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# **Process Filtration Systems**



### Cartridge Filter







It can be applied to various industries from liquid to gas, and it can be widely applied from pre-treatment process to filtration of the final process.

It can be designed and manufactured according to customer needs, such as vertical, horizontal, integral, and separate types.

\* Characteristic

1. Applying various filter elements : Depth, Pleated, Carbon,

Sintered mesh, Porous metal, etc.

2.Filtraion rating: 0.1~100 micron

3.Filtration efficiency : 98% ~ 99.99%

※ Applications

Applicable to all industries

### **Bag Filter**





It is suitable for liquid filtration and has a large filtration surface area, which can filter a large amount.]

It is manufactured in various forms from single type to multi type.

\* Characteristic
1.Large filtration surface area
2.Easy filter element replacement
3.Filtration rating : 1~400 micron

※ ApplicationsApplicable to all industries



### **Coalescer Filter**





It is excellent for separation of liquid and liquid, separation of gas and gas, separation of gas and liquid, removal of impurities in fluid and removal of oil or moisture.

It can be applied in various forms from steps 1 to 3 within one container.

It is produced in two types: cartridge type and wafer pack type.

\* Characteristic

1. Removal of moisture or oil in fluids such as liquids, gases, and gases

2. Separate discharge of liquids with different specific gravity

3.Filtration rating : 1~100 micron

### ※ Applications

Applied to industries such as petrochemical, oil refining, fine chemical, etc.





### **Disc Filter**



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It is a device that filters by stacking a male circular type filter plate.

Various filtering media such as paper, fiber, or metal mesh can be inserted between the plates and used.

Maximum efficiency can be obtained by coating various filter media (diatomaceous earth, cellulose, carbon, etc.)

- **%** Characteristic
- 1.Less residue after filtration.
- 2.Filtration rating : 0.1~100 micron
- 3.Capacity: 500 ~ 30,000 liter/hr
- **\*** Applications

Filtration of chemical solutions such as surfactants and plasticizers in the chemical industry

Filtration of epoxy resins, resins, etc. in the paint industry

### **Disc Filter Package**



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It is a pre-coated filtration device of a circular disk type.

It is composed of agitator, coating pump, and disk filter, and can be used conveniently by connecting the inlet and outlet pipes.

Various optional devices can be applied to meet the customer's requirements.

#### **%** Characteristic

1.Manufactured by manual or semi-automatic operation

2.Filtration rating : 0.1~100 micron

3.Capacity: 500 ~ 30,000 liter/hr

#### **\*** Applications

Filtration of chemical solutions such as surfactants and plasticizers in the chemical industry

Filtration of epoxy resins, resins, etc. in the paint industry

## Pressure Leaf Filter Vertical type







It is a device that filters the cake by individually mounting leafshaped filter elements in a vertical housing on the central manifold.

The cake is dried with compressed air, gas, or steam, and shaken off using a vibrating vibrator.

#### ※ Characteristic

1.Large filtration area :  $1.5 \sim 100 \, \text{m}^2$ 

2.Bulk cake processing :  $30 \sim 2,200 \text{ dm}^3$ 

3.Filtration rating : Ave. 1 micron

#### **\*** Applications

Refining of animal and vegetable oils and fats in food and bio industries

Filtration of chemical solutions such as surfactants, plasticizers, paraffin, glycerin, and solvents in the chemical industry

# Pressure Leaf Filter Horizontal type





It is a device that filters a cake by individually mounting a leafshaped filter element in a horizontal housing on the central manifold and pressing the cake.

The cake is washed by the spray nozzle and discharged through the lower valve.

\* Characteristic

- 1.Large filtration area : 5 ~ 150  $\rm m^{2}$
- 2.Bulk cake processing : 20  $\sim$  3,490 d m<sup>3</sup>
- 3.Filtration rating : Ave. 1 micron

### **\*** Applications

Refining of animal and vegetable oils and fats in food and bio industries

Filtration of chemical solutions such as surfactants, plasticizers, paraffin, glycerin, and solvents in the chemical industry

### Pre-coat Bag Filter







It is a filtration device that individually mounts a bag-type filter media on the upper manifold and pre-coats it.

The filter media is made of fiber, so it is light and easy to handle.

### \* Characteristic

- 1. Filter media made of multi-layered fibers
- 2.Large filtration area :  $20 \sim 100 \, \text{m}^2$
- 3.Capacity:  $20 \sim 300 \text{ m}^{\circ}/\text{h}$
- 4. Filtration rating : Ave. 1 micron

### ※ Applications

Filtration of sulfuric acid solution in copper foil industry Plating solution filtration in the plating industry Filtration of various chemical solutions

### Automatic Back-flush Filter



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It is an automatic filtration device that filters and backwashes candle-type filter elements individually mounted on the manifold.

The cake is dried with compressed air, gas, steam, etc., and is discharged by backwashing by strongly inserting compressed air inside the filter element.

