

DISTRIBUTOR



Vicargate Limited

www.vicar-gate.com, www.vicargate.net

**12, Eshinlokun Street,
Oriente Industrial Area,
Sango Otta, 112001
Ogun State, Nigeria
West Africa**

**Tel: 234 (0) (802) 303-6858
234 (0) (805) 615-4450
Email: vicargate@yahoo.co.m
vicargate@hotmail.com**

Water Filter Elements and Vessels



Liquid Filter Vessels



High Flow Housings



Membrane Element



Water Filter Cartridges



Brush type self-cleaning filter



Duplex filter



Multi-media filter



Shallow sand filter

Application



- Ultrafiltration system: RO security filtration, seawater desalination pretreatment, reverse osmosis system prefiltration

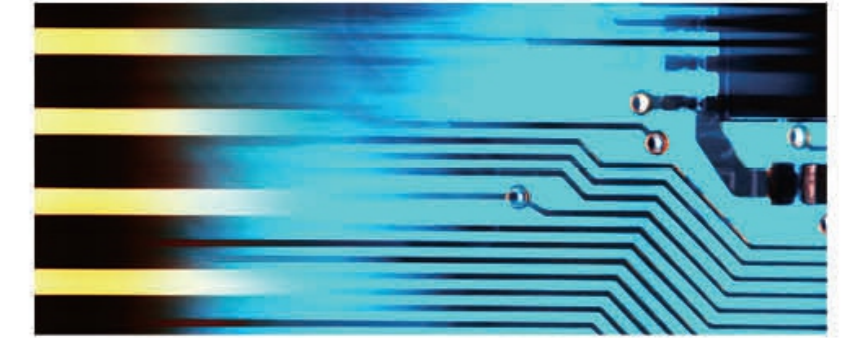


- Chemistry / chemical industry: filtration of various acids, alkalis, solvents, quenched water, brine, etc.

- Petrochemical industry: various solvents, quench water, salt water filtration



- Microelectronics, film, fiber, resin, paint, coating material



- Power Generation : iron removal filtration, power plant condensate filtration, stator cooling water filtration

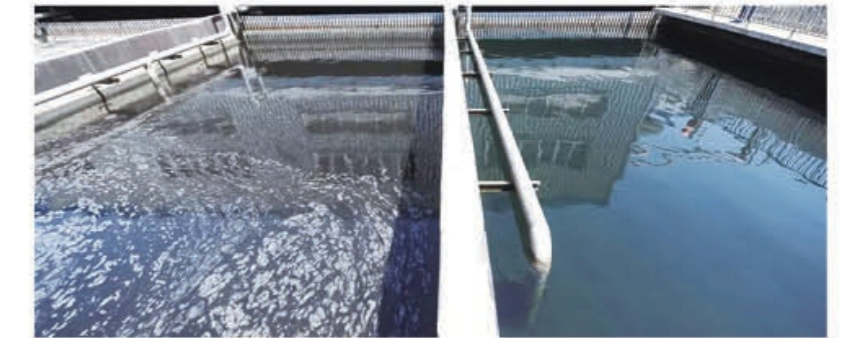


- Filtration of water in the biopharmaceutical industry

- Thermal power plant: Boiler make-up water, condensate polishing treatment



- Advanced treatment of steel mill wastewater, advanced treatment of papermaking wastewater, advanced treatment of printing and dyeing wastewater



- Industry: Filtration of process water, condensate water, cooling water, waste water, etc.



- Reclaimed water plants, municipal water and other places with large filtration flow

PP Melt-blown Filter

Application

- Used in drinking water filtration, RO antiosmosis filtration
- Used in the acid and alkali liquid filtration in industrial chemistry
- The filtration of industrial water and plating solution
- The filtration of imaging solution and ink
- The pre-filtration of sterile water and ultra-pure water
- The filtration of chemical materials and organic solvent

Features

- The surface with deep hole groove structure can scatter the direction of flow and reduce the flow resistance
- Progressive density structure can increase the carrying capacity of the pollutant
- Reinforce the surface fiber structure and reduce the depilation possibility
- Be made of PP superfine fiber which have high filtration precision
- 100% pure PP can ensure high corrosion resistance
- Shape in hot melt way without any chemical adhesive



Technical specifications

Filter Size:

External diameter: 63mm, 110mm

Inner diameter: 28mm, 30mm

Length: 9.75", 9.87", 10", 20", 30", 40", 50", 60"

Material:

Filter material: polypropylene (PP)

End cover: polypropylene

Center pole: polypropylene

Spacer/ seal ring: silicon rubber, Ethylene Propylene Rubber (EPR), nitrile rubber buna (NBR), FPM

Filter element performance:

Filtration accuracy: 1μm, 3μm, 5μm, 10μm, 25μm, 50μm, 75μm, 100μm, 150μm

The highest operating temperature: 80°C

The maximum PSID (Pounds per Square Inch Differential): 2.0Bar, 21°C

String Wound Cartridge Filter

Application

- Pre filtering treatment of drinking water
- Filtration of acid and lye liquid in chemical process
- Filtration of industrial chemicals and organic solvent
- Pre filtering of reverse osmosis in RO
- Filtration of serous fluid such as syrup, chocolate
- Filtration of developing liquid, ink
- Pre filtration of sterile water and ultrapure water
- Treatment of industrial water and plating solution



Features

- Wire-wound filter element is made of textile fiber yarn, which is tightly wrapped on porous skeleton, and its different filtering precision is controlled by the winding density of filtering layer and shapes of filter hole
- It can withstand high filtration pressure
- It has a wide range of chemical compatibility
- A variety of materials can be used to make this filter element in order to adapt to the demand of different liquid filtration
- The structure of filter aperture with deep filtering effect is loose outside and tight inside
- With the small pressure drop and large pollutant-carrying capacity this filter element can effectively remove suspended matters and particles in liquid.

Technical specifications

Filter size:

• Outer diameter: 62 mm, 110 mm

• Inside diameter: 28 mm, 30 mm

• Length: 9.75", 9.87", 10", 20", 30", 40"

Parts material:

• Filter material: polypropylene (PP), absorbent cotton, glass fiber

• Center rod: polypropylene and stainless steel

Filter performance:

• Filtration accuracy: 0.5μm, 1μm, 5μm, 10μm, 20μm, 30μm, 50μm, 75μm, 100μm

• Polypropylene wire-wound filter element can be used in chemical solvents such as acid and alkali, organic solution, and the suggested highest operating temperature is 60°C or less.

• The center rod of absorbent cotton fiber filter is made of stainless steel, and it can be used in organic solution, water, oil, alkaline solution, beverage, and medicine etc.

Condensate filter element in Power Plant

Description

Designed for condensate water, Condensate filter element is a filter element that can flush folded repeatedly.

Using continuous high performance fiber filter, another condensate filter element installed in existing equipment is entwined by the special equipment to prevent deformation and shedding of the fibers. High performance filter element can omit impurities and boot time of the pre-washing.



Application

- RO cartridge filtration and desalination pretreatment
- Condensate water filtration in power plant
- Raw material drug, solvents and water filtration in Biopharmaceutical industry
- Paints, coatings, petrochemical
- Microelectronics, films, fibers, resins

Features

- Intact PP structure
- Wide range of chemical applications
- Folding design increases filtering area
- Twining design increases the capacity of pollutants
- Can be washed repeatedly
- The resin can be used in the surface of the housing before the first usage
- Surface filtering design can ensure the effective removal of particles
- Long filter element 70 "(1778mm) is suit for high flow / high-capacity sewage applications
- Can be directly installed in existing housing, no need to replace or retrofit

Technical Specifications

The size:

Outside diameter: 64mm

Length: 60inch (1524mm) 70inch (1778mm)

The material of parts:

- Filter material: Polypropylene
- Support / diversion layer: polypropylene or stainless steel
- Connection: thread, or -222 fins

The performance:

- Filtering accuracy: 1µm, 5µm, 10µm
- Maximum operating temperature: 82°C
- Maximum PSID (Pounds per Square Inch Differential): 2.8Bar 65°C

Microporous Pleated Cartridge filter

Application

- Pharmaceutical industry: pre filtration of various antibiotic pharmaceutical
- Food and beverage industry: filtration of wine, mineral water and drinking water
- Petroleum industry: pre filtration of oil field water
- Electronic industry: pre filtration of high purity water
- Chemical industry: filtration of all kinds of organic solvents, acid and alkali

Features

- Outstanding chemical compatibility, suitable for filtering the strong acid, alkali and organic solvents
- Membrane is the deep folding filtration, and the folding design increases the filtering area
- Low PSID (Pounds per Square Inch Differential), strong pollutant-carrying capacity, long service life
- A variety of filtering precisions are offered.
- The gradual aperture changes can provide high pollutant-carrying capacity
- Materials meet the FDA's requirements

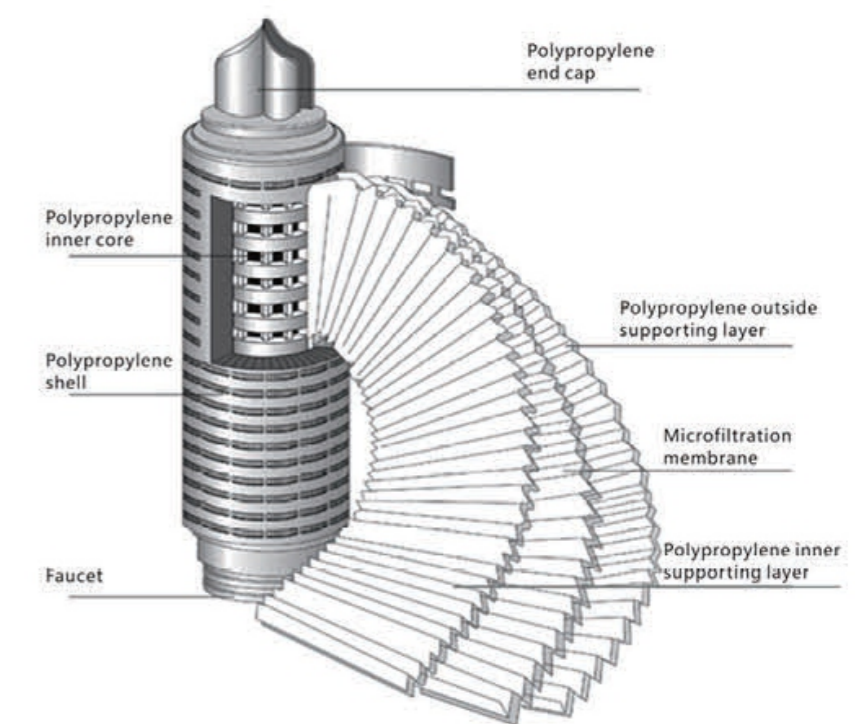
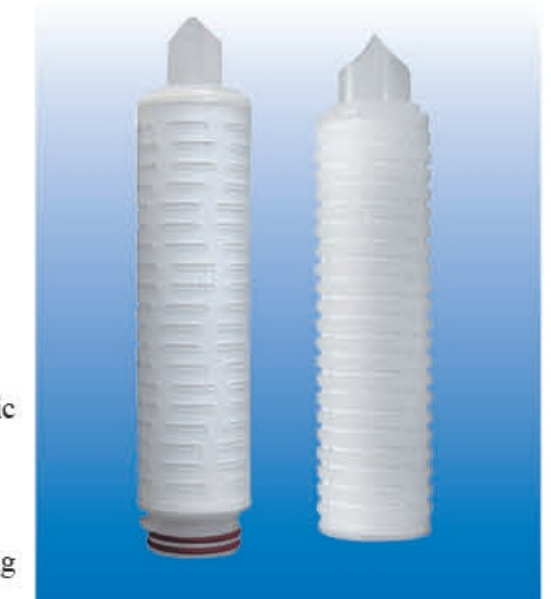
Technical specifications

Filter size:

- Outer diameter: 69 mm
- Length: 9.75 ", 10 ", "20", 30 ", 40"

Parts material:

- Filter material: polypropylene (PP), poly ether sulfone (PES), poly tetra fluoro ethylene (PTFE), Nylon 6 (N6), PVDF membrane
- Sealing ring material: silicon rubber, ethylene-propylene rubber, nitrile rubber, fluorine rubber, Teflon rubber
- filtering accuracy: 0.1µm, 0.22µm, 0.45µm, 1µm and 3µm, 5µm, 10µm, 20µm, 50µm



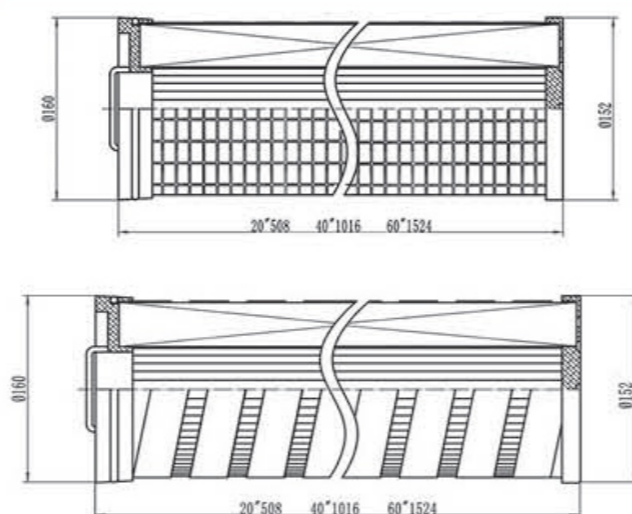
L Series High Flow Cartridges

Applications

- Reverse Osmosis Pre-Filtration
- Power plant cold condensate filtration
- Chemical
- Petrochemicals
- Food & Beverage
- Oil & Gas
- Industrial water treatment

Features and advantages

1. The combination of surface filtration and deep filtration can significantly reduce the number of cartridges and significantly reduce the size of the supporting filter shell compared with ordinary cartridges, to help you reduce the cost.
2. The filter layer is made of high-efficiency and low-resistance material, which can achieve more than 99% of ultra-high filtration efficiency and long the service life of the filter cartridge to help you reduce exchange-out times.
3. The design of convenient handle significantly reduces the time of cartridge replacement and makes cartridge replacement simple and portable.
4. The overall polypropylene design and hot melt welding treatment effectively prevent the end cap from falling off and secondary pollution.
5. The design of sealed interface reduces the risk of bypass flow and ensures the sealing and reliability of filtration.
6. The folded design increases the filtering area and makes the pressure drop significantly lower than that of ordinary cartridge.
7. The design of large diameter increases the dirt holding capacity, prolongs the service life and reduces the production cost



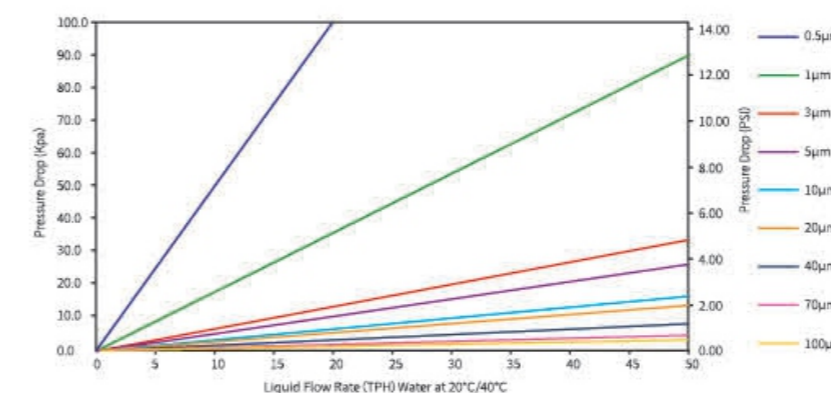
Structural Style

1. External cage
2. Internal and External cage
3. Spiral

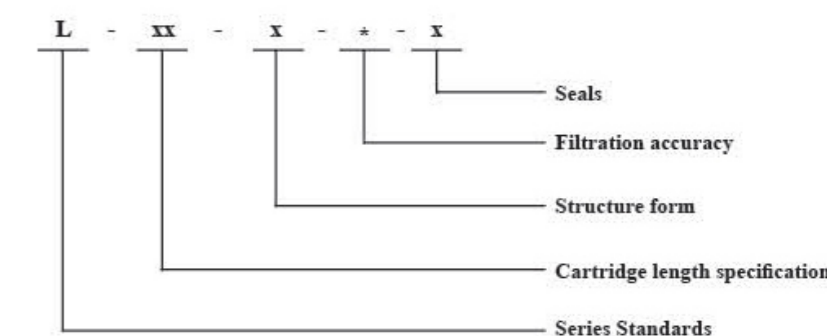
Product structure



Flow curve



Order information of L series high flow water cartridge



Series Standards	Cartridge length (inch)	Structure form	Filtration accuracy	Seals
L-Series	20--20"	N--Inner and outer skeleton	005--0.5µm	S--Silicone Rubber
High flow filter	40--40"	W--Outer skeleton	010--1µm	E--EPDM rubber
	60--60"	R--External winding tape	030--3µm	V--Viton
			050--5µm	B--Nitrile rubber
			100--10µm	
			200--20µm	
			400--40µm	
			700--70µm	
			1000--100µm	

