Shanghai SAM Environment Protection Co., Ltd.

Bag Filter Housing
&
Filter Bag Catalog
Shanghai SAM Environmental Protection Co., Ltd is located in Jin Qiao Export Processing Zone in Pudong New District, Shanghai, China. It is an ISO 9001:2000 certified high technical environmental protection company specialized in manufacturing and developing filter products. We currently have advanced equipment, strict quality control system, and provide strong technique support to our customers worldwide.

Our products are widely used in various fields such as Fine Chemistry, Water Treatment, Industrial Painting, Paper Making, Automobile and Metal Processing, Food and Beverage, Pharmacy, Petroleum and Petrifaction Industries, etc. Our main products include bag-filter housings, filter bags, dust collection filter bags, strainers, automatic self cleaning filters, automatic backwashing filters, plastic filters, stainless steel heat preservation filters, vortex self cleaning filters, and filtration equipments, etc. They can be used alone or combined to meet various industries filtration needs. At the same time, we have focused on researching and developing in the gas field in order to satisfy our domestic and overseas customers’ requirements.

Filter bag housings are precision manufactured for industrial processes and applications including:

- Adhesive
- Beverage
- Chemical and Petrochemical
- Cutting Fluids and Cooling Water
- Ptergents
- Foods
- Lacquers
- Oils
- Pharmaceutical
- Varnishes
- Automotice
- Biofuel
- Cosmetics and Toiletries
- Dairy Products
- Electronics
- Ink/Dyes
- Lubriants
- Paints and Powder Coatings
- Resins
- Water Treatment

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<tr>
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<th>Page</th>
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<td>10</td>
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Shanghai SAM Environment Protection Co., Ltd.
Liquid Filter Bag

- **Product Description**
  Inside the Bag Filtration System, the filter bag is supported by an inside metal basket. The incoming fluid is to flow out after filtered by the bag, thus the impurity is intercepted in the filter bag. You can continue to use