Provide The Best

FILTRATION SOLUTIONS

HEF SERIES AUTOMATIC BACKWASH FILTER

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FILAD

Worldwide Distributors / Agents

INTERNATIONAL ACCREDITED COMPANY 0046 BS EN ISO 9001 : 2008
Reg No.QAIC/TW/118139

MEMBER Water Quality ASSOCIATION

FILTRATION SYSTEM

FILAD FILTRATION SYSTEM

Provide The Best FILTRATION SOLUTIONS

About FILAD

With nearly 20 years of experience in producing filtration equipment for industrial fluids and continual endeavor, FILAD Filtration Industry Co., Ltd. has successfully entered the international market and won contracts from world-leading manufacturers with a superior brand image.

Specialized in the R&D and manufacture of precision filtration, FILAD offers a wide range of standard products as well as product customization service to tailor solutions for the specific needs of customers. With neither restriction nor boundary in our services, we are committed to be the "filtration consultant" of customers. As far as there are filtration needs, we will do the best of our best to create the optimal production value and the most benefit for customers.

Upholding "quality is basic, innovation is drive, operation internationalization, and new areas of specialization", to uncover new areas in filtration and to provide substantive services are our goals!

APPLICATION

Paper industry
Water Filtration: raw water, high- and low-pressure spray tube, water needle water, whitewater, seal water.
Paint additive filtration: coating liquid, liquid starch, sizing agents, calcium carbonate, latex.

Textile, Dyeing & Finishing industry
Raw water, dyes, wastewater recovery.

Chemical engineering
Cooling water circulation system, pre-protection device of heat exchanger, pre-filtering of filling, catalyst recovery, emulsions and dispersions, pipe scale removal, separation of benzene in the polymer, pre-filter protection device for pump.

Power plant
Thermal power: Industrial cooling water, seal water, boiler feed water pre-filtration.
Hydroelectric power: Bearing cooling water, generator oil cooler, floating ring seal water.

Water treatment
Well water, pipe scale or calcification, water reuse, raw water, floccule removal, ultra-filtration membrane pre-filter protection, RO membrane pre-filter protection, pre-filtration for membrane liquid purification.

Metal processing (metallurgy)
cooling water circulation system, nozzle, pre-filtration for pump, cooling lubricant (cutting fluid, cleaning fluid), precious metal recovery, pre-treatment filter, cleaning anti-rust and hydraulic oil on filter.

Paint and coating industry
(Paint industry and surface coating industry)
Paints and enamels: Clot suspension preparation, varnishes and enamel clots, solvents, impurities formed in the storage, packaging line and hybrid line filter, monomer purification.

Food & Beverage industry
Beer membrane filtration, removal of oil impurities, pre-filtering of filling, syrup filtering, filtration of suspended solids and sediments in beverages.

Automotive industry
Cooling lubricants (cutting fluids, cleaning fluid), pre-coating filtration, electrophoresis paint, bottom paint, varnishes, paint loop filters, parts cleaning fluid, filling compounds, lubricants, metal working fluid.

Electronics industry
Recycling filtration for waste water from wafer grinding, pure water pre-filtering, pre-filtration for membrane filter, cooling water, chemical drug pulp, PCB ink, zinc solution sediments.

Pharmaceutical industry
Recycling of active raw materials, catalysts, removal of activated carbon, medicinal syrups, plant extracts, pH value adjustment liquid, pre-filtration for crystal liquid, gelatin filtering.

Petroleum industry
Oil field injection water, pipeline rinse water, pre-filtration for high-pressure pump.

Other
Mining industry, electroplating industry, steel industry, ink industry, refining industry, agricultural irrigation.

FILAD FILTRATION SYSTEM

HEF SERIES - AUTOMATIC BACKWASH FILTER

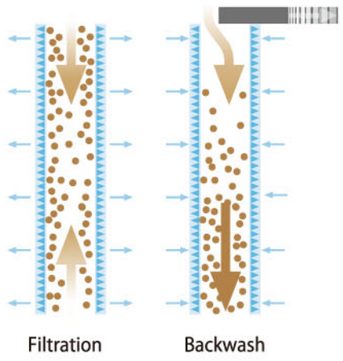
Our new FILAD HEF Series - Automatic Backwash Filter - permit the device to have a longer product life cycle and lower maintenance frequency so as to bring out the lowest operating costs, precise filtration, reliable continuous filtration, and create a perfect combination of economy and efficiency.