#### \* Characteristic

- 1.Large filtration area :  $20 \sim 100 \, \text{m}^2$
- 3.Capacity: 20 ~ 200 m<sup>3</sup>/h
- 4. Filtration rating : Ave. 1 micron

### **\*** Applications

Refining of animal and vegetable oils and fats in food and bio industries

Filtration of chemical solutions such as surfactants, plasticizers, paraffin, glycerin, and solvents in the chemical industry



## Automatic Strainer Multi type





It is an automatic strainer that filters by installing a number of candle-shaped filter screens in a certain arrangement, and discharges impurities by differential pressure.

For backwash discharge, the cleaning motor rotates, and impurities are automatically discharged through the backwash discharge holder.

#### \* Characteristic

- 1.Backwash discharge without interruption of raw water supply
- 2.Large filtration area
- 3.Filtration rating : max..25 micron
- 5.Capacity : max. 170,000 m<sup>\*</sup>/h.

#### **※** Applications

1.Filtration of cooling water for heat exchangers in power plants
2.Filtration of descaling cooling water in the steel industry
3.R.O pre-treatment filtration in water treatment industry
4.Coolant oil filtration in automobile parts industry

### Automatic Strainer Basket type



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It is an automatic strainer that filters through a basket-shaped filter screen and discharges impurities by differential pressure.

For backwash discharge, the cleaning motor rotates and impurities are automatically discharged by a brush or scraper.

### **%** Characteristic

- 1.Backwash discharge without interruption of raw water supply
- 2.Can be cleaned directly inside the screen with a scraper and brush
- 3. Filtration rating : max.. 25 micron
- 5.Capacity : max. 170,000 m<sup>3</sup>/h.
- **\*** Applications
- 1. Filtration of cooling water for heat exchangers in power plants
- 2. Filtration of descaling cooling water in the steel industry
- 3.R.O pre-treatment filtration in water treatment industry
- 4. Coolant oil filtration in automobile parts industry

# Automatic Strainer Dual type package





It is a system composed of two automatic strainers of the basket type.

Individual operation, cross operation, and simultaneous operation are possible to fully guarantee the stability of the process.

### \* Characteristic

Backwash discharge without interruption of raw water supply
 Expandable and large-capacity configuration
 Filtration rating : max.25 micron
 Capacity : max. 170,000 m<sup>3</sup>/h.

### \* Applications

1.Filtration of cooling water for heat exchangers in power plants2.Filtration of descaling cooling water in the steel industry3.R.O pre-treatment filtration in water treatment industry4.Coolant oil filtration in automobile parts industry

# **Manual Strainers** Basket, T, Y, Cone type



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It is a strainer that is widely applied to all industrial fields. It can be manufactured from canned type to casting type. Strict quality control and inspection ensure solid quality.

### **\*** Characteristic

- 1. Manufactured according to design code : KS, JIS, ASME,
- 2.Special materials can be made : duplex steel, monel, titanium
- 3.Special surface treatment available : PE, NR, PTFE, ETFE Lining & Coating
- 4. Able to manufacture large diameters over 24"
- **\*** Applications
- All industries





## Manual Strainers Duplex type





It is a duplex strainer with two independent filter screens connected.

Manufactures from canning type to casting type.

Strict quality control and inspection ensure solid quality.

### ℁ Characteristic

- 1. Manufactured according to design code : KS, JIS, ASME,
- 2.Special materials can be made : duplex steel, monel, titanium
- 3.Special surface treatment available : PE, NR, PTFE, ETFE Lining & Coating
- 4. Able to manufacture large diameters over 24"
  - (Excluding casting borrowings)
- ※ Applications
- All industries

### Air Pulse Filter





It is a dust collector that filters and discharges gas or gas containing dust.

The dust attached to the filter element is removed by spraying it by the air pulse nozzle, and it is accumulated in the lower hopper and automatically discharged by the mechanical device.

It can be applied either as a bag filter type or as a cartridge type.

### \* Characteristic

1.High dust collection efficiency for particles and collects various types of dust

2.Maintaining constant pressure loss

3.Filtration rating : Ave.1 micron

#### **\*** Applications

All workplaces that emit dust, such as minerals, wood, cement, grain, feed, and food

## Separator Demister type





It is a device that removes liquid mist or impurities in gas or gas. It is equipped with a wire pad.

As the fluid passes through the pad, the liquid mist gradually increases in volume due to inertial collision and is removed as it naturally falls.

\* Characteristic

1.Various filter pads can be applied: stainless steel and P.E. Glass pad

2.Low pressure loss

3.Filtration rating : 30  $\sim$  1000 micron

\* Applications

All processes in which mist is generated



### **Pressure Vessel**



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It is a container manufactured to withstand pressure for the purpose of storage, reaction, filtration, separation, etc. of liquid or gas.

Accurate design and strict quality control ensure solid quality.









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Metering system