Specification of replacement high-flow water filter

Filter Media	Polypropylene(PP),Glass Fiber
Length	20"(508mm),40"(1016mm),60"(1524mm)
Outside Diameter	6 inch (152mm)
Filtration direction	From inside to outside
Filtration Rating	1µm,2µm, 3µm,5µm,10µm,20µm,40µm,70µm,100µm
Support Core	Polypropylene (PP)
End Cap Material	Glass fiber reinforced Polypropylene (PP)
Outside	Rigid Hard Cage,Belt,Stainless Steel(special)
Seal Material	EPDM,Buna-N, Viton
Maximum Operating Temperature	Pleated glass fiber:121°C Pleated PP: 82°C Melt Blown PP: 65°C
Maximum Differential Pressure	Pleated glass fiber:3.4 Bar at 121°C Pleated PP:3.4Bar at 82°C Melt Blown:1.03Bar at 65°C
Recommended Change out Differential Pressure	2.5Bar at 20°C

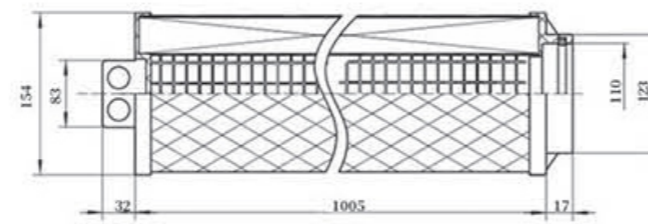
K Series High Flow Cartridges

Applications

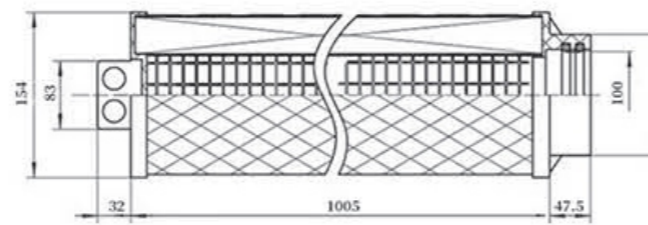
- Reverse Osmosis Pre-Filtration
- Potable Water
- Waste Water
- Lubricating Oil
- Coolants

Benefits:

- High flow capacity means fewer cartridges and reduces labor costs to change
- High flow capacity allows smaller housings and less capital expenditure
- Built in handle makes change fast, easy and safe
- High surface area pleated design provides lower pressure drop and longer service life than other cartridges
- O-ring seal assures filtration integrity
- Choice of polypropylene or cellulose media allows use in both aqueous and non-aqueous fluid applications
- Thermally bonded polypropylene and phenolic resin bonded cellulose filter media prevent particle bleed through and unloading that commonly occurs with wound cartridges



Single O-ring

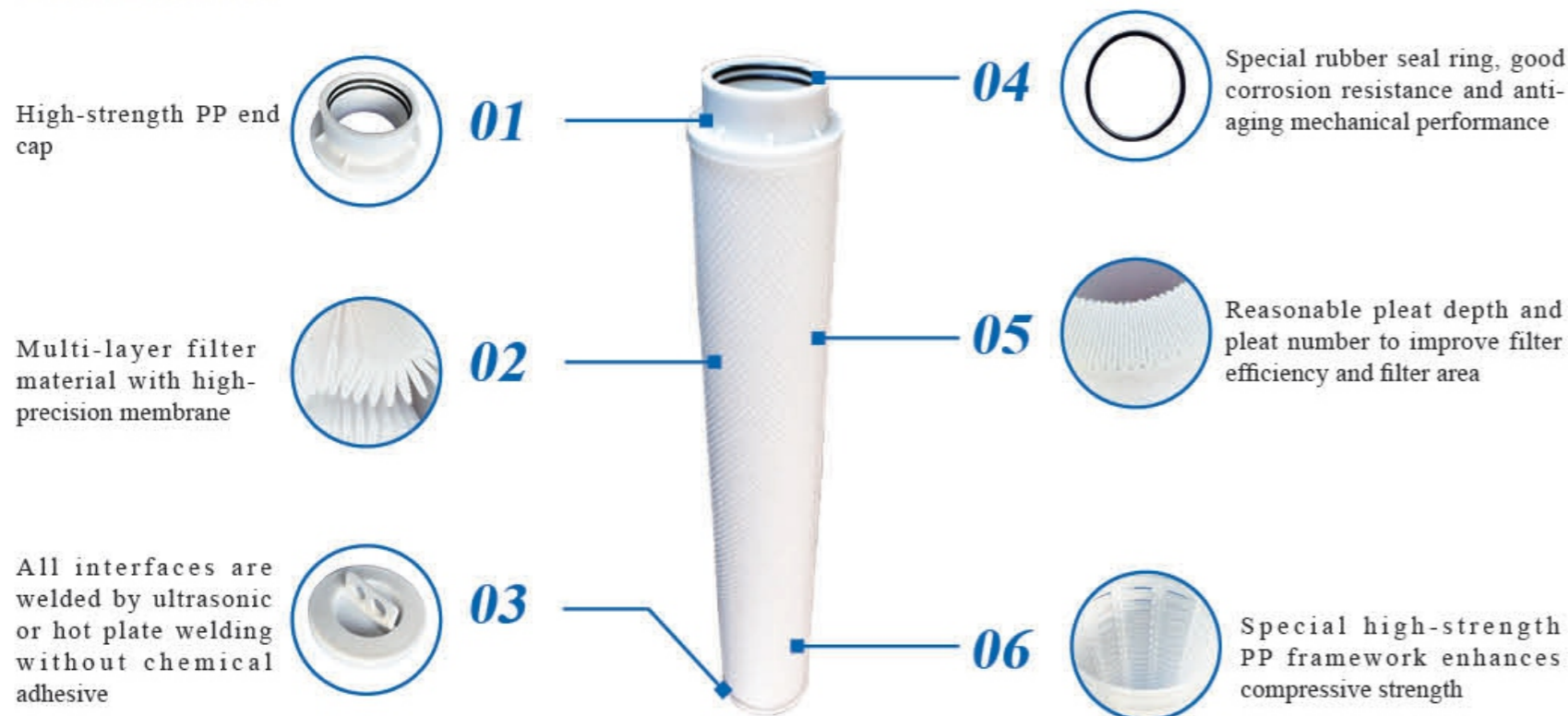


Double O-rings

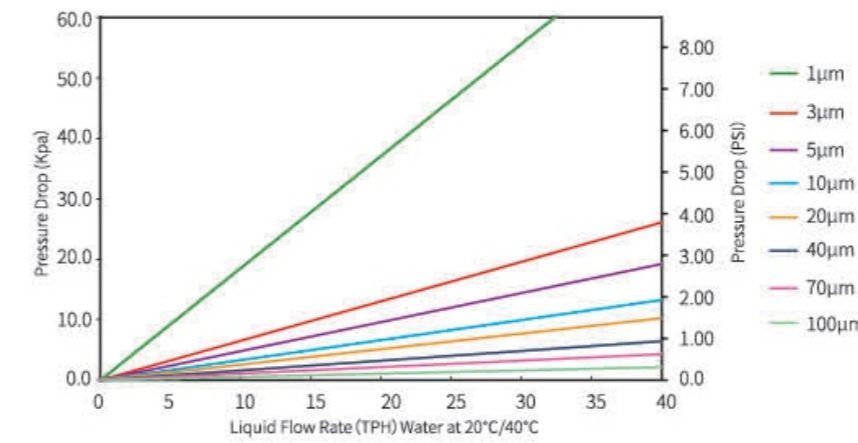
Structure Type

Single O-ring Double O-rings

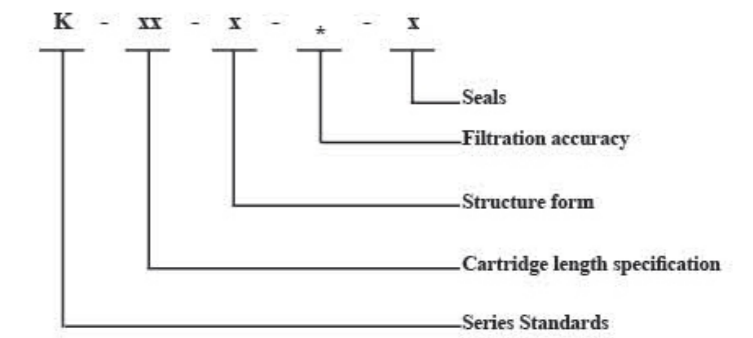
Product structure



Flow curve



Order information of K series high flow water cartridge



Series Standards	Cartridge length (inch)	Structure form	Filtration accuracy	Seals
K-Series	20--20"	D- -Single seal	005--0.5µm	S--Silicone Rubber
High flow filter	40--40"	S- Double seal	010--1µm	E--EPDM rubber
	60--60"		030--3µm	V--Viton
			050--5µm	B--Nitrile rubber
			100--10µm	
			200--20µm	
			400--40µm	
			700--70µm	
			1000--100µm	

Specification of K series High flow cartridges

Filter Media	Polypropylene(PP)
Length	20"(508mm), 40"(1016mm), 60"(1524mm)
Outside Diameter	6 inch (152mm)
Inside Diameter	3.5inch(89mm)
Filtration Rating	1µm, 2µm, 3µm, 5µm, 10µm, 20µm, 40µm, 70µm, 100µm
Support/Drainage	Polypropylene (PP)
End Cap Material	Glass fiber reinforced Polypropylene (PP)
Outside	Netting ,Cage
Seal Material	EPDM, Buna-N, Viton
Maximum Operating Temperature	82°C
Maximum Differential Pressure	3.4Bar @ 82°C
Suggested Maximum Flow Rate	20"(508mm) - 30m³/h 40"(1016mm) - 50m³/h 60"(1524mm) - 70m³/h

M Series High Flow Cartridges

Application

- Municipal Water
- General Industrial
- Oil & Gas
- Chemical & Petrochemicals
- Food & Beverage



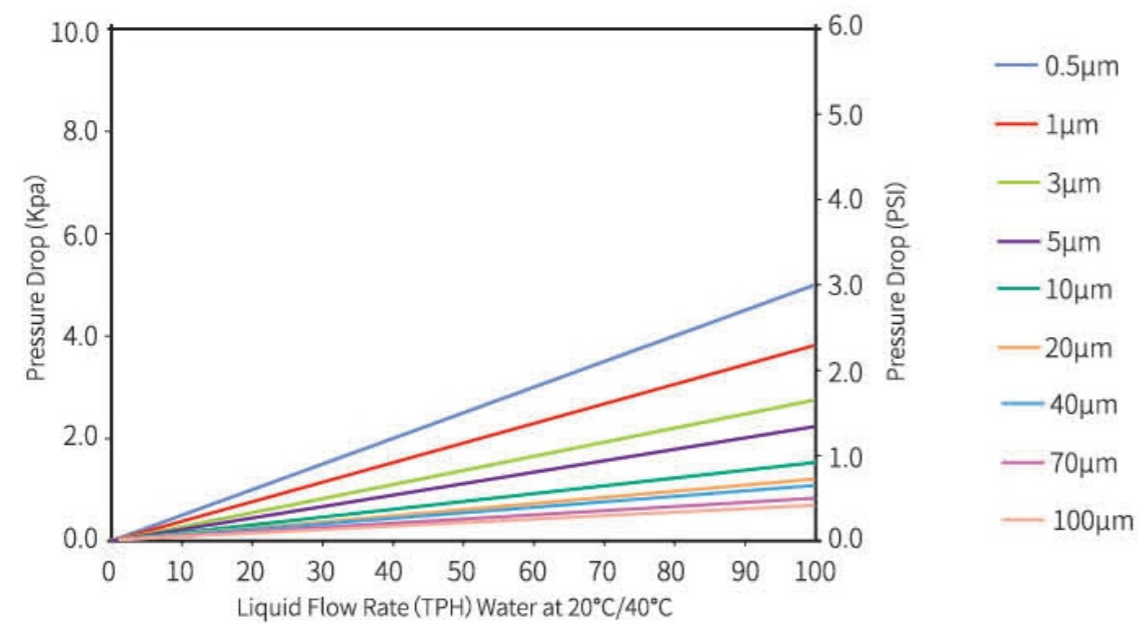
Benefits

- Special radial pleated and vertical design
- Ultra high flow rate up to 113m³/hr (500GPM)
- High dirt holding capacity for long life and lower cost
- Broad chemical compatibility for different applications
- Convenient handle for easy change-out
- Smaller footprint to help you reduce the cost

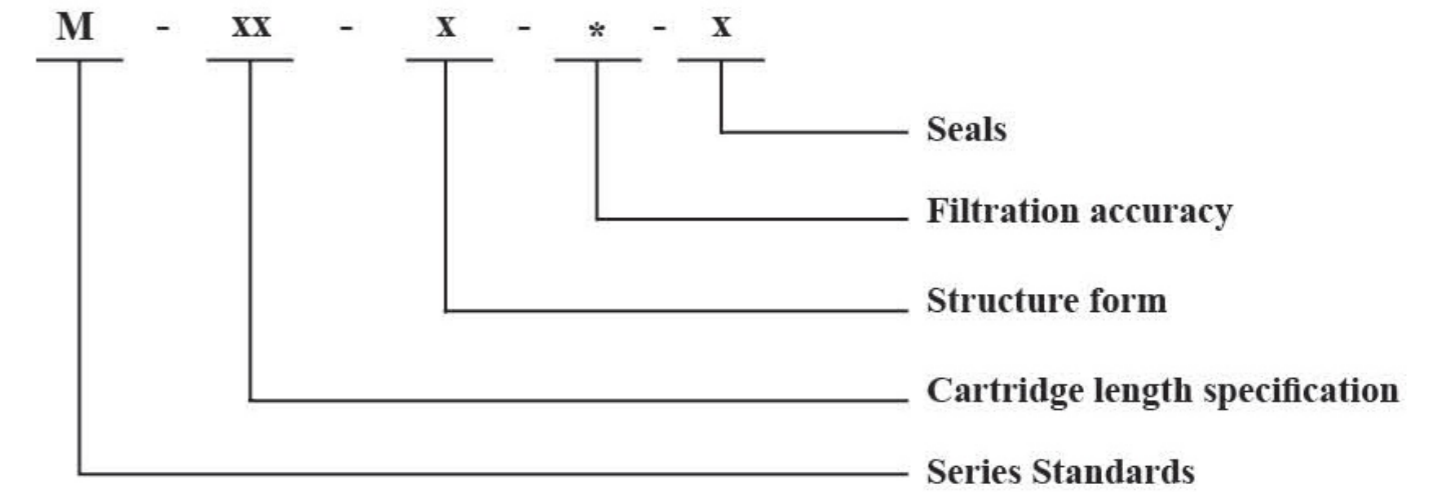
Specification

Material	
Filter Media	Polypropylene
Support/Drainage	Polypropylene(PP)
End Cap Material	Glass fiber reinforced Polypropylene(PP)
Seal Material	EPDM, Buna-N, Silicone
Size	
Length	20"(508mm), 40"(1016mm), 60"(1524mm)
Outside Diameter	6.5inch (165mm)
Inside Diameter	3 inch (76.2mm)
Filtration Rating	1µm, 3µm, 5µm, 10µm, 20µm, 50µm, 70µm, 100µm
Operation conditions	
Max. Operating Temperature	80°C
Recommend DP for change-out	2.1~2.4bar
Filtration Area	18m²@60inch, 12m²@40inch

Flow curve

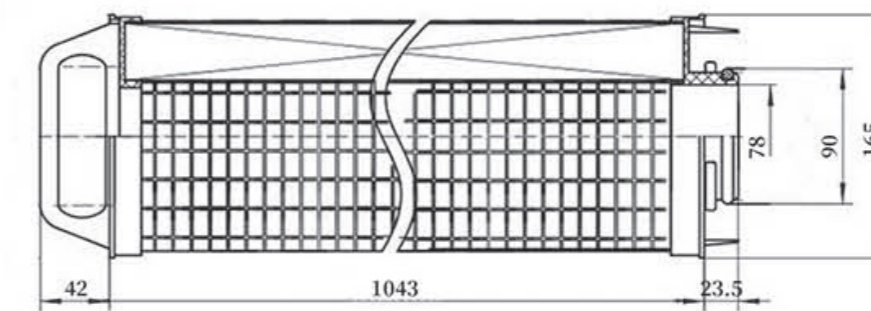


Order information of M series high flow water cartridge

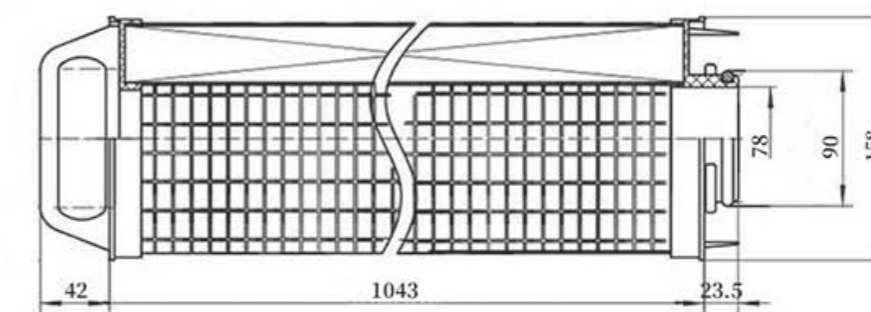


Series Standards	Cartridge length (inch)	Structure form	Filtration accuracy	Seals
M-Series	20--20"	Z--Longitudinal pleating	005--0.5µm	S--Silicone Rubber
High flow filter	40--40"	H--Horizontal pleating	010--1µm	E--EPDM rubber
	60--60"		030--3µm	V--Viton
			050--5µm	B--Nitrile rubber
			100--10µm	
			200--20µm	
			400--40µm	
			700--70µm	
			1000--100µm	

Product Drawing



radial pleated



vertical pleated

R Series High Flow Cartridges

Applications

- Salt Water
- Ink & Chemical
- Municipal Water
- Food & Beverage
- RO Pre-filtration
- Photographic
- Boiler Condensate
- Processing Water
- Cosmetic & Medical



Features

- Allows high flow rate of media to pass through the filter media, which has the advantages of high efficiency, low pressure loss and long life.
- The external inlet and internal outlet structure of the high-flow cartridge makes it easy to replace the cartridge, while keeping the contaminants trapped outside the cartridge.
- The internal pp support skeleton of the cartridge can withstand the differential pressure of 0.245MPa.
- The β value of the filter element is more than 1000.
- Multiple filter cartridges can be installed in the filter housing, which can be used in a wide range of flow rates, whether in start-up or continuous operation.

Specification

Filter Material	Polypropylene(PP)
Length	40"(1016mm), 60"(1524mm)
Outside Diameter	6.75"(171mm)
Inside Diameter	71.5mm
Filtration Rating	1 μ m, 5 μ m, 10 μ m, 15 μ m, 20 μ m, 50 μ m, 70 μ m, 100 μ m
Conductor layer/support layer	Polypropylene (PP)
End Cap Material	Nylon
Seal Material	Buna-N
Maximum Operating Temperature	82°C
Working pressure difference	0.38MPa / 21°C / 0.15MPa 82°C
Recommended Change out Differential Pressure	2.4bar / 20°C

High Flow Cartridge Housing

Applications

- Pre RO
- Desalination
- Food & Beverage
- Pulp & Paper
- Oil & Gas
- Petrochemicals



Features

- Vertical and horizontal designs offered
- Designs for 1-20 filters per housing
- Accepts 20inch, 40inch and 60inch High Flow Cartridges
- Special design for easy elements change-out

Order information of High flow cartridge Vessels

Model	In-outlet	Size	Thickness(mm)	structure type	No. Of cartridge	Flow rate (t/h)	Material
LFD-1-30	DN50	Φ219×1300	2	Clamp	1	30	Carbon Steel/ SUS
				Movable flange			
LFD-2-60	DN80	Φ377×1500	3	Flange	2	60	
LFD-3-90	DN125	Φ400×1700	3	Flange	3	90	
LFD-4-120	DN150	Φ450×1750	3	Flange + boom	4	120	
LFD-6-180	DN150	Φ500×1800	3	Flange + boom	6	180	
LFD-7-210	DN150	Φ550×1800	3	Flange + boom	7	210	
LFD-8-240	DN200	Φ600×1850	3	Flange + boom	8	240	
LFD-9-270	DN200	Φ650×1900	3	Flange + boom	9	270	
LFD-11-330	DN250	Φ700×1950	3	Flange + boom	11	330	
LFD-13-390	DN250	Φ750×1950	4	Flange + boom	13	390	
LFD-15-450	DN300	Φ800×2050	4	Flange + boom	15	450	

Note: User can customize according to actual working conditions.

RO Cartridge Filter Vessel

Applications

- Petrochemicals
- Pharmaceutical plants
- Electronic industry
- Industrial water



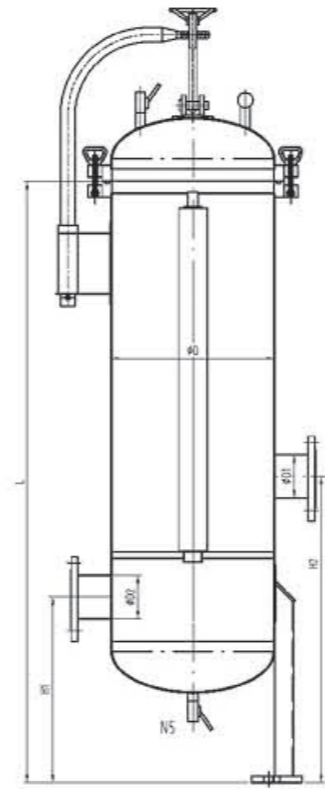
Clamp type



Flange type



Flange + boom



Order information of Cartridge Filter Housing

Model	Model by Melt Blown Filter	In-Outlet	Size	Thickness (mm)	structure	No. Of element	Size of element	Flow rate (t/h)	Material
LFB-1-5X	LFB-15X	DN25	φ219×700	2	Flange	5	10	1.5	Carbon Steel/SUS
LFB-2-5X	LFB-25X	DN32	φ219×1000	2	Flange	5	20	3	
LFB-3-5X	LFB-35X	DN40	φ219×1200	2	Flange	5	30	5	
LFB-4-5X	LFB-45X	DN50	φ219×1500	2	Flange	5	40	7	
LFB-4-10X	LFB-410X	DN65	φ325×1550	2.5	Flange	10	40	15	
LFB-4-15X	LFB-415X	DN80	φ377×1600	3	Flange	15	40	22	
LFB-4-20X	LFB-420X	DN80	φ426×1650	3	Flange	20	40	30	
LFB-4-25X	LFB-425X	DN100	φ450×1700	3	Flange	25	40	40	
LFB-4-30X	LFB-430X	DN100	φ500×1750	3	Flange + boom	30	40	45	
LFB-4-35X	LFB-435X	DN100	φ550×1800	3	Flange + boom	35	40	55	
LFB-4-45X	LFB-445X	DN125	φ600×1850	3	Flange + boom	55	40	85	
LFB-4-50X	LFB-450X	DN125	φ650×1900	3	Flange + boom	61	40	90	
LFB-4-60X	LFB-460X	DN125	φ700×1950	3	Flange + boom	73	40	110	
LFB-4-65X	LFB-465X	DN150	φ750×2000	4	Flange + boom	85	40	125	
LFB-4-70X	LFB-470X	DN150	φ800×2050	4	Flange + boom	91	40	135	
LFB-4-80X	LFB-480X	DN150	φ900×2100	5	Flange + boom	121	40	180	
LFB-4-100X	LFB-4100X	DN200	φ1000×2150	5	Flange + boom	131	40	195	

Note: User can customize according to actual working conditions.

Bag Filter Housings

Model

single and multibag

Application

Water, oil, paint and other liquid purification and solid-liquid separation in machinery, metallurgy, chemical, textile, printing and dyeing, electroplating, medicine, food and other industries.

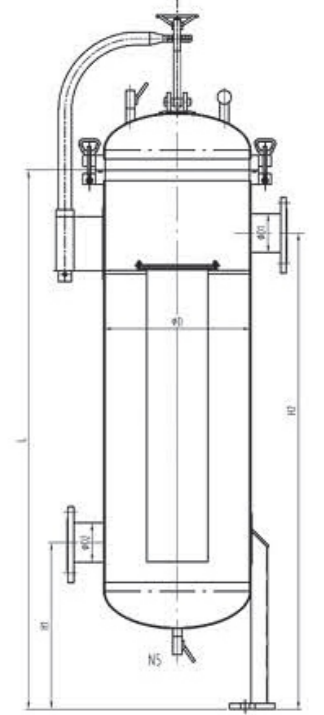
Features

- Low chance of side leakage of filter bags
- Low pressure loss and low running costs
- Increasing filtration accuracy of filter bags
- Large bag filtration handling capacity, small volume, large dirt holding capacity

Order information of Bag Filter Housings

Model	In-outlet	Size	Thickness (mm)	Structure	Number of bags	Type of bags	Flow rate (t/h)	Filter area (m ²)
LFD-1-P	DN40	Φ219*900	2	Clamp	1	1#	15	0.23
			2	Movable flange				
LFD-2-1P	DN50	Φ219*1310	2	Clamp	1	2#	30	0.5
			2	Movable flange				
LFD-2-2P	DN80	Φ400*1450	3	Flange	2	2#	60	1
LFD-2-3P	DN100	Φ450*1500	3	Flange	3	2#	90	1.5
LFD-2-3P	DN100	Φ550*1550	3	Flange + boom	4	2#	120	2
LFD-2-5P	DN125	Φ600*1600	3	Flange + boom	5	2#	150	2.5
LFD-2-6P	DN150	Φ650*1600	3	Flange + boom	6	2#	180	3
LFD-2-7P	DN200	Φ700*1650	3	Flange + boom	7	2#	210	3.5
LFD-2-8P	DN200	Φ750*1700	4	Flange + boom	8	2#	240	4
LFD-2-9P	DN200	Φ800*1750	4	Flange + boom	9	2#	270	4.5
LFD-2-10P	DN250	Φ850*1750	4	Flange + boom	10	2#	300	5
LFD-2-11P	DN250	Φ900*1750	5	Flange + boom	11	2#	330	6
LFD-2-13P	DN250	Φ950*1750	5	Flange + boom	13	2#	390	6
LFD-2-15P	DN300	Φ1000*1750	5	Flange + boom	15	2#	450	7.5

Note: User can customize according to actual working conditions.



Automatic Cleaning Filter

Application

Agricultural irrigation - especially suitable for water sources with high impurity particle content. Sprinkler irrigation, drip irrigation, parks, golf courses, turf watering, drip irrigation treatment, etc.

Raw water treatment - surface river water, lake water, sea water, reservoir water, well water and ground water can be filtered to remove sand, algae, organic matter, etc.

Industrial circulating water filtration - used in equipment with certain requirements for water quality, such as: cooling towers, rolling mills, continuous casting machines, polishing, pumps, ion exchangers, sprayers, heat exchangers, etc. or supply and drainage pipelines, can filter out impurities in water to avoid blockage of pipelines, nozzles and other components.

Cooling water treatment - cooling towers, supplemental water systems, air conditioning systems, DC system water filtration, reducing the generation of sediment in heat exchangers and maintaining their cooling effect.

Paper industry - white water filtration

Plastic industry - product recovery cooling water filtration

Power industry - turbine cooling water filtration, power plant dust removal cycle ash water filtration

Technical parameter

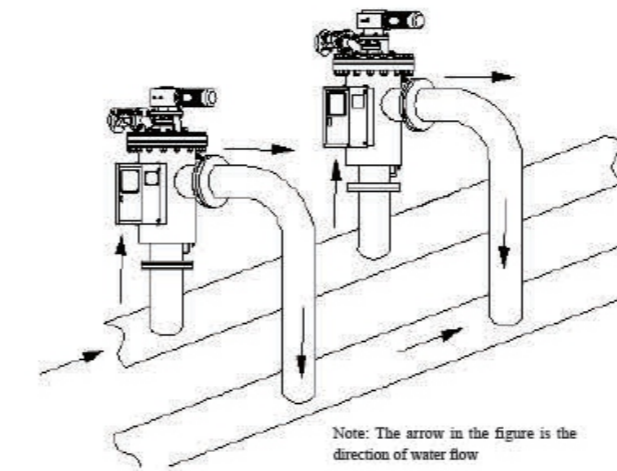
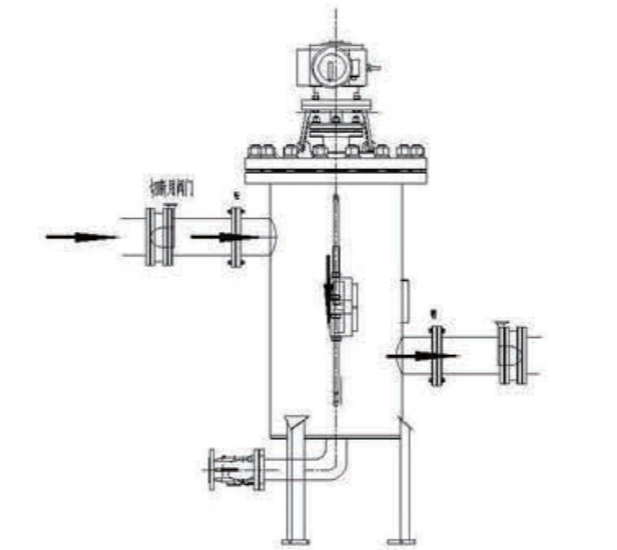
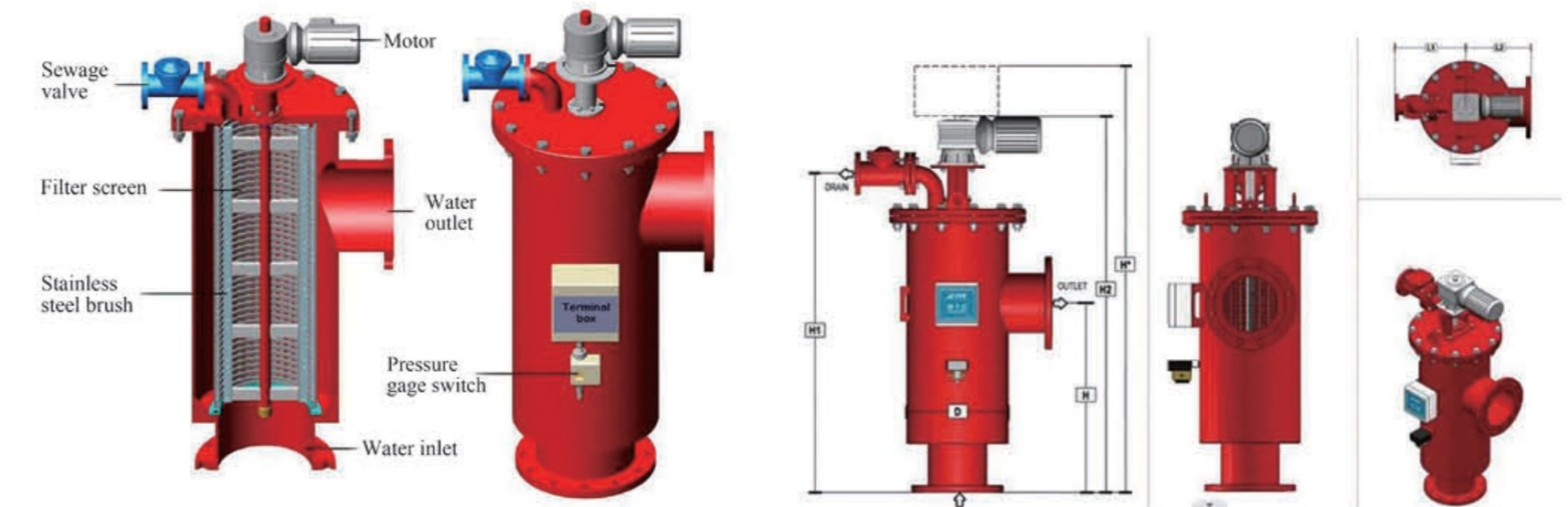
- | | |
|---|---|
| 1. Use pressure: 0.2-2.5Mpa | 2. Operating temperature: $\leq 80^{\circ}\text{C}$ |
| 3. Using voltage: 380v 50hz | 4. Backwashing water consumption: $\leq 2\%$ |
| 5. Filtration precision: 50-5000 microns | 6. Filter element material: 304 316L 2205 |
| 7. Tank material: Q235B, 304, 316, 316L, carbon steel lined with rubber | 8. Cleaning brush material: 304 316L |
| 9. Cleaning method: brush type | 10. Cleaning time: 60s or adjustable |
| 11. Control mode: manual, automatic | |

Order Information

model	Inlet and outlet	Casing size	Pressure	motor power	Flow rate (m³/h)	Micro
LFZ-250-50	DN50	φ273*1000	1.0Mpa	0.18kw	50	$\geq 50\mu\text{m}$
LFZ-300-100	DN100	φ325*1200	1.0Mp	0.37kw	100	$\geq 100\mu\text{m}$
LFZ-400-150	DN150	φ426*1300	1.0Mp	0.37kw	200	$\geq 200\mu\text{m}$
LFZ-480-200	DN200	φ480*1550	1.0Mp	0.37kw	300	$\geq 300\mu\text{m}$
LFZ-530-250	DN250	φ530*1650	1.0Mp	0.75kw	450	$\geq 300\mu\text{m}$
LFZ-600-300	DN300	φ600*1750	1.0Mp	0.75kw	550	$\geq 300\mu\text{m}$
LFZ-700-350	DN350	φ700*2000	1.0Mp	0.75kw	700	$\geq 500\mu\text{m}$
LFZ-800-400	DN400	φ800*2150	1.0Mp	0.75kw	1000	$\geq 800\mu\text{m}$
LFZ-900-450	DN450	φ900*2300	1.0Mp	0.75kw	1200	$\geq 1000\mu\text{m}$
LFZ-1000-500	DN500	φ1000*2500	1.0Mp	0.75kw	1500	$\geq 1500\mu\text{m}$
LFZ-1100-600	DN600	φ1100*2600	1.0Mp	0.75kw	1800	$\geq 3000\mu\text{m}$
LFZ-1200-700	DN700	φ1200*2800	1.0Mp	1.5kw	2300	$\geq 3000\mu\text{m}$



Vertical automatic self-cleaning filter



Shallow Sand Filter

Applications

1. Filtration of industrial water: such as: steel plant oxygen lance water, boiler, heat exchanger water supply, etc., can filter out impurities in water and avoid blockage of pipelines and nozzles.
2. Filtration system for industrial circulating water. Such as cooling tower circulating water, heat exchanger circulating cooling water, dry dedusting circulating water treatment system.
3. Treatment of raw water: It can be used for the treatment of surface river water, lake water, sea water, reservoir water, well water, water plants of industrial enterprises, centralized water supply stations, etc., and the removal of iron and manganese from ground water.
4. Agricultural irrigation: especially suitable for water sources with large flow and low impurity content, such as irrigation of farmland water conservancy, irrigation of lawns on parks and golf courses, etc.
5. Food processing industrial water, paper industry, electric sewage treatment, etc., pretreatment of industrial and medical pure water. Recycling of industrial production water, industrial wastewater treatment, and removal of suspended solids from production wastewater.
6. It is used for pretreatment of sewage treatment plants, pretreatment before softening and desalination treatment, biochemical treatment of organic sewage, and subsequent filtration after treatment in secondary sedimentation tanks.
7. Urban tap water is used as the water source to filter the differentiated water supply of urban communities to remove sand, suspended solids, algae, and organic matter in the water.
8. Purification treatment of aquatic industry, swimming pool and water park, fountain waterscape.

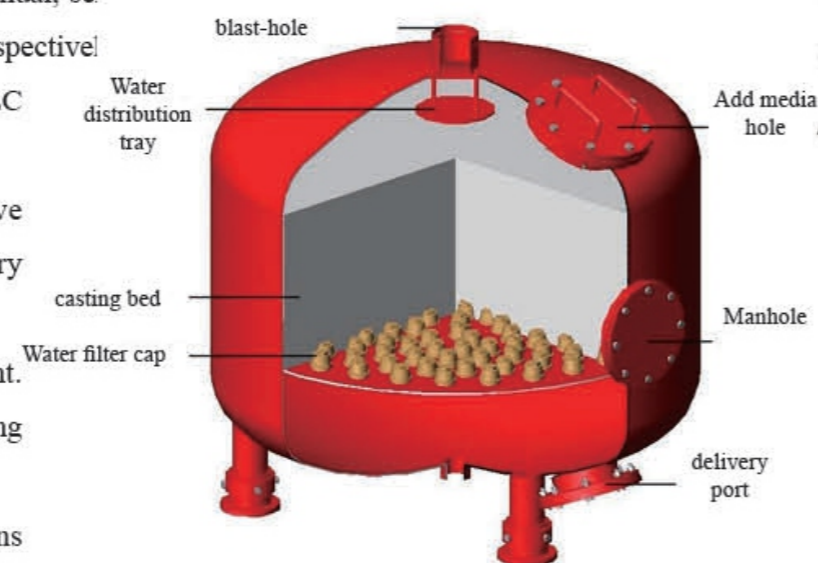
Features

The shallow media filtration system consists of one or more standard high-speed filtration units. The water flows through the internal water distributor and water collector. Using different media, it can effectively remove particulate matter and reduce turbidity. If a specific filter material is installed, such as activated carbon, anthracite, etc., it can also absorb and remove phase corresponding organic matter, ions, etc.

Filter units are available in various sizes from 24 inches (500mm) to 96 inches (2400mm), and can be installed in different ways. The filter can be used as an independent filtration system, using the water supply pump in the existing process, and if it is used as a side filter, it can also be equipped with its own pump. The filter can also be installed on the common pipeline with multiple processing units, which can realize the unlimited filtering capacity of this system.

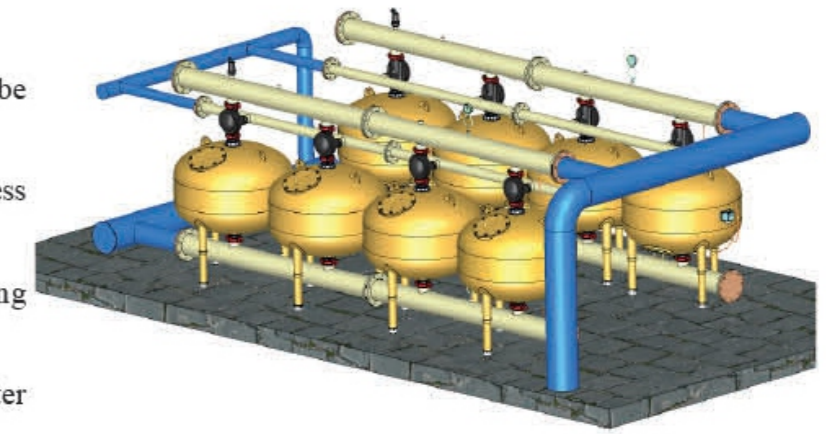
There are three methods of backwashing of the filtration system: manual, manual buttons, PLC, pressure difference or management system respectively and the factory setting is 3 minutes. This control is realized by PLC automatic filter control system.

1. High filtration speed and low pressure loss completely solve the problems of slow filtration speed and low flow rate of ordinary mechanical media filters.
2. Modular setting, small footprint, less piping, and low investment. The floor area is reduced by more than 40%, and the amount of piping engineering is reduced by more than 50%.
3. Manual, semi-automatic and fully automatic backwashing options are available to fully meet your needs.



Internal structure diagram

4. The backwash water source can be selected from the system, water tower or external water source, and can be used automatically Manual switching (on special request).
5. Multiple units can be combined, and the processing flow can be expanded arbitrarily.
6. The shell and pipeline are made of carbon steel Q235B, and stainless steel can also be used make.
7. The core components are imported with original packaging (BERMAD, BACCARA, SIEMEN, MITSUBISHI).
8. The filter unit adopts a single-chamber design, which has better backwashing effect and higher sand running rate.
9. The water collector can be made of stainless steel/ABS for longer life.
10. The water outlet pipe is set at the bottom of the unit, the water resistance is smaller, and the maintenance is more convenient.



Multi-group skid-mounted schematic diagram

Working principle

Filter status

The shallow filter is composed of several filter units arranged side by side. When the system is in the filtering state, the unfiltered water is evenly distributed through the unique water distributor developed by ourselves, and the water passes through the packing layer (refined uniform-grained quartz sand) in the filter in a laminar flow state. When the water flows through the packing layer, the impurities are intercepted

stay inside the packing layer. There are multiple evenly distributed water collectors at the bottom of the filter, which collect and lead out the filtered water evenly, and advective filtration allows the filter to filter at a high flow rate and still achieve a better filtering effect.

Backwash status:

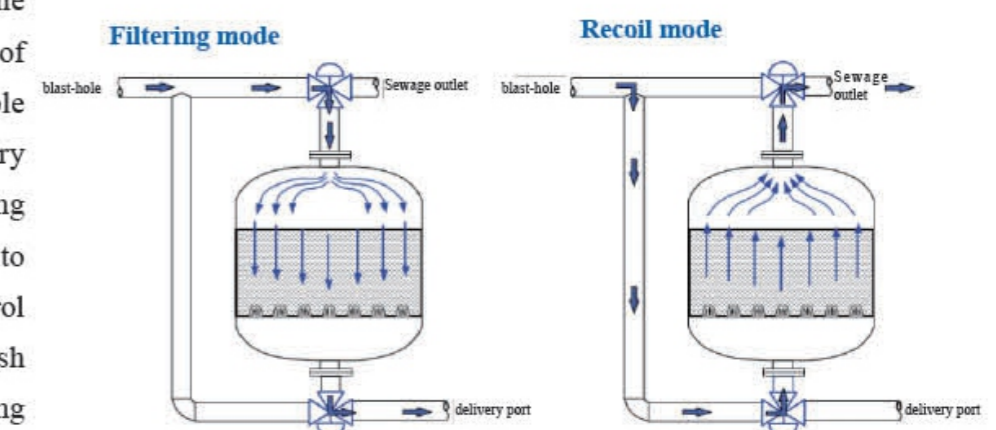
As impurities continue to accumulate in the packing layer, the internal pressure head loss will continue to increase. When the loss of inlet and outlet water pressure head reaches the set value, the system will automatically activate the constant pressure difference device to switch to the backwashing state. will

For cleaning accumulated impurities.

When the system is in the state of backwashing, the filtration continues, and the standard unit sand cylinder to be backwashed does not perform filtration, and the other standard unit sand cylinders in the system are still filtering. Part of the filtered clean water is used to backwash the standard unit sand tank, and the rest is still sent to the user. Backwash sewage is passed through

The backwash drain of the hydraulic valve is discharged. In the high-speed sand tank high-efficiency filtration system, the special design of the water collector can make the fillers scrub each other, maximize the efficiency of backwashing, reduce the required backwashing water (clean water), and at the same time, there is no leakage during backwashing. material phenomenon. The backwashing time for a standard unit sand tank is 3 minutes. After the

backwashing is over, the internal pressure head loss of the standard unit sand tank is reduced to a reasonable range. The constant pressure device gives a recovery signal, and the hydraulic valve returns to the filtering state. The next standard unit sand tank Then it is ready to enter the backwashing state. The system can also control the backwashing by time. The default is to backwash every 4 hours. The time can be adjusted on site according to the working conditions.



Technical Parameters

1. Working effect

Influent turbidity: < 30FTU, effluent turbidity: < 10FTU

2. Working Environment Parameters

- Working temperature: 5-60°C
- Working pressure: ≤ 0.6MPa
- Inlet water pressure: ≥ 0.3MPa
- Backwash back pressure: ≥ 0.3 MPa (if ≤ 0.3MPa, a regulating valve needs to be added to the outlet main pipe)
- Pressure difference between inlet and outlet: 0.02-0.05MPa

3. Operating parameters

- Working method: pressure type
- Operating method: water flow from top to bottom
- Filtration speed: 30-60m/h
- Backwashing method: internal source backwashing
- Backwash water consumption: 1-3%
- Backwash intensity: 4-15L/s m²
- Backwash duration: 10-15min
- Backwash expansion rate: 40-50%

4. Control mode: manual control, automatic control (time)

5. Tank material: Q235B, 304, 316L, carbon steel with rubber lining. Water cap material: ABS, 304, 316L

6. Single flow rate: 0.5m³/h~230m³/h

7. Input voltage: AC220V± 10 % 50-60HZ

8. Output voltage: AC24V/ AC220V

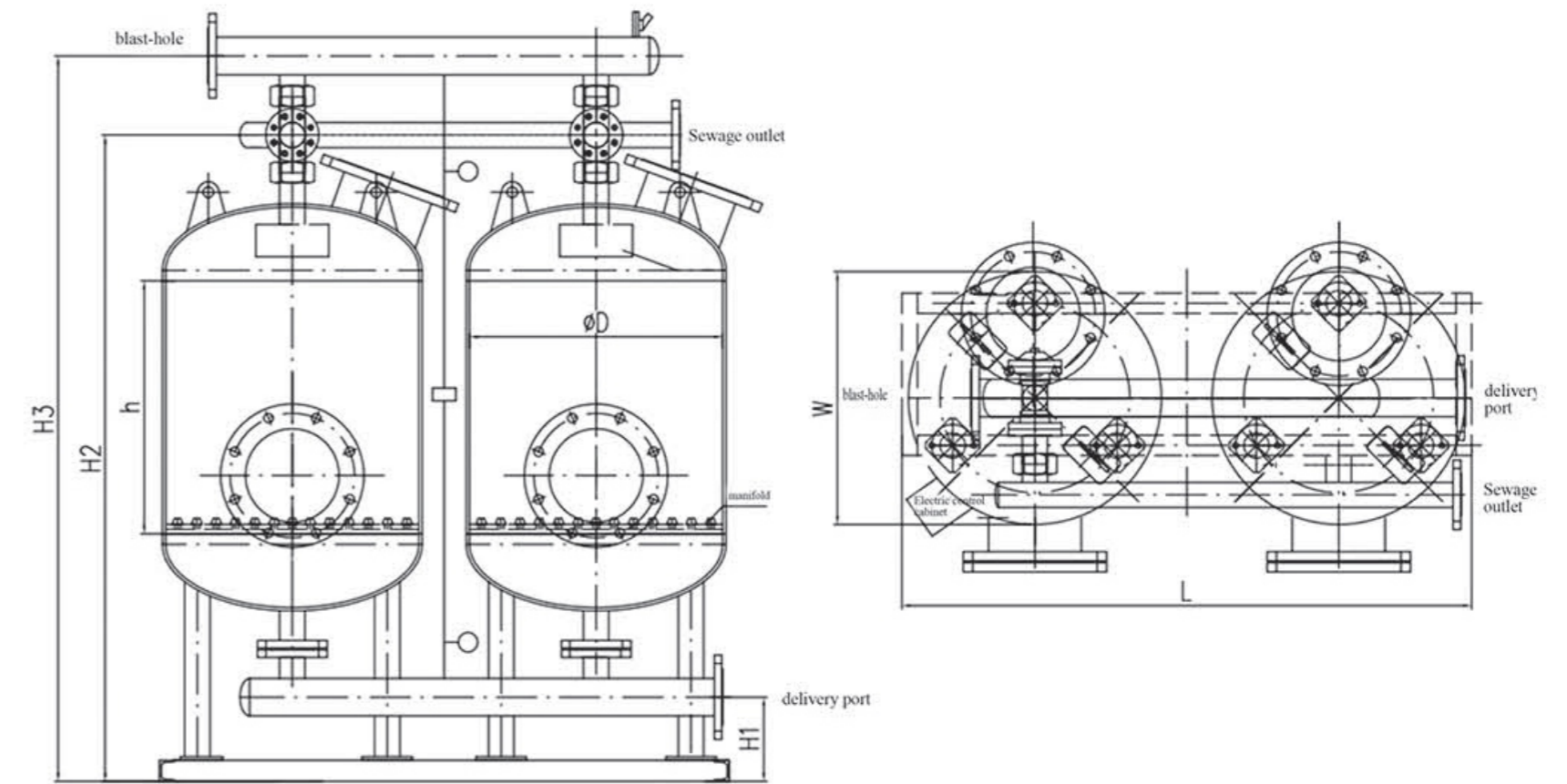
9. Load power: 24W/1A

10. Power of each circuit: ≤ 50W

Order Information

Model	Tank Size	Inlet & outlet Size	Max. Of Single flow rate (t/h)	Pressure (Mpa)
LFQ-400	φ400*1550*6	DN25	5	1.0
LFQ-500	φ500*1650*6	DN25	8	1.0
LFQ-1000	φ1000*1750*6	DN80	45	1.0
LFQ-1200	φ1200*1950*8	DN80	60	1.0
LFQ-1400	φ1400*2150*8	DN80	70	1.0
LFQ-1600	φ1600*2200*8	DN100	100	1.0
LFQ-1800	φ1800*2250*10	DN100	120	1.0
LFQ-2000	φ2000*2300*10	DN150	150	1.0
LFQ-2200	φ2200*2300*10	DN150	200	1.0
LFQ-2400	φ2400*2300*10	DN200	230	1.0

Drawing



Size of LFQ housing

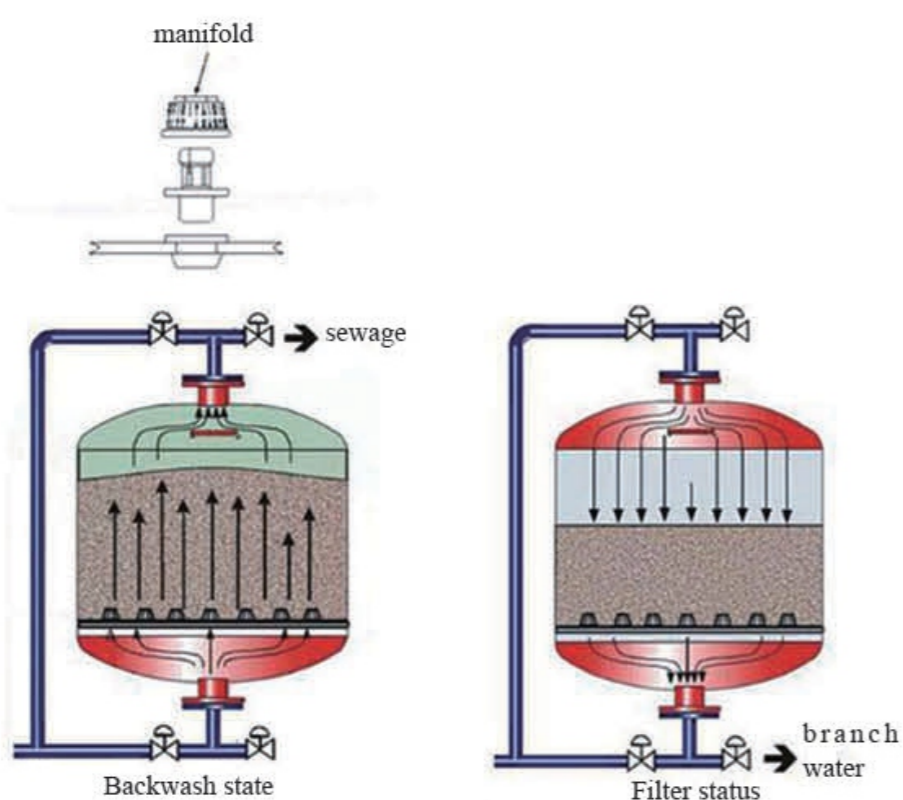
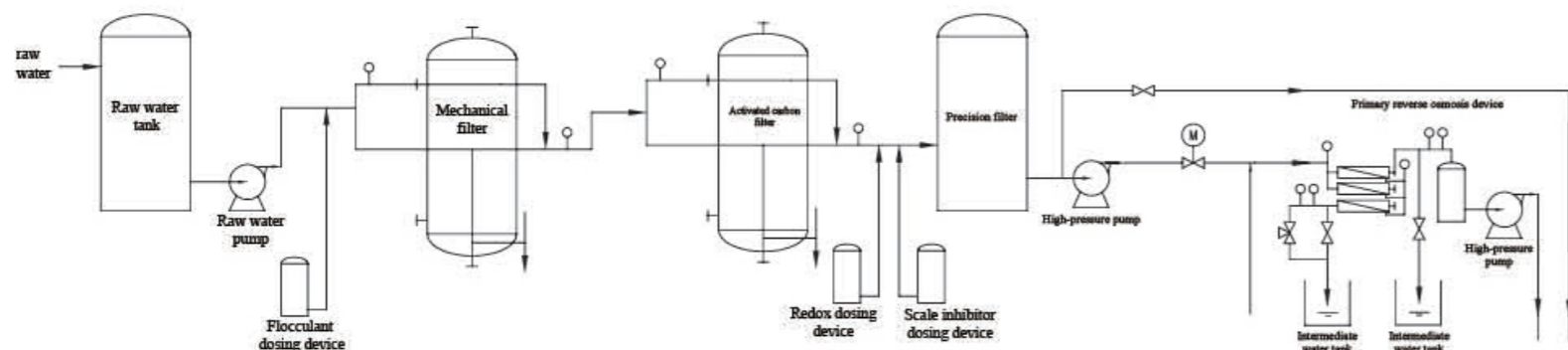
Model	D(mm)	L(mm)	W(mm)	h(mm)	H1(mm)	H2(mm)	H3(mm)
LFQ-400x2G	φ400	1100	550	600	200	1500	1700
LFQ-400x3G	φ400	1600	550	600	200	1500	1700
LFQ-500x2G	φ500	1200	650	600	200	1500	1700
LFQ-500x3G	φ500	1800	650	600	200	1500	1700
LFQ-800x2G	Φ800	1700	950	600	300	1800	2000
LFQ-800x3G	Φ800	2600	950	600	300	1800	2000
LFQ-800x4G	Φ800	3500	950	600	300	1800	2000
LFQ-800x5G	Φ800	4500	950	600	300	1800	2000
LFQ-1200x2G	Φ1200	2500	1350	600	350	2200	2600
LFQ-1200x3G	Φ1200	3800	1350	600	350	2200	2600
LFQ-1200x4G	Φ1200	5200	1350	600	350	2200	2600
LFQ-1200x5G	Φ1200	6500	1350	600	350	2200	2600
LFQ-1400x2G	Φ1400	3000	1550	600	350	2300	2700
LFQ-1400x3G	Φ1400	4500	1550	600	350	2300	2700
LFQ-1400x4G	Φ1400	6000	1550	600	350	2300	2700
LFQ-1400x5G	Φ1400	7500	1550	600	350	2300	2700

Multi-media Filters

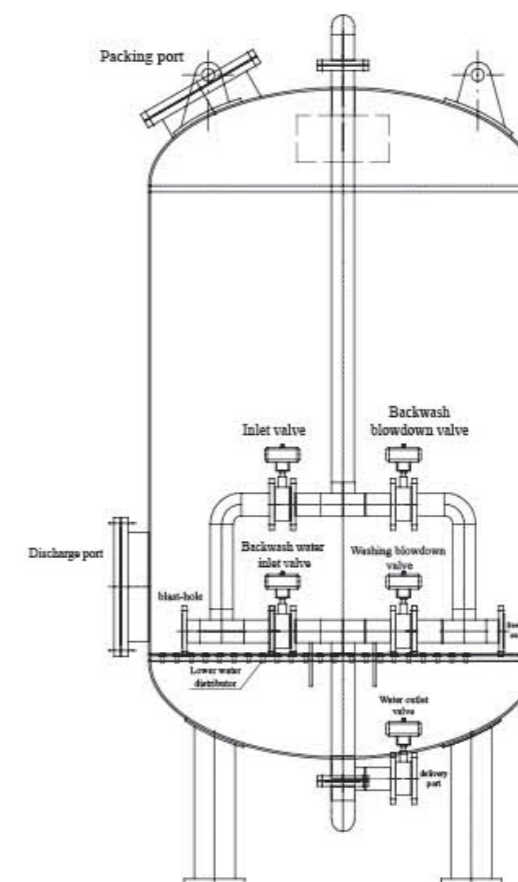
Introduction

Multi-media filter is a process of using one or several filter media to pass water with higher turbidity through a certain thickness of granular or non-granular material under a certain pressure, thereby effectively removing suspended impurities and clarifying the water. Commonly used filter materials are quartz sand, anthracite, manganese sand, etc., which are mainly used for water treatment to remove turbidity, soften water, and pre-treatment of pure water.

The above figure mainly indicates the three main links of water treatment, which are mechanical filtration stage (multi-media filtration), precision filtration stage, reverse osmosis stage. Raw water passes through mechanical filters and activated carbon filters to remove suspended solids and odors, and after passing through precision filters to remove tiny particles, it enters the Reverse osmosis device to achieve the purpose of purifying water quality.



Order Information

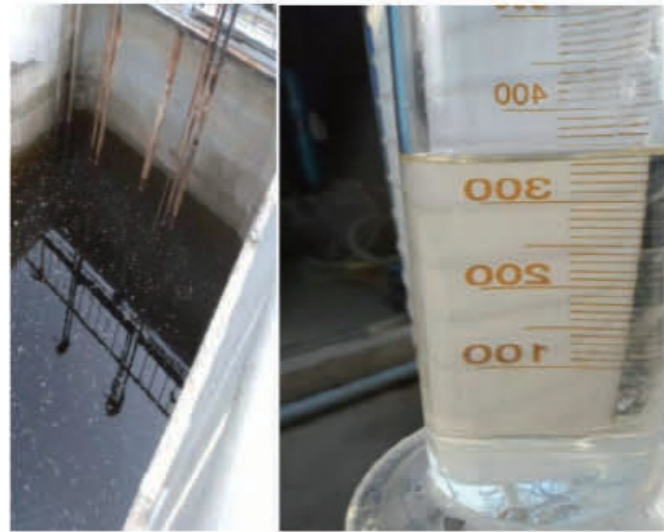


Model	Tank size φx H	Inlet&outlet	Max. Flow rate (t/h)	Design Pressure (MPa)
LF-SYS500	φ500*1500	DN50	2	1.0
LF-SYS600	φ600*1500	DN50	3	1.0
LF-SYS800	φ800*1500	DN65	5	1.0
LF-SYS1000	φ1000*1500	DN65	8	1.0
LF-SYS1200	φ1200*1500	DN65	12	1.0
LF-SYS1500	φ1500*1500	DN80	18	1.0
LF-SYS1600	φ1600*1500	DN80	20	1.0
LF-SYS1800	φ1800*1500	DN100	25	1.0
LF-SYS2000	φ2000*1500	DN100	30	1.0
LF-SYS2200	φ2200*1500	DN125	40	1.0
LF-SYS2400	φ2400*1500	DN125	50	1.0
LF-SYS2500	φ2500*1500	DN125	60	1.0
LF-SYS2600	φ2600*1500	DN150	70	1.0
LF-SYS2800	φ2800*1500	DN150	80	1.0
LF-SYS3000	φ3000*1500	DN219	100	1.0
LF-SYS3200	φ3200*1500	DN219	120	1.0
LF-SYS3400	φ3400*1500	DN250	150	1.0
LF-SYS3600	φ3600*1500	DN250	180	1.0

Note: H is the height of the straight section of the cylinder

Technical Parameters

1. Working effect
Influent turbidity: < 20FTU, effluent turbidity: < 3FTU
2. Working Environment Parameters
 - Working temperature: 5-60°C
 - Working pressure: ≤ 0.6MPa
 - Water inlet pressure: ≥ 0.1MPa
 - Backwash water inlet pressure: ≥ 0.3 MPa
 - Pressure difference between inlet and outlet: 0.02-0.05MPa
3. Operating parameters
 - Working method: pressure type
 - Operating method: water flow from top to bottom
 - Filtration speed: 10-20m/h
 - Backwashing method: water washing, or air-water combined backwashing
 - Backwashing water consumption: ≤ 3%
 - Backwashing intensity: 4-15L/s·m²
 - Backwash duration: 10-15min
 - Backwash expansion rate: 40-50%
4. Control mode: manual control, automatic control (time control)
5. Tank material: Q235B, 304, 316L, carbon steel with rubber lining. Water cap material: ABS, 304, 316L.
6. Single flow rate: 0.5m³/h~180m³/h
7. Input voltage: AC220V± 10 % 50-60HZ
8. Output voltage: AC24V/ AC220V
9. Load power: 24W/1A
10. Power of each circuit: ≤ 50W



The effect of a factory sewage pool after multi-media filtration



Comparison of river water before and after filtration

Project



Clean ring water system for steel mills



Paper Mill Circulating Water Filtration System



Cooling circulating water system in petrochemical plant



Installation site of a power plant circulating water system



Reverse osmosis pre-sand filter in a chemical plant



Oxygen plant water treatment workshop

Spin-on Engine oil filter

In order to ensure the high-efficiency operation of the modern engines, it is very important to have a smooth oil passage, because only clean oil can ensure the long-lasting and stable performance of the engine. VICARGATE oil filter continuously removes impurities and combustion residues from the circulating oil, preventing wear and prolonging the life of the engine. We can provide variety types of oil filters for customer to choose.



Diesel / Fuel filter

Fuel filter usually acts as oil water separation to remove water from the fuel. VICARGATE Fuel filter improves the quality and purity of the fuel, ensuring the dust particles and moisture in the fuel not damage the engine.



Air filter

In order to obtain the best performance, the internal combustion engine needs intake clean air. VIKAXX air filter can effectively remove the dust, pollen, sand, carbon black and water droplets, which promotes the complete combustion of fuel and ensures the stability of engine performance.



Air cabin filter

Dirty air can irritate your eyes and respiratory tract, make people feel tired. The Air cabin filter will remove pollutants such as dust, pollen, smoke and etc. from the air to ensure the fresh air in the car and improve comfort.



Application

The filtration products were used for Power Plant ,Steel Plant ,Cement Plant,Oil&Gas field, Petrochemical, Refineries, Paper mills,Textile,Mine,Railway,Food and beverage, water treatment , and other industrial sectors.



Power plant



Steel plant



Cement Plant



Marine Service



Chemical



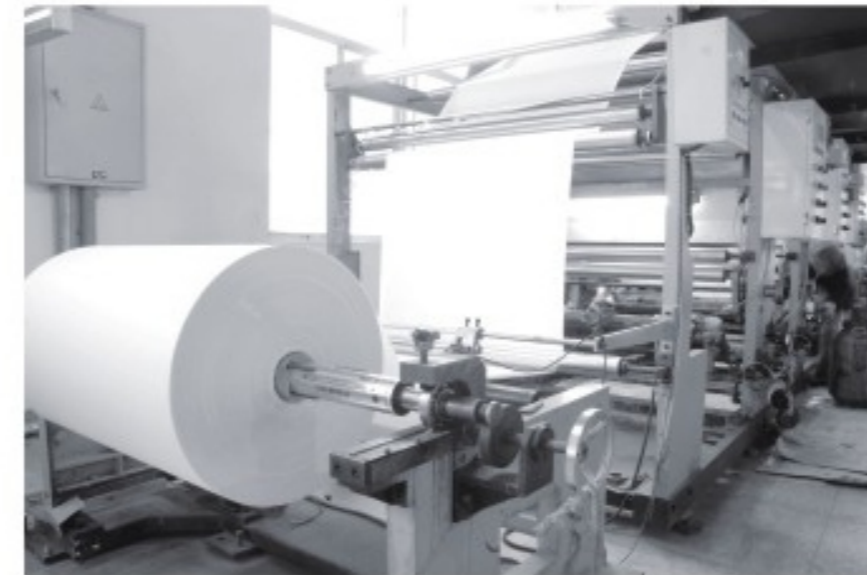
Mining



Oil & Gas



Pharmaceutical



Pulp & Paper



Shipbuilding



Water treatment



Textile Service

Oil Filter



LYC-B High precision Oil Purifier



LYC-A Movable Oil Purifier



LYC-J Coalescence-separation Oil Purifiers



ZLYC Efficient Vacuum Oil Purifier



Filter Element



Coalescer & Separator



Water Filter Housing



Y type Strainer



Basket Strainer



Sand Filter

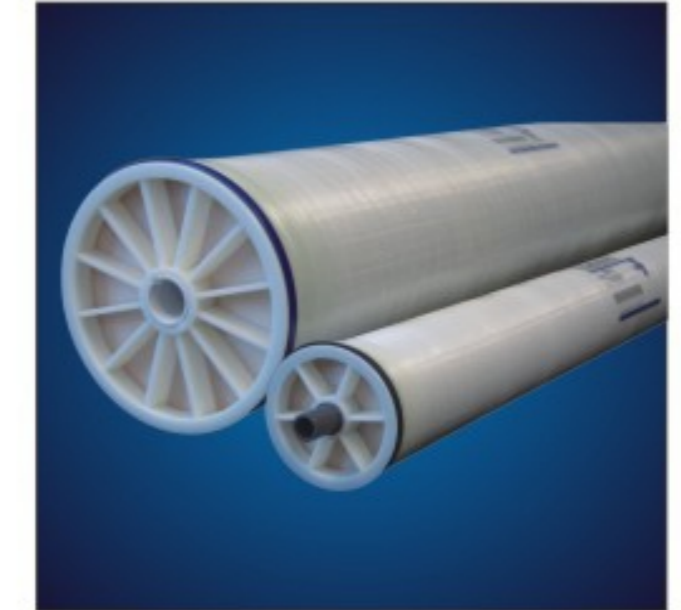


automatic self-cleaning filter

Water Filtration



Water Filter Cartridge



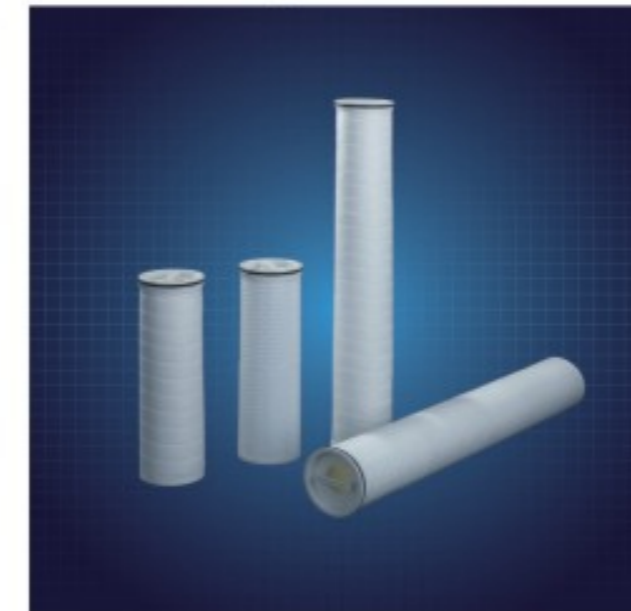
RO Membrane



High Flow Filter



High Flow Filter



High Flow Filter

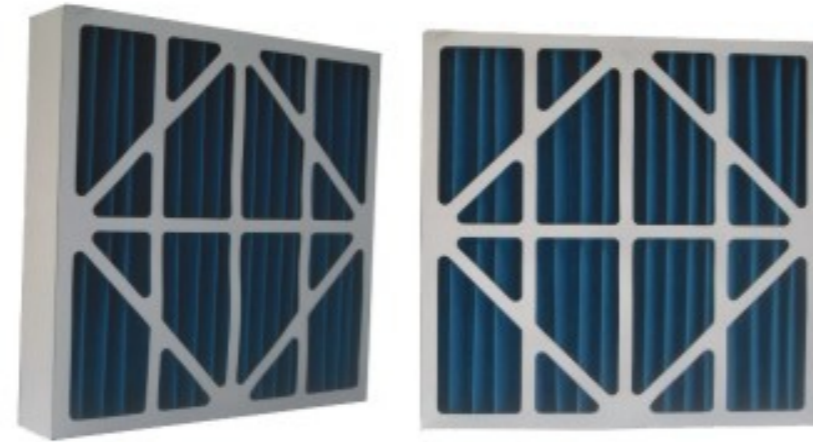


High Flow Filter

Air Filtration



Dust Filter Bag



Filter cartridge

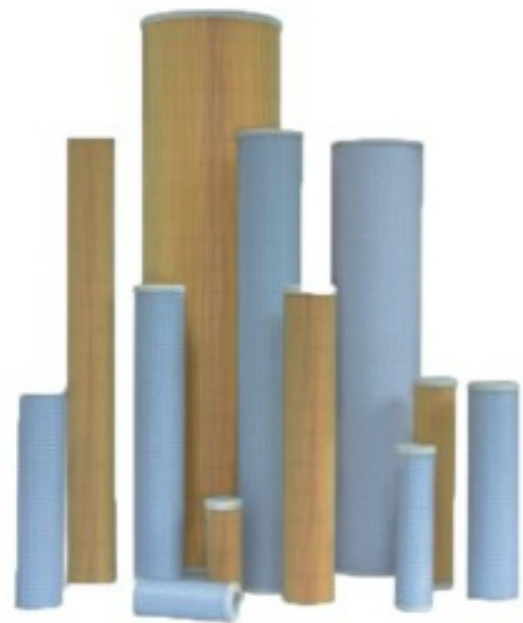


Hepa Filter

Dust Collector



Air Inlet Filter

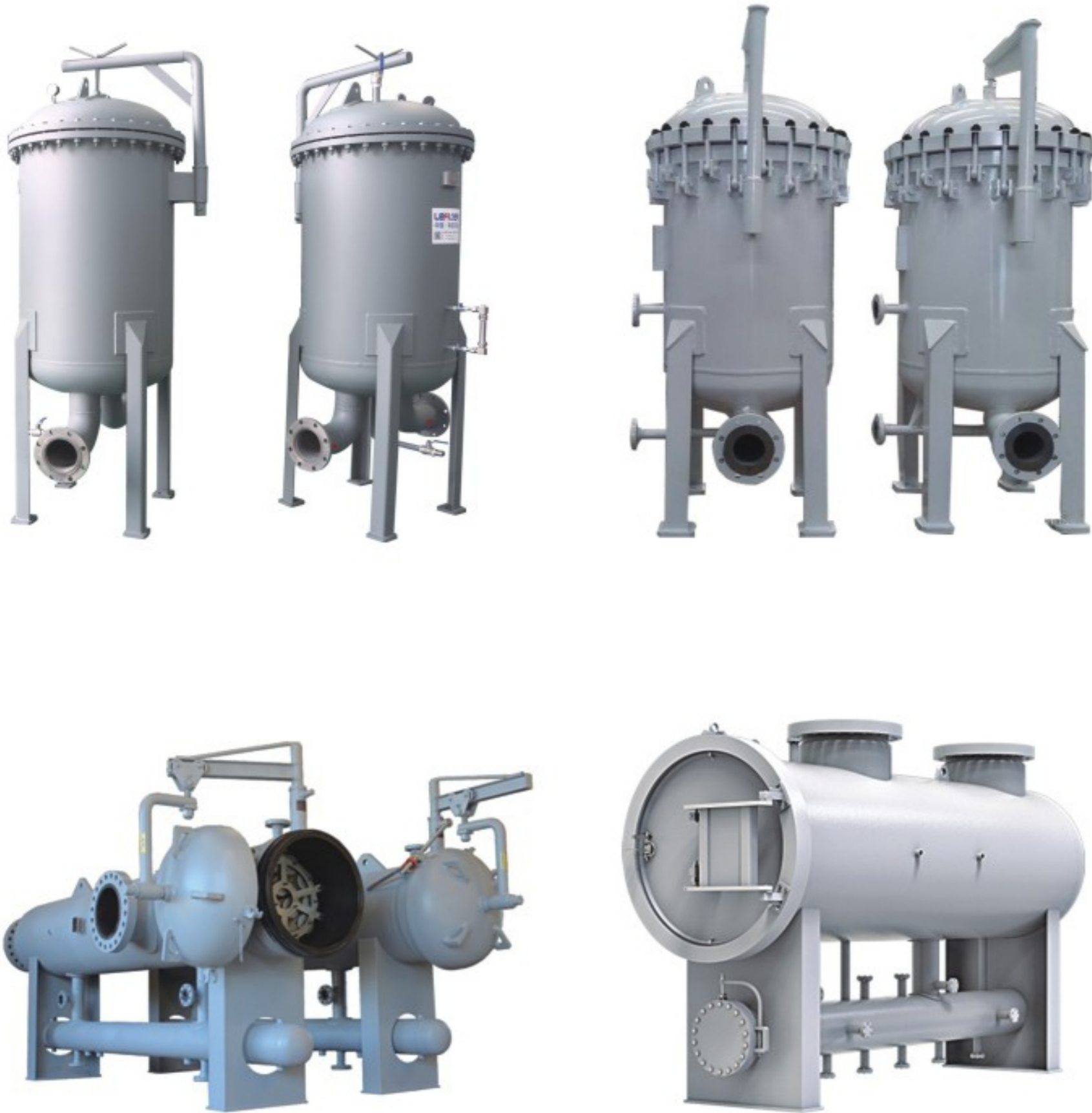


Compressor Filter



Product Overview

Coalescence Separator Filter



Coalescer Cartridge & Separator Cartridge

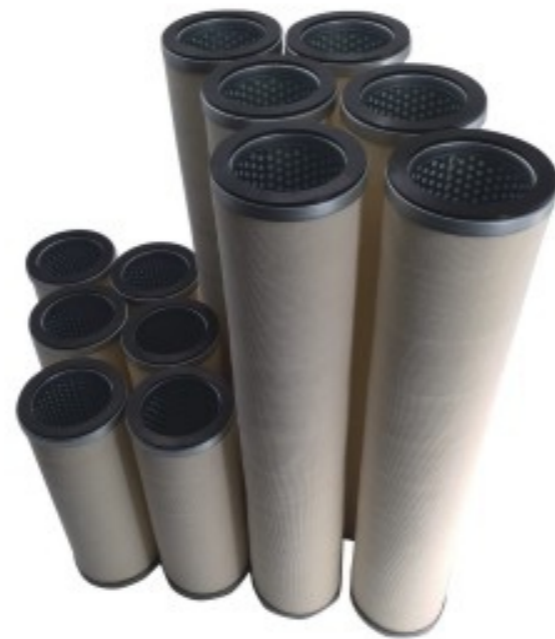
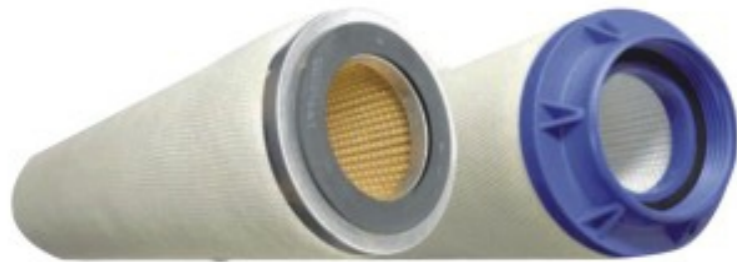


Coalescer Filter Element

Introduction:

Coalescer filter element is made of a variety of composite materials by special process. With hydrophilic characteristics, it can not only remove the mechanical impurities from the liquid, but also separate the emulsified water from the liquid through demulsification and coalescence process, and then it can coalesce the emulsified water into larger water droplets to further realize the purification of the liquid.

Equivalent Facet



Typical Model Codes:

CA11-3	CA11-8	CA11-9	CA11-5	CAA11-5	CM-11-5
CA14-3	CA14-8	CA14-9	CA14-5	CAA14-5	CM-14-5
			CA14-5SB	CAA14-5SB	CM-14SB-5
CA22-3	CA22-8	CA22-9	CA22-5	CAA22-5	CM-22-5
			CA22-5SB	CAA22-5SB	CM-22SB-5
CA28-3	CA28-8	CA28-9	CA28-5	CAA28-5	CM-28-5
CA28-3SB	CA28-8SB	CA28-9SB	CA28-5SB	CAA28-5SB	CM-28SB-5
CA33-3	CA33-8	CA33-9	CA33-5	CAA33-5	CM-33-5
CA33-3SB	CA33-8SB	CA33-9SB	CA33-5SB	CAA33-5SB	CM-33SB-5
CA38-3	CA38-8	CA38-9	CA38-5	CAA38-5	CM-38-5
CA38-3SB	CA38-8SB	CA38-9SB	CA38-5SB	CAA38-5SB	CM-38SB-5
CA43-3	CA43-8	CA43-9	CA43-5	CAA43-5	CM-43-5
CA43-3SB	CA43-8SB	CA43-9SB	CA43-5SB	CAA43-5SB	CM-43SB-5
CA56-3	CA56-8	CA56-9	CA56-5	CAA56-5	CM-56-5
CA56-3SB	CA56-8SB	CA56-9SB	CA56-5SB	CAA56-5SB	CM-56SB-5

Equivalent Faudi



Typical Model Codes:

A.1-559	MIL.1-842	K.1-842	P.1-842	D.1-362
A.1-842	MIL.3-467	K.3-467	P.3-467	D.1-842
A.3-842	MIL.3-559	K.3-559	P.3-559	D.6-467
A.4-727	MIL.3-842	K.3-842	P.3-842	DC.1-842-xx
A.4-842	MIL.3-965	K.3-965	P.3-965	DC.4-279-xx
A.6-467	MIL.4-279	K.4-279	P.4-279	DC.4-362-xx
A.6-842	MIL.4-362	K.4-362	P.4-362	DC.4-559-xx
Y.1-842/5	MIL.4-559	K.4-559	P.4-559	DC.4-727-xx
Y.4-467/5	MIL.4-727	K.4-727	P.4-727	DC.4-842-xx
Y.4-559/5	MIL.4-842	K.4-842	P.4-842	DC.4-1093-xx
Y.4-842/5	MIL.4-965	K.4-965	P.4-965	DC.4-1422-xx
Y.6-362/5	MIL.4-1093	K.4-1093	P.4-1093	DC.7-362-xx
Y.6-559/5	MIL.4-1422	K.4-1422	P.4-1422	DC.7-559-xx
Y.6-842/5	MIL.7-362	K.7-362	P.7-362	DC.7-727-xx
Y.7-362/5	MIL.7-559	K.7-559	P.7-559	DC.7-842-xx
Y.7-842/5	MIL.7-727	K.7-727	P.7-727	DC.7-1093-xx
Y.7-1422/5	MIL.7-842	K.7-842	P.7-842	DC.7-1422-xx
MIL.6-362	MIL.7-965	K.7-965	P.7-965	
MIL.6-559	MIL.7-1093	K.7-1093	P.7-1093	
MIL.6-842	MIL.7-1422	K.7-1422	P.7-1422	

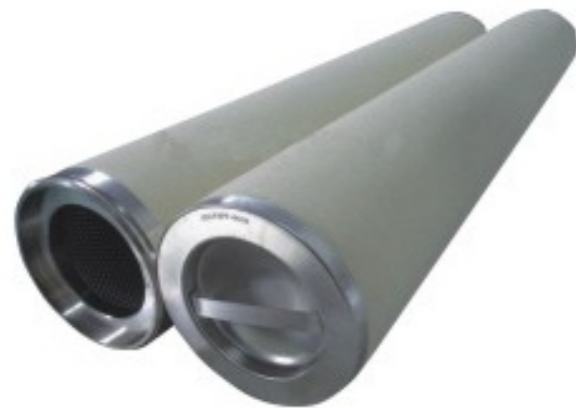
Equivalent Velcon

Typical Model Codes:

I-614C5TB	I-614C5
I-622C5TB	I-622C5
I-628C5TB	I-628C5
I-633C5TB	I-633C5
I-638C5TB	I-638C5
I-644C5TB	I-644C5
I-656C5TB	I-656C5



Equivalent Pall



Typical Model Codes:

LCS2B1AH	LCS06PXSH	CC3LGA7H13	CS604LGDH13
LCS4B1AH	LCS2PXSH	CC3LGB7H13	CS604LGBDH13
LCS2H1AH	LCS4PXSH	CC3LG02H13	CS604LGT2H13
LCS4H1AH	LSS2F1H	CS604LGH13	CS604LGT2DH13
LCS2H2HH	LSS2F2H	CS604LGBH13	CS604LGBT2H13
LCS4H2HH	NGGC-324-PL-01	NGGC-336-PL-01	CS604LGBT2DH13

Separator Filter Element

Introduction:

The separator filter element is made of special hydrophobic material. When the liquid passes through the separator filter element, the water beads are kept outside the filter element, and the liquid flows through the filter element and is finally discharged from the outlet. The water droplets kept outside the filter element gather with each other, gradually increase in size, and then settle into the water storage tank at the bottom of the container due to gravity.

Equivalent Facet



ST318FA-5	ST630FD-5	SS318FA-5	SS630FD-5	SM-318FA-5	SM-30FD-5
ST324FA-5	ST630FE-5	SS324FA-5	SS630FE-5	SM-324FA-5	SM-30FE-5
ST412FC-5	ST630FF-5	SS412FC-5	SS630FF-5	SM-412FC-5	SM-30FF-5
ST415FB-5	ST633FB-5	SS415FB-5	SS633FB-5	SM-415FB-5	SM-33FB-5
ST417FB-5	ST633FD-5	SS417FB-5	SS633FD-5	SM-417FB-5	SM-33FD-5
ST422FC-5	ST636FB-5	SS422FC-5	SS636FB-5	SM-422FC-5	SM-36FB-5
ST424FB-5	ST636FD-5	SS424FB-5	SS636FD-5	SM-424FB-5	SM-36FD-5
ST430FB-5	ST636FE-5	SS430FB-5	SS636FE-5	SM-430FB-5	SM-36FE-5
ST432FC-5	ST636FF-5	SS432FC-5	SS636FF-5	SM-432FC-5	SM-36FF-5
ST436FB-5	ST638FD-5	SS436FB-5	SS638FD-5	SM-436FB-5	SM-38FD-5
ST609FB-5	ST640FD-5	SS609FB-5	SS640FD-5	SM-09FB-5	SM-40FD-5
ST609FF-5	ST640FE-5	SS609FF-5	SS640FE-5	SM-09FF-5	SM-40FE-5
ST611FD-5	ST640FF-5	SS611FD-5	SS640FF-5	SM-11FD-5	SM-40FF-5
ST612FB-5	ST643FB-5	SS612FB-5	SS643FB-5	SM-12FB-5	SM-43FB-5
ST614FD-5	ST643FD-5	SS614FD-5	SS643FD-5	SM-14FD-5	SM-43FD-5
ST616FD-5	ST644FB-5	SS616FD-5	SS644FB-5	SM-16FD-5	SM-44FB-5
ST618FB-5	ST644FD-5	SS618FB-5	SS644FD-5	SM-18FB-5	SM-44FD-5
ST622FD-5	ST644FE-5	SS622FD-5	SS644FE-5	SM-22FD-5	SM-44FE-5
ST624FB-5	ST644FF-5	SS624FB-5	SS644FF-5	SM-24FB-5	SM-44FF-5
ST624FE-5	ST648FD-5	SS624FE-5	SS648FD-5	SM-24FE-5	SM-48FD-5
ST624FF-5	ST648FF-5	SS624FF-5	SS648FF-5	SM-24FF-5	SM-48FF-5
ST629FD-5	ST656FB-5	SS629FD-5	SS656FB-5	SM-29FD-5	SM-56FB-5
ST630FB-5	ST656FF-5	SS630FB-5	SS656FF-5	SM-30FB-5	SM-56FF-5

Equivalent Faudi



60.644-179/D	60.6C4-179/D	60.444-179/D	60.4C4-179/D	60.648-179/D	60.649-179/D	60.655-179/D	60.677-179/D
60.644-235/D	60.6C4-235/D	60.444-235/D	60.4C4-235/D	60.648-235/D	60.649-235/D	60.655-235/D	60.677-235/D
60.644-279/D	60.6C4-279/D	60.444-279/D	60.4C4-279/D	60.648-279/D	60.649-279/D	60.655-279/D	60.677-279/D
60.644-300/D	60.6C4-300/D	60.444-300/D	60.4C4-300/D	60.648-300/D	60.649-300/D	60.655-300/D	60.677-300/D
60.644-362/D	60.6C4-362/D	60.444-362/D	60.4C4-362/D	60.648-362/D	60.649-362/D	60.655-362/D	60.677-362/D
60.644-407/D	60.6C4-407/D	60.444-407/D	60.4C4-407/D	60.648-407/D	60.649-407/D	60.655-407/D	60.677-407/D
60.644-430/D	60.6C4-430/D	60.444-430/D	60.4C4-430/D	60.648-430/D	60.649-430/D	60.655-430/D	60.677-430/D
60.644-526/D	60.6C4-526/D	60.444-526/D	60.4C4-526/D	60.648-526/D	60.649-526/D	60.655-526/D	60.677-526/D
60.644-565/D	60.6C4-565/D	60.444-565/D	60.4C4-565/D	60.648-565/D	60.649-565/D	60.655-565/D	60.677-565/D
60.644-600/D	60.6C4-600/D	60.444-600/D	60.4C4-600/D	60.648-600/D	60.649-600/D	60.655-600/D	60.677-600/D
60.644-626/D	60.6C4-626/D	60.444-626/D	60.4C4-626/D	60.648-626/D	60.649-626/D	60.655-626/D	60.677-626/D
60.644-700/D	60.6C4-700/D	60.444-700/D	60.4C4-700/D	60.648-700/D	60.649-700/D	60.655-700/D	60.677-700/D
60.644-727/D	60.6C4-727/D	60.444-727/D	60.4C4-727/D	60.648-727/D	60.649-727/D	60.655-727/D	60.677-727/D
60.644-756/D	60.6C4-756/D	60.444-756/D	60.4C4-756/D	60.648-756/D	60.649-756/D	60.655-756/D	60.677-756/D
60.644-820/D	60.6C4-820/D	60.444-820/D	60.4C4-820/D	60.648-820/D	60.649-820/D	60.655-820/D	60.677-820/D
60.644-842/D	60.6C4-842/D	60.444-842/D	60.4C4-842/D	60.648-842/D	60.649-842/D	60.655-842/D	60.677-842/D
60.644-900/D	60.6C4-900/D	60.444-900/D	60.4C4-900/D	60.648-900/D	60.649-900/D	60.655-900/D	60.677-900/D
60.644-965/D	60.6C4-965/D	60.444-965/D	60.4C4-965/D	60.648-965/D	60.649-965/D	60.655-965/D	60.677-965/D
60.644-1012/D	60.6C4-1012/D	60.444-1012/D	60.4C4-1012/D	60.648-1012/D	60.649-1012/D	60.655-1012/D	60.677-1012/D
60.644-1093/D	60.6C4-1093/D	60.444-1093/D	60.4C4-1093/D	60.648-1093/D	60.649-1093/D	60.655-1093/D	60.677-1093/D
60.644-1130/D	60.6C4-1130/D	60.444-1130/D	60.4C4-1130/D	60.648-1130/D	60.649-1130/D	60.655-1130/D	60.677-1130/D
60.644-1204/D	60.6C4-1204/D	60.444-1204/D	60.4C4-1204/D	60.648-1204/D	60.649-1204/D	60.655-1204/D	60.677-1204/D
60.644-1226/D	60.6C4-1226/D	60.444-1226/D	60.4C4-1226/D	60.648-1226/D	60.649-1226/D	60.655-1226/D	60.677-1226/D
60.644-1244/D	60.6C4-1244/D	60.444-1244/D	60.4C4-1244/D	60.648-1244/D	60.649-1244/D	60.655-1244/D	60.677-1244/D
60.644-1422/D	60.6C4-1422/D	60.444-1422/D	60.4C4-1422/D	60.648-1422/D	60.649-1422/D	60.655-1422/D	60.677-1422/D

Equivalent Velcon



SO-424V	SO-624VA5	SO-640VA5
SO-424V5	SO-630VA	SO-640PV5
SO-430V	SO-630PV5	SO-644V
SO-436V	SO-633VA	SO-644VA5
SO-614VA5	SO-633VA5	SO-644PV5
SO-623VA5	SO-636PV5	SO-648V
SO-624V5	SO-640V	SO-648V5
SO-624VA	SO-640V5	SO-646V5

Natural Gas Filter Element

Natural gas filter element is suitable for gas-liquid and liquid-solid separation of natural gas, artificial gas and other non-corrosive gases, such as nitrogen, carbon dioxide, propane, butane, etc. It is a necessary separation and purification equipment component of natural gas gathering and transportation pipeline, gas gathering station, pressure station, sub-transmission station, pigging station, terminal station and various application fields. It can effectively filter the dirt in the pipeline and the peeling debris of the pipe wall, so as to ensure the safe operation of the gas transmission and gas equipment, and meet the quality requirements of the pipeline transportation and users. Among them, the demand for coalescing filter element is very large.

PCHG series

PCHG-12	PCHG-312	PCHG-372
PCHG-24	PCHG-324	PCHG-536
PCHG-36	PCHG-336	PCHG-572



FG series

FG-12	FG-36	FG-336
FG-24	FG-312	FG-536



G series

G0.5	G1.5	G2.5	G3.5	G5.0
G1.0	G2.0	G3.0	G4.0	G6.0



JFG series

JFG-12	JFG-36	JFG-312	JFG-336	JFG-536
JFG-24	JFG-72	JFG-324	JFG-372	JFG-572

JMG series

JMG-12	JMG-36	JMG-312	JMG-336	JMG-536
JMG-24	JMG-72	JMG-324	JMG-372	JMG-572



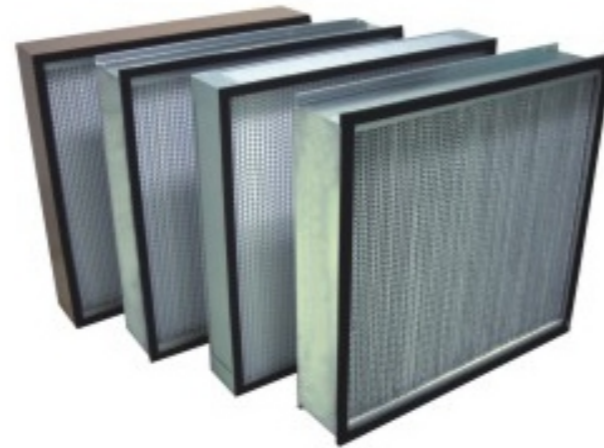
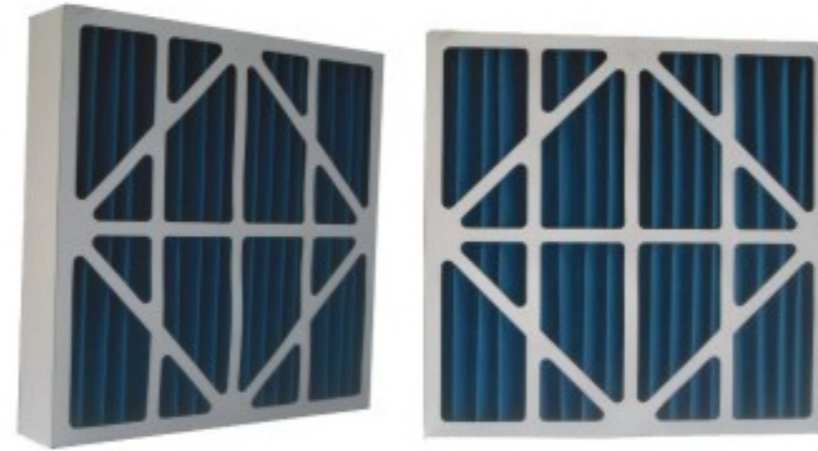
JFS series

JFS-312	JFS-336	JFS-372	JFS-524	JFS-548
JFS-324	JFS-348	JFS-512	JFS-536	JFS-572

Air Filtration



Dust Filter Bag



Filter cartridge



Hepa Filter

Dust Collector



Application

The filtration products were used for Power Plant ,Steel Plant ,Cement Plant,Oil&Gas field, Petrochemical, Refineries, Paper mills,Textile,Mine,Railway,Food and beverage, Paint & pigments , and other industrial sectors.



Power plant



Steel plant



Cement Plant



Marine Service



Chemical



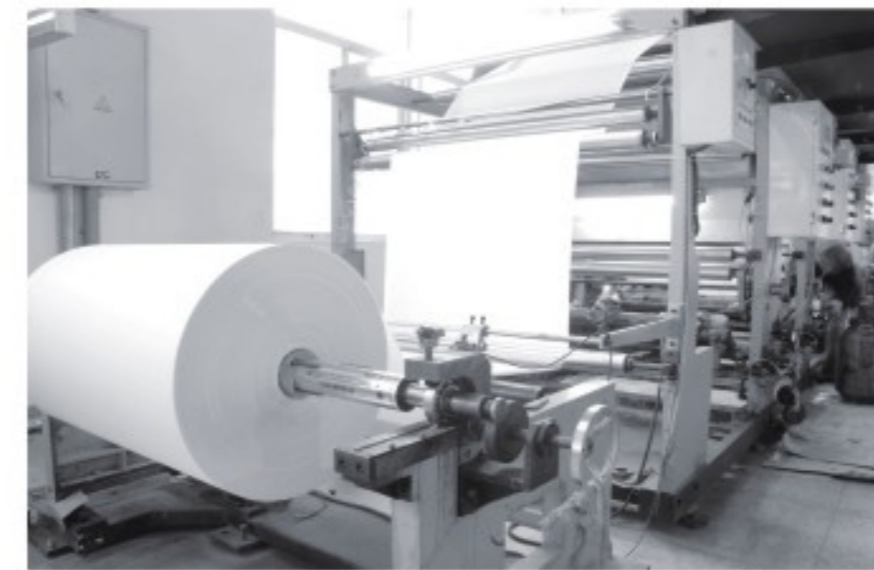
Mining



Oil & Gas



Pharmaceutical



Pulp & Paper



Shipbuilding

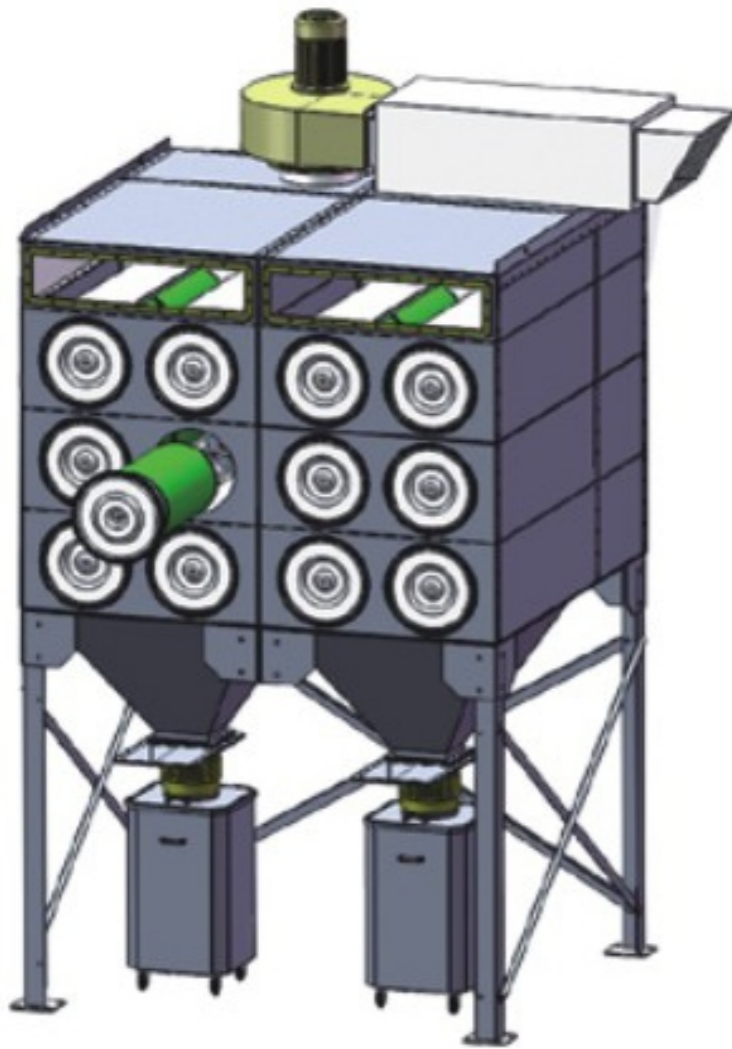


Woodworking

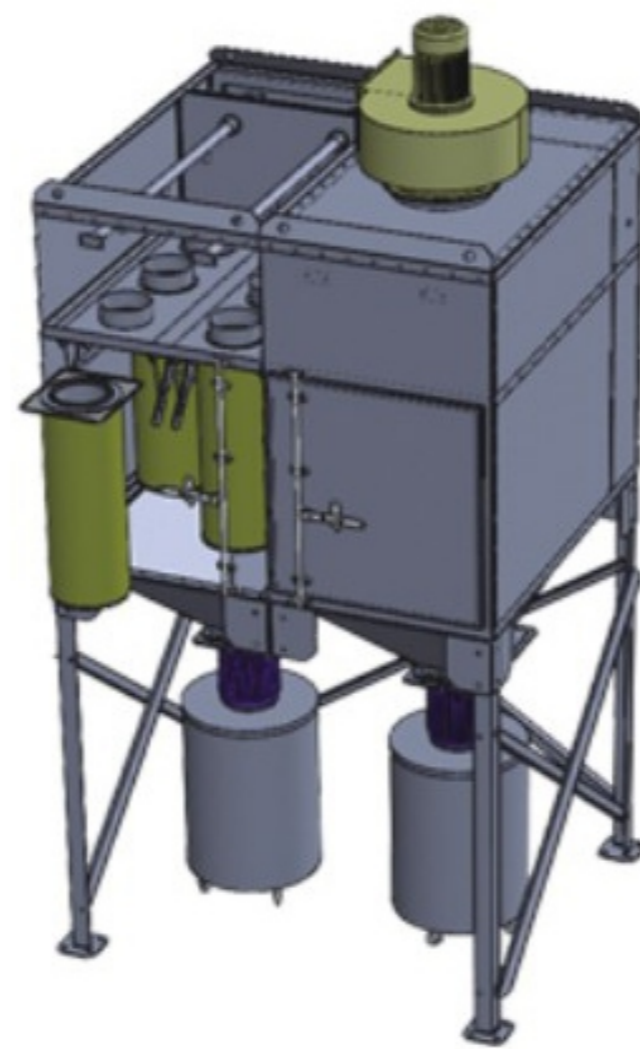


Powder Coating

Cartridge Dust Collectors



Horizontal Cartridge Dust Collector



Vertical cartridge Dust Collector

Descriptions

The cartridge dust collector is operated under negative pressure. The dust-containing gas enters the tank through the air inlet; Under the action of the negative pressure in the folding filter cartridge, the gas enters the cylinder through the filter material outside the cylinder, and then enters the clean air chamber, and finally the clean gas is discharged from the air outlet. When the dust accumulates on the surface of the filter material, the resistance is getting larger and larger (can also be set by time), the pulse valve is opened, the compressed air is directly sprayed into the center of the filter cartridge, and the filter cartridge is sequentially pulsed to remove the dust, and the dust on the surface of the filter cartridge is purged.

Features

- 1.High dust removal efficiency, it can filter fine dust.
2. Modular combination, small size and easy installation.
- 3.Simple operation and easy maintenance.
- 4.Low resistance loss. The maximum resistance of the equipment is not more than 1500Pa.

Applications

Metal working, mineral, cement, shipbuilding, painting, welding smoke, tobacco, cleaning (spray) pills, electricity, food, chemicals, building materials.

Technical Data

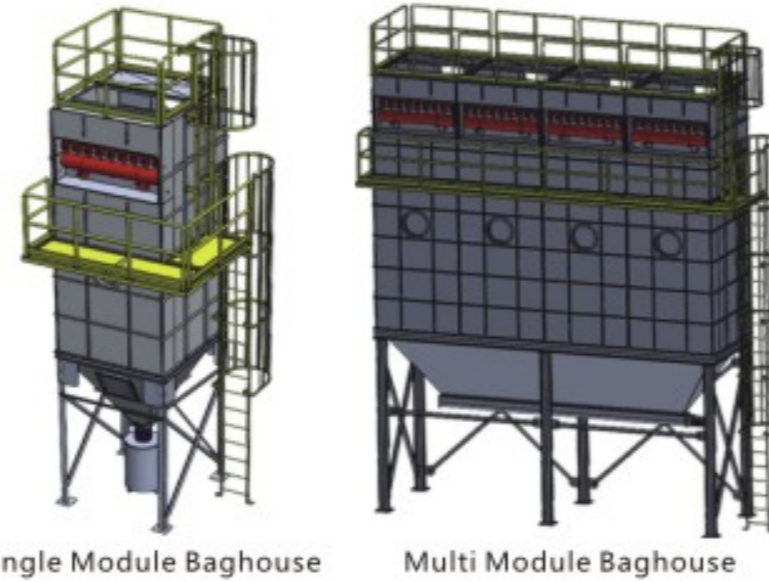
Model	Cartridge Numbers	Filter Area(Sq.M)*	Valve Numbers	Standard Container Loading Numbers		
				20GP	40GP	40HQ
CDHR 2-8	8	184	4	4	9	9
CDHR 2-12	12	276	6	3	7	7
CDHR 2-16	16	368	8	2	5	5
CDHR 2-24	24	552	12	1	3	3
CDHR 2-36	36	828	18	1	2	2
CDHR 3-12	12	276	6	4	9	9
CDHR 3-24	24	552	12	2	4	4
CDHR 3-36	36	826	18	1	3	3
CDHR 3-48	48	1104	24	1	2	2
CDHR 3-60	60	1380	30	1	1	1
CDHR 3-72	72	1656	36	0	1	1
CDHR 4-16	16	368	8	4	8	8
CDHR 4-32	32	736	16	2	4	4
CDHR 4-48	48	1104	24	0	0	3
CDHR 4-64	64	1472	32	0	0	2
CDHR 4-80	80	1840	40	0	0	1
CDHR 4-96	96	2208	48	0	0	1
CDHR 4-112	112	2576	56	0	0	1
CDHR 4-128	128	2944	64	0	0	1

* The filter areas are based on the filters with cellulose media. Please contact us for filter area with other filter media

Bag Dust Collectors

Descriptions

Baghouse dust collectors are using needle felt bags for filtering and reverse pulse compressed air to clean filters. After the dust loading gas enters the filter chamber, the dusts are filtered on the surface of bags, and clean air is discharged from the top of the filter bags. When the differential pressure across the bags reaches a certain value, the compressed air will be blown into the center of bags through nozzles, leading the surrounding air into the bags. The expansion force inside the bags will blow off the dusts on the bag surfaces. The bags restore their pressure drop and recover the filtration performance.



Features

1. The total system is modular design. Each modular can be shipped in a standard container, greatly saving the shipping freight.
2. Most components pre-installed in factory to minimize installation on site. No welding work is required on site, which allows the quickest erection of system.
3. Low pressure high filtration efficiency needle felt bags let the baghouse system work under lowest energy consumption.
4. Advanced pulse clean technology makes the compressed air consumption to a minimum, effectively reduces the operation cost.
5. Special deflector chamber on the inlet entry effectively knock down the large particles to hopper directly. Protecting the bags and increasing their lives.
6. Each modular is available in different height to accommodate different airflow. Inlet and outlet are special designed to achieve optimal airflow.
7. Minimum maintenance and tool-free maintenance for filter bags & cages. Easy access doors on top of dust collectors.
8. Specially designed pulse valve chamber to protect the valves and control the pulse cleaning noise.

Application

Cement, Woodworking, Chemical, Foundry, Furnace, Grain, Lime, Asphalt, Rubber, Glass, Plastic, Mineral, Ceramics, Stone crushing, Battery, Pigment, Abrasive blasting

Specifications

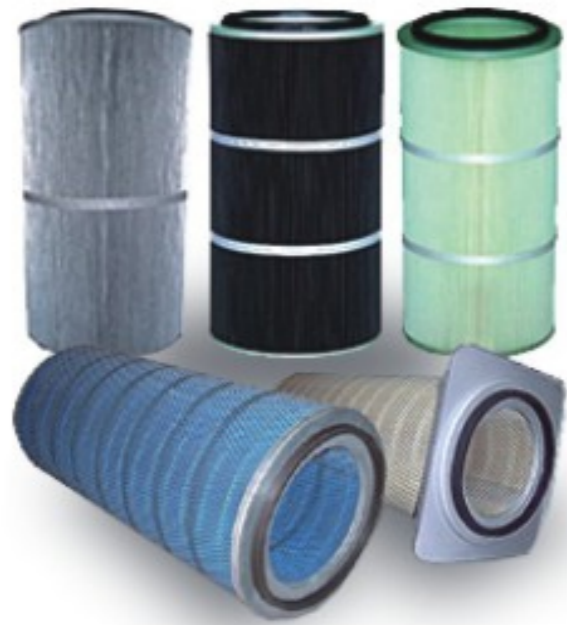
Model	Bag Size	Bags	Filter Area	Airflow
MC20	Φ130MM * L: 2000MM	100	81 M2	9600CMH
MC25	Φ130MM * L: 2500MM	100	102 M2	12000CMH
MC30	Φ130MM * L: 3000MM	100	122 M2	14400CMH
MC35	Φ130MM * L: 3500MM	100	142 M2	16800CMH
MC40	Φ130MM * L: 4000MM	100	162 M2	19200CMH
MC45	Φ130MM * L: 4500MM	100	183 M2	21600CMH

1) Unit for drawing: mm; 2) Filter area: Sq. M.

Dust Collector Structure



Cellulose Cartridge Filter



Filter Media Types

- 100% cellulose
- Cellulose/Polyester blend
- Cellulose with flame retardant treatment

Features

- Lowest energy consumption to save cost
- Great filter surface and airflow
- Uniform pleat spacing is maintained

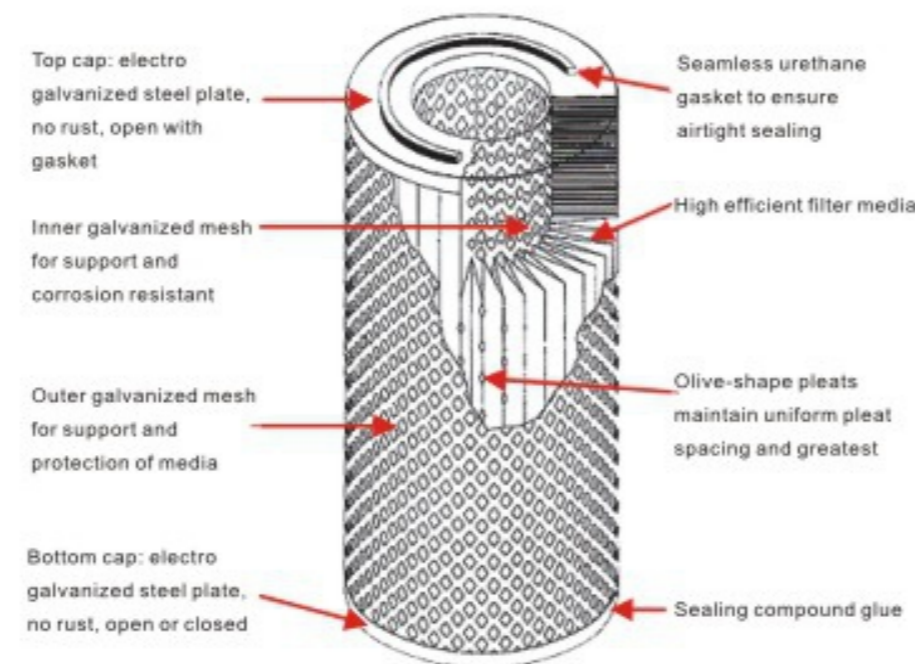
Applicable Temperature: 65°C

Typical Applications

A wide applications, dry and granular shaped particulate such as Metal working, Shot Blasting, Mining industry, Tobacco, Chemical, Gas turbine, Compressor, and dust removal.

Specifications

Model	O.D	I.D	Length	Diameter of hole
LF/Z3266	Φ324mm	Φ213mm	660mm	Φ14
LF/Z3275	Φ324mm	Φ213mm	750mm	Φ14
LF/Z3566	Φ352mm	Φ241mm	660mm	Φ16
LF/Z3288	Φ324mm	Φ213mm	880mm	Φ16
LF/Z3290	Φ324mm	Φ213mm	915mm	Φ16



Gas Turbine Air Intake Filter Cartridge



Descriptions

1. Gas Turbine Air Intake Filter cartridges are modern and reliable for gas turbines and Air compressors .
2. They ensure high efficient filtration of dust and other contaminants even in the most polluted environments.
3. Normally these are made of mixture of polyester & cellulose and Nanofiber media.
4. These media have much better pleat ability & dimensional stability.

Specifications

Model	Shape	O.D(mm)	I.D(mm)	Length(mm)	Filter area(m ²)
LF-01	cylinder	324	213	559(22")	18
LF-02	cylinder	324	213	660(26")	21
LF-03	cylinder	324	213	700(27.5")	22.3
LF-04	cylinder	324	213	735(29")	23.5
LF-05a	cylinder	408	293	875(34.5")	33.2
LF-05b	cylinder	408	293	559(22")	21.6
LF-06(twist lock)	cylinder	324	213	865(34")	25
LF-01	cone	445-324	330-213	660(26")	23.3
LF-02	cone	324-250	213-134	660(26")	16.4
LF-03	cone	408-324	293-213	711(28")	23
LF-04(twist lock)	cone	408-324	293-213	925(36.6")	34.3
LF-01(TenKay type)	cylinder	324Top cap size:406×362	213	668(26.3")	22
LF-02(TenKay type)	cylinder	324Top cap size:406×362	213	875(34.5")	28

Note: Accept the replacement Donaldson Air Filter.

Polyester Cartridge Filter



Filter Media Types

- 100% spun bond polyester
- Polyester with antistatic treatment
- Polyester with oil & water repellent treatment
- Polyester with PTFE membrane

Features

1. Durable and rigid material, washable
2. Excellent resistance against electric conductance, oil and water
3. Wide pleat spacing and smooth, hydrophobic PTFE provides excellent dust cake release
4. Highest filter efficiency to meet the stringent efficiency requirements
5. Excellent resistance to chemical erosion

Applicable Temperature: 120°C

Typical Applications

Filtration for very fine dust types in Metal, Woodworking, Chemical, Pigment, Cement, Food Paper, Plastic, Sandblasting, Powder Coating, Welding Fume, Foundry, Pharmaceutical and other sticky agglomerative dust collections.

Specifications

Model	O.D	I.D	Length
LF/P3266	Φ324mm	Φ213mm	660mm
LF/P3566	Φ352mm	Φ241mm	660mm
LF/P3275	Φ324mm	Φ213mm	750mm
LF/P3288	Φ324mm	Φ213mm	880mm
LF/P3290	Φ324mm	Φ213mm	915mm

Pleated Bag Filters



Filter Media Types

- Water and oil repellent treatment.
- Antistatic treatment.
- PTFE membrane treatment.

Features

- (1) World famous brand filter media: 100% spun bond polyester Smooth surface of filters.
- (2) Highest filter efficiency more than 99.99% Proper number of pleats, wide and rigid pleats Large Length-to-OD ratio.
- (3) Offers excellent dust release Incorporate design according to requirements Various installation options available.
- (4) Airtight gasket accessories available Applications in many temperatures conditions.

Specifications

Model	Filter area	Length	Cartridge (2mLength)	Media Weight	Air permeability	Media type
LF-P1	2.3m ²	1m	135°C	270g/m ²	7m ³ /m ² /min 12mm WC	Spun bond polyester
LF-P2	4.6m ²	2m	135°C	270g/m ²	7m ³ /m ² /min 12mm WC	Spun bond polyester
LF-D1	2.3m ²	1m	135°C	270g/m ²	7m ³ /m ² /min 12mm WC	Antistatic Spun bond polyester
LF-D2	4.6m ²	2m	135°C	270g/m ²	7m ³ /m ² /min 12mm WC	Antistatic Spun bond polyester
LF-F1	2.3m ²	1m	135°C	270g/m ²	7m ³ /m ² /min 12mm WC	Spun bond polyester + PTFE
LF-F2	4.6m ²	2m	135°C	270g/m ²	7m ³ /m ² /min 12mm WC	Spun bond polyester + PTFE
LF-N1	2.3m ²	1m	190°C	500g/m ²	7m ³ /m ² /min 12mm WC	
LF-N2	4.6m ²	2m	190°C	500g/m ²	12m ³ /m ² /min 12.7mm WC	

Inquiry details: Filter dimension ,Media,Image ,Filter Area,ect.

Filter Bag



Cement Industry

1. The head and tail of the rotary kiln: It generally uses high temperature bag (glass fiber mat, fluorine mae).
2. Shaft kiln: glass fiber filter bags are generally used.
3. Others: Polyester needle-punched felt, waterproof and oil-resistant needle-punched felt and antistatic needle-punched felt are used.



Metallurgical Industry

- (1) Dust removal of the blast furnace gas: Fluorine needle-punched mat is commonly used.
 - (2) Dust removal of the taphole: Polyester needle-punched felt is generally used.
- Steelworks: Polyester needle-punched felt (or mat) or coating needle-punched felt (or mat) is used by electric furnace or converter.

Sintering plants

- (1) Head of the sintering machine: High-temperature glass fiber needle-punched felt is commonly used.
- (2) Tail the sintering machine: Polyester needle-punched felt (or mat) or coating needle-punched felt (or mat) is used.

Power Industry

Dust removal of the boiler in the power plant: Imported PPS (polyphenylene sulfide) needle felt is generally used, but some manufacturers also use imported glass fiber coated filter bag or METAX filter bag.

Carbon Black Industry

Generally used is glass fiber needle felt with PTFE post-processing, but sometimes bulk yarn glass fiber filter bag is also used.

Calcium Carbide And Ferroalloy Industry

Glass fiber filter bag is commonly used, but sometimes fluorine mae filter bag or glass fiber mat filter bag is also used.

Common specifications are as follows, but special size can be customized.

133*1000	133*1500	133*2000	133*2450	133*3000
160*1500	160*3000	160*6000	300*2000	600*4000

Customize as your required sizes

The above are commonly used products. As for other special industries, on-site visit will be needed and the choice can also be made according to the bag material used before. Anyway we will make every effort to achieve accuracy and customize special specifications.

Bag Cage



Descriptions

Bag cages are ribs of a filter bag and it should be light and easy for installation and maintenance. The quality of a frame has a direct bearing on the filtering state and service life of a filter bag.

Cage Style

Round, oval, flat, envelope style

Cage Material

Low carbon steel, galvanized steel, stainless steel

Cage Vertical wires

8, 10, 12, 18, 20 even 24 vertical wires available

Cage Top

Roll flange, roll flange with venture, roll band low groove, straight flange, and multi-pieces body design

Cage surface treatment

Galvanizing, powder coat, antirust treatment, Teflon finish, epoxy finish and organic silicon coating.

HVAC Filter

Chemical fiber filter, efficiency specifications: G3-G4.
Aluminum frame can be cleaned and can automatically change filter material; paper frame is disposable
It is generally used in simple first-level filtering air conditioning and ventilation system.

Specifications:

595x595x46 (G3, G4)	290x595x46 (G3, G4)
595x595x96 (G3, G4)	290x595x96 (G3, G4)



Panel Filter

Glass fiber filter material, efficiency specifications: G2-F6, metal frame, long glass fiber, replaceable filter material.
It is generally used in coarse dust filtration and high temperature oven in Automobile Coating Factory

Specifications:

595x595x46 (G3, G4)	290x595x46 (G3, G4)
595x595x96 (G3, G4)	290x595x96 (G3, G4)



High Efficiency HEPA Filter

With Pleat HEPA filter: classic high efficiency filters, efficiency specifications: 99.99% (sodium flame method)
Without Pleat HEPA filter: clean room terminal HEPA filter, efficiency specifications: 99.95%, 99.995%, 99.9995% (MPPS). International general specification, imported high-quality glass fiber filter paper.
Generally used in clean programs of each industry filtration, air conditioning of special requirements and processing air supply system.

Specifications:

610x610x150	305x610x150	915x610x150	1219x610x150
610x610x292	305x610x292	915x610x292	1219x610x292
320x320x220	484x484x220	726x848x220	968x484x220
630x630x220	315x630x220	945x630x220	1260x630x220
305x305x70	305x610x70	610x610x70	762x610x70
915x610x70	1219x610x70		
305x305x90	305x610x90	610x610x90	762x610x90
915x610x90	1219x610x90		



V Bank Air Filter

Chemical fiber filter material, efficiency specifications: F7—H10, burnt 100%;
Imported glass fiber filter material, efficiency specifications F6-F8, H10;
High strength, and used in inlet of the air filter of gas turbine and compressor.
Generally used in central air conditioning and industrial ventilation system.

Specifications:

592x592x292	287x592x292	490x592x292
-------------	-------------	-------------



Active Carbon Air Filter

- Application:
 - Used in the IAQ place. HVAC system. Used in the airport, hospital, semiconductor factor.
 - Biology company where require high air quality of the in-room environment.
- Type: Active carbon plank filter
- Frame: Stainless or aluminum frame
- Media: Active carbon
- Protect mesh: Aluminum mesh or spray iron mesh



Pocket Bag Filter

Imported glass fiber filter material, efficiency specifications: F5-F8, commonly used, long service life, stable performance, traditional product;
Imported chemical fiber filter material, efficiency specifications: F5-F8, environmental protection, flame retardant, popular nowadays.
The primarily-efficient f bag filter, efficiency specifications G3-G4, washable and cheap.
It is generally used in central air conditioning and central ventilation system

Specifications:

Type	3bag type	4bag type	5bag type	6bag type	8bag type	9bag type	10bag type	12bag type
G3, G4	287x592x350		490x592x350	592x592x350		897x592x350		
F5	287x592x60		490x592x600	592x592x500				
F6		287x592x650	287x592x650	490x592x650	592x592x650		592x592x650	
		287x592x550		490x592x550				
F7		287x592x650	287x592x650	490x592x650	592x592x650		592x592x650	
		287x592x550		490x592x550				
F8		287x592x650	287x592x650	490x592x650	592x592x650		592x592x650	592x592x650
		287x592x550		490x592x550				



Dust Collector Accessories

Centrifugal Fan

Centrifugal Fan have forward and backward curved blades, single and double inlet, with or without housing, ideal for general extraction and cabinet cooling applications. Additional dampers, silencers and speed controllers can be fitted on them.



Rotary Valve

Rotary airlock is special equipment applicable for unloading, packing, mixing, dust collection, metering, rationing conveying of solid materials (powder, particles and its mixtures) conveying system. Materials can be discharged equably and continuously to the downstream unit according to the conveying system requirements.

Diaphragm & Solenoid Valve

Diaphragm and solenoid valves work together for efficient operation of the dust collector cleaning system. They are the "switch" for compressed air in the dust clean blowing system. Controlled by the output signals of the pulse jet controller, they make dust clean to the filters by filters to keep the pressure drop of dust collector within the set range and thus guarantee the filtering functions and the efficiency of dust collector.



Pulse Valve Controller

Pulse valve controller is the main control equipment in the dust cleaning system of pulse jet dust collector. Its output signals control the solenoid valves, which spray and inject compressed air to clear dust from the filter elements in sequence.

The controller output pulse interval and pulse width are set according to the dust cleaning requirement of the dust collector to ensure that the system resistance remains within the set range.

Differential Pressure Gauge

Differential pressure gauge quickly indicates low air or non-corrosive gas pressures, either positive/negative or differential pressures. The design resists shock, vibration and over pressures. It is an industry standard to measure fan and blower pressures, filter resistance, air velocity, furnace draft, pressure drop across orifice plated, liquid levels with bubbler system and pressures in fluid amplifier or fluidic systems.



Venturi

Venturi is used to induce surrounding air to enhance cleaning. When pulse cleaning, the high speed airflow induces 5-8 times more than compressed air to blow into the filter elements. This causes filter elements expand instantly. Due to the reaction of airflow, the dusts loaded on the filter elements will be brushed off. Venturi greatly improves the pulse clean strength and effects, save the compressed air and energy.



Injection nozzle

High-velocity injection nozzle assembly makes airflow uniform in injection, not deviated from the center, lower resistance than direct tapping in the nozzle. The supersonic airflow formed by the hole in the nozzle enables surrounding air to enter the injection nozzle so that an expanded airflow may inject into the filter bag center, producing better dashing effects.

Bulk Head Connector

The bulk head connector consists of an aluminum alloy cast part, stainless punched part and rubber part and is for the connection of inner and outer pipe of airtight containers such as the connection between the blowing tube of pulse jet bag-house and rectangular pulse valve (batten wall mounted) and between submerged electromagnetic pulse valve and outlet pipe (head tank mounted). It can be reliably fixed and sealed without welding and is convenient for installation and maintenance.



Explosion Relief Vent

To avoid and minimize any possible explosion damage, explosion relief vents have to be used. They feature high pressure precision, large release area, excellent gas tight, safe and reliable. They can blow up at full opening under low pressures from 0.005MPa to 0.05MPa.

Material Level Sensor

Material level sensors are used to indicate the material levels. They give alarm signals when the dusts reach the set level in dust drums or bins.



DISTRIBUTOR



Vicargate Limited

www.vicar-gate.com, www.vicargate.net

12, Eshinlokun Street,
Oriente Industrial Area,
Sango Otta, 112001
Ogun State, Nigeria
West Africa

Tel: 234 (0) (802) 303-6858

234 (0) (805) 615-4450

Email: vicargate@yahoo.co.m

vicargate@hotmail.com