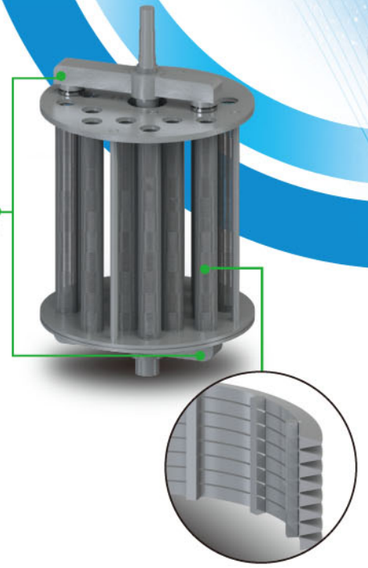
Perfect Coordination of *Economy & Efficiency*

OPERATING PRINCIPLE

The filter is equipped with high precision wedge wire screen made in Europe. It has a cylindrical screen design with two openings, from which filtering fluid flows into the screen. After filtration through the screen, filtered particles of solid impurities are accumulating at the surface of the screen, making the best of the entire filter area.

When the volume of impurity reaches the level that calls for cleaning, a pressure difference detector will send a signal to start the backwash system. Electric motor will start backwash system which will then drive the rotative arm located on the top of screen to turn around, and cover the screen, while a rotative backwash arm at the bottom will turn to the corresponding opening at the bottom of the filter screen. The discharging valve will be automatically open, which will create a high-speed flow moving vertically in the screen.





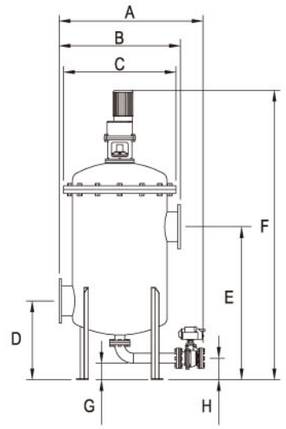
The covering movement of the upper rotative arm against the corresponding opening on the filter top produces a decelerating horizontal flow supporting the backwash operation, making the backwash energy evenly distributed on the whole length of the screen. A horizontal backwash with high-speed vertical flow cleans uniformly the interior area of the screen, so as to achieve the best effect of backwashing.

HEF Series - Automatic Backwash Filter has the multiple screens design. Every time the automatic backwashing system is turned on, a backwash cycle will start and clean screens one by one. But only one single screen will be cleaned once, while other screens are keeping filtration procedures on, which ensures the function of on-going filtration.

The high-efficiency backwash system works with the high-quality stainless steel wedge wire screen, which prevent the filter from clogging effectively. It reduces the frequency of screen replacement, demand for labor and the cost of spare parts consumption. That achieves the perfect balance between economy and efficiency.

ADVANTAGES & CHARACTERISTICS

- Extended product life
- Automatic backwash device
- User-friendly design, easy operation
- Low-frequency maintenance
- Low running costs
- Quick and easy cleaning and maintenance
- Large filtration area
- Modular design, permitting a variety of combinations and changes
- Great filtration precision and efficiency



	HEF400 Caliber 4"	HEF600-800 Caliber 5"	HEF1000-1200 Caliber 6"	HEF1400-1600 Caliber 8"
A	1035	1134	1220	1300
B	829	917	1015	1095
C	730	830	935	1015
D	682		692	712
E	1333		1381	
F	2564		2614	
G	150			
H	195			

(Unit : mm)

TECHNICAL SPECIFICATIONS

General Information

Model (Large capacity models are available on demand)	HEF-400	HEF-600	HEF-800	HEF-1000	HEF-1200	HEF-1400	HEF-1600
Operating pressure (Bar)	0~15(Pressure can be increased on customers' demand)						
Inlet and outlet size (Inch)	2", 3", 4", 5", 6", 8", 10", 12", 14"						
Maximum operating temperature (°C)	200	200	200	200	200	200	200

Cleaning Information

Discharging valve size (Inch)	3"						
Backwash system trigger mechanism	Pressure detection and time settings						
Backwash media	Filtered liquid						
Backwash cycle time (Sec)	30	40	50	35	40	45	50
Minimum washing volume (L)	10	16	22	28	34	40	46

Electronic Control Information

Motor (HP)	1/2
Control voltage (V)	220V
Rated voltage (V)	Option 3 phase,220 / 380 / 440V, 50 / 60Hz
Pressure (Kg/cm⊠)	5.0

Manufacturing materials

Filter body	SUS 304 / SUS 316
Screen	SUS 316L
Discharging valve	SUS 304 / SUS 316
Gasket	PE/PP/TEFLON
Control box	SUS 304/SUS 316

Screens and Filtration Precision

Filtration precision (Micron)	10	25	50	80	100	125	150	200	300	500
Wedge wire screen		●	●	●	●	●	●	●	●	●
Sintered metal mesh	●									

Flow Table and Opening Area

Filtration precision (Micron)	10	25	50	75	100	125	150	200	300	500
The processing amount (L/min)	46	116	232	337	433	541	633	976	1135	1420
Filtration area (mm⊠)	203,575									

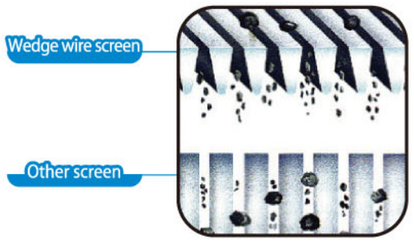
* The above information shows reference data for a single screen, of which the flow volume is tested on the basis of the water velocity of 1M/Sec.

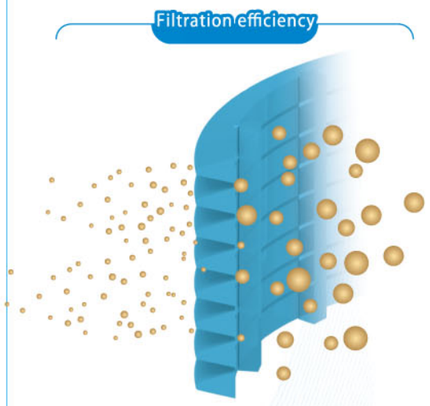
FILAD

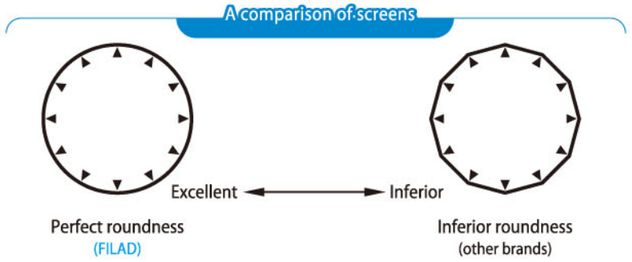
WEDGE WIRE SCREEN

DESCRIPTION

The filter is perfectly manufactured on the basis of European most sophisticated processing technology. A single wire is wound into a one piece stainless steel slot screen. Its high aperture ratio, high pressure resistance and high wear resistance make it greatly superior to other filter models.
FILAD's stainless steel wedge wire screen is a product manufactured in Europe. The filter surface is characterized by its perfect roundness and smoothness, making the filtering efficiency far superior to those of other products.







ADVANTAGES & CHARACTERISTICS

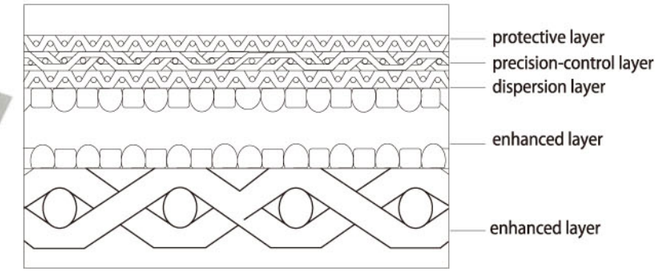
- Prevention from blocking: Its wedge-shaped slot prevents the filter from partial obstruction.
- High aperture ratio: The opening area is at least 30% greater than older models.
- High precision: An exquisite European technology is the sign of a high level precision.
- Pressure Resistance Structure: Wedge-shaped stainless steel wire wrapped around the ring in the solid support column, linked at the precision of the welding process, which makes the screen rigid.
- Easy cleaning: Scraping, rinse or backwash is enough to remove impurities from the surface of wedge wire screen.

SINTERED METAL MESH

The multi-layered sintered metal mesh is composed of multi-layered metal woven wire mesh, specially laminated and compressed of vacuum sintering technology. All layers of wire mesh are intertwined to form a uniform and ideal structure with high mechanical strength and over all rigidity. Its mesh size, permeability and strength make the good precision and resistance of filtration, mechanical strength, wear resistance, heat resistance and processability. Its overall performance is significantly better than the sintered metal powder, ceramics, fiber, cloth, filter paper, and other types of filter material.

Currently, this series has been widely used for filtration and purification, gas-solid, liquid-solid and gas-liquid separation, etc., in fields such as aviation, aerospace, oil, chemical engineering, metallurgy, machinery, pharmaceutical, food, synthetic fiber, and environmental protection industries.

Sintered wire meshes are processed into disc and welded with flange. They are suitable for many filtration devices, such as pharmaceutical, chemical, food filtration devices and are able to replace traditional filtration cloth. It has a great number of advantages, such as good rigidity, high strength, extended replacement cycle, easy to clean, simple assembly and so on.



Features

1）Its standard five-layered mesh structure is composed of a protective-layered mesh, a precision-control layered mesh, a dispersion-layered mesh and several enhanced-layered meshes.
2）The sintered five-layered mesh is characterized by its high mechanical strength and pressure resistance.
3）Its high precision allows a uniform surface filtration of granules of 2-200 μm.
4）Its heat resistance permits a continuous filtration under temperatures varying from -50 degrees to 550 degrees.
5）It has excellent upstream filter cleaning in the surface filtration structure.

Main Purposes

1）Filtration for all kinds of high temperature substances, etching solution, and catalysts in petrochemical industry.
2）Filtration and purification for all kinds of polymer melts in film industry.
3）Filtration and separation for all kinds of catalysts in pharmaceutical industry.
4）Component for gas distribution, and fluidized bed plates.
5）Component for the high-pressure backwash oil filter, etc.