



JX FILTRATION

Product Quality and Reputation are our first principle.

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Company Profile



Multimedia Filter

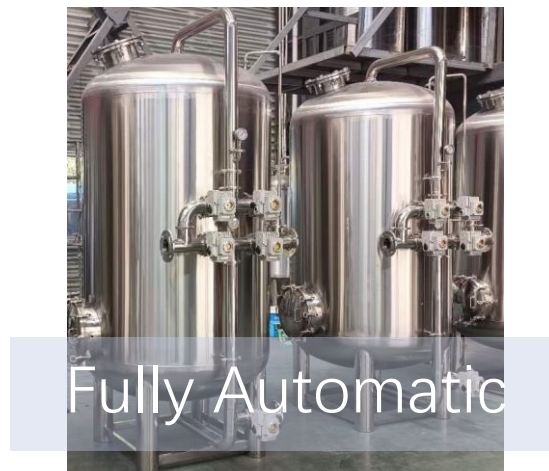
Product Introduction

A multimedia filter is a mechanical filter filled with two or more types of filtration media. Common media used in multimedia filters include anthracite, ceramic particles, quartz sand, activated carbon, manganese sand, coconut shells, and walnut shells. Multimedia filters generally combine two or more types of media with strong contaminant-removal capabilities. This setup allows each medium to function optimally, resulting in low head loss and excellent filtration performance.

In industrial circulating water treatment systems, filters are used to remove impurities and absorb chemical components from wastewater, ensuring the water meets the standards for reuse. The main purpose of filtration is to eliminate suspended or colloidal impurities in the water. It is particularly effective in removing fine particles and bacteria that cannot be removed by sedimentation methods. Filtration also has a certain degree of effectiveness in reducing BOD₅ and COD levels.

JX Filtration control systems start the self-cleaning cycle under the following conditions:

1. Getting a signal from the Pressure Differential Switch
2. The time interval parameter is set at the control system
3. Manual start



Working Principle

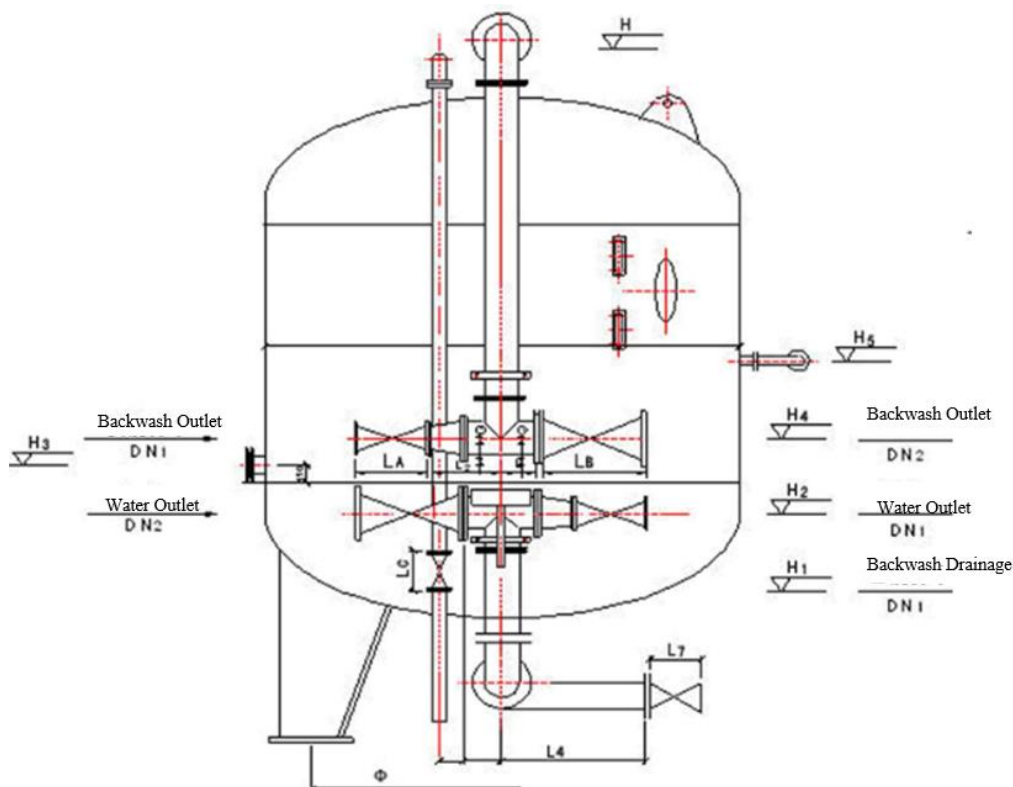
- ◆ The top layer of the filter bed is composed of the lightest and coarsest grade of material, while the heaviest and finest grade is placed at the bottom. As raw water flows downward through the filter media, suspended solids in the water are captured on the surface of the filter layer through adsorption and mechanical blocking. When the water reaches the middle of the filter layer, the sand particles are arranged more densely, providing more opportunities for particles in the water to collide with the sand grains. Consequently, flocculants, suspended solids, and impurities in the water adhere to the sand particles' surfaces, allowing impurities to be trapped within the filter media layer and resulting in clarified water.

◆ Filtration Processing

As water flows into the equipment, larger particles are trapped in the initial stages of the filter, while smaller particles are captured deeper within. This process enables the water quality to meet clarification standards.

◆ Cleaning processing

As the filtration process continues, contaminants accumulate on the surface of the filter layer, leading to an increase in pressure difference across the filter. At this point, a backwash operation is needed. By



reversing the flow of water, the filter layer is flushed clean, restoring its filtration capacity.

Application

- ◆ Pretreatment for systems such as reverse osmosis, electrodialysis, ion exchangers, and ultrafiltration.
- ◆ Preliminary water filtration treatment for power generation, chemical, paper, beverage, and other industries.
- ◆ Decolorization and removal of organic substances from the feed water in chemical plants.
- ◆ Pre-treatment of potable water
- ◆ Industrial water treatment.
- ◆ Swimming pool water treatment.
- ◆ Circulating water side filtration system
- ◆ Turbidity reduction and decolorization of surface water and groundwater.
- ◆ Wastewater treatment

Advantages

- ◆ Core components brands (BERMAD, BACCARA, SIEMEN, MITSUBISHI).
- ◆ A multimedia filter is a commonly used pretreatment device for advanced water purification. Different filter media can be added according to process requirements, allowing it to effectively remove suspended solids, silt, colloids, and other particulate impurities from the water.
- ◆ It is utilizing a stainless steel collector who has a longer life. The water outlet is located at the bottom of the vessel that is convenient for maintenance.

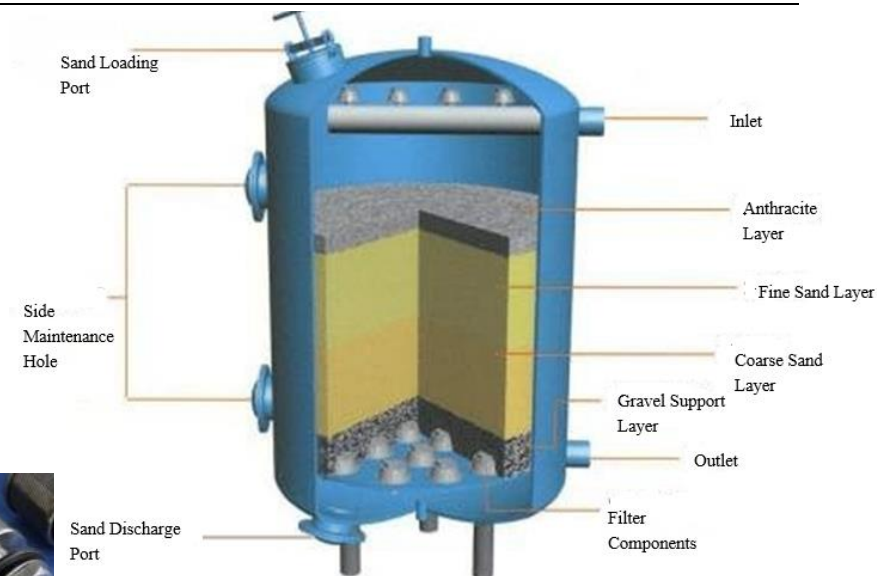
Features

- ◆ High-speed flow and low-pressure loss.
- ◆ Modular and compact design. (The area decreased by more than 40% and piping reduced by at least 50%).
- ◆ Manual, semi-automatic, full-automatic backwash is optional.
- ◆ Backwashing could choose filtering cleaning water or another water source, which is free to switch (when needed)

Structure and Material

Housing	Carbon steel with coating/ stainless steel
corrosion protection	Internal epoxy coating / rubber lining / fiberglass lining
top distribution	basket strainer / baffle / header pipe / distributor plate
bottom distribution	stainless steel claw-type / plate-type strainer

Internal water distributor



Model Selection

Model	Tank Specification (mm)	Maximum capacity (m3/h)	Diameter (mm)	Material
JXDZ-600	ø600*2250*6	3	600	Q235/Stainless Steel
JXDZ-800	ø800*2450*6	5	800	Q235/ Stainless Steel
JXDZ-900	ø900*2550*6	7	900	Q235/ Stainless Steel
JXDZ-1000	ø1000*2550*6	8	1000	Q235/ Stainless Steel
JXDZ-1200	ø1200*2650*8	12	1200	Q235/ Stainless Steel
JXDZ-1500	ø1500*2850*8	18	1500	Q235/ Stainless Steel
JXDZ-1800	ø1800*3050*10	25	1800	Q235/ Stainless Steel
JXDZ-2000	ø2000*3150*10	30	2000	Q235/ Stainless Steel
JXDZ-2200	ø2200*3300*10	40	2200	Q235/ Stainless Steel
JXDZ-2500	ø2500*3400*10	60	2500	Q235/ Stainless Steel
JXDZ-2800	ø2800*3600*10	80	2800	Q235/ Stainless Steel
JXDZ-3000	ø3000*3900*12	100	3000	Q235/ Stainless Steel
JXDZ-3200	ø3200*4500*12	120	3200	Q235/ Stainless Steel
JXDZ-3500	ø3500*4600*12	150	3500	Q235/ Stainless Steel
JXDZ-3750	ø3750*4650*12	180	3750	Q235/ Stainless Steel