
8.2 Acceptance Rule...	11
9 Test Conditions...	13
10 Test Methods and Technical Requirements...	13
10.1 Screen Filter...	13
10.2 Centrifugal Filter (Hydro-cyclone Sand Separator)...	16
10.3 Sand Media Filter...	16
10.4 Disc Filter...	17
10.5 Self-flushing Property Test for Self Cleaning Filter...	17

Foreword

This standard is prepared according to the provisions specified in "Directives for Standardization - Part 1. Structure and Drafting of Standards" (GB/T 1.1-2009).

This standard was proposed by and is under the jurisdiction of The Ministry of Water Resources of the People's Republic of China.

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INDUSTRY STANDARD

OF THE PEOPLE'S REPUBLIC OF CHINA

Basic Parameters and Technical Requirements for
Irrigation Filters

1 Scope

This standard specifies basic parameters and technical requirements for screen filters, centrifugal filters (hydro-cyclone sand separators), sand media filters and disc filters.

2 Normative References

The following referenced documents are indispensable for the application of this document.

For dated reference, only the edition cited applies. For undated references, the latest edition of

the normative document (including any amendment) applies.

GB 150 "Steel Pressure Vessels"

GB/T 2828 "Sampling Procedures and Tables for Lot-by-lot Inspection by Attributes
(Apply to Inspection of Successive Lots or Batches)"

GB/T 7306.1 Pipe Threads with 55 Degree Thread Angle Where Pressure-tight Joints
Are Made on the Threads - Part 1. Parallel Internal and Taper External Threads (eqv
ISO 7-1. 1994)

GB/T 7306.2 Pipe Threads with 55 Degree Thread Angle Where Pressure-tight Joints
Are Made on the Threads - Part 2. Taper Internal and External Threads (eqv ISO 7-1.
1994)

GB/T 9112~9124 "Steel Pipe Flanges"

GB/T 18690.2 "Agricultural Irrigation Equipment - Filters - Strainer-type Filters"

GB/T 18690.3 "Agricultural Irrigation Equipment - Filters - Automatic Self-cleaning
Strainer-type Filters"

JB/T 2932 "Specification for Water Treatment Equipment"

3 Terms and Definitions

3.1

Filtration

The process to remove impurities possibly blocking the irrigation system from water.

3.2

Filter media

Porous and penetrable substances or materials for intercepting impurities in water.

3.3

Filter element

The assembly installed in the filter and used for intercepting and separating impurities in
water.

3.4

Filter housing

The container for containing filter media or filter element.

3.5

Screen filter

The filter regarding screen as the filter media.

3.6

Hydro-cyclone sand separator centrifugal separation

Also known as hydro-cyclone sand separator, i.e. the filter for separating solid particles from water by way of cyclone.

3.7

Sand media filter

The filter regarding naturally or artificially synthesized sand or gravel as the filter media.

3.8

Disc filter

The filter regarding overlapped plastic sheet with fine groove on the surface as the filter

Flushing control system

The system for controlling filter flushing in accordance with the combination of one or several physical quantities like pressure drop, filtration time and filtration water volume.

3.17

Flushing pressure differential

The artificial pressure differential between upstream and downstream in case of starting filter

flushing cycle.

3.18

Minimum working pressure

The minimum working pressure that can ensure the filter to exert normal function.

3.19

Flushing water volume

The water volume discharged from the filter in one flushing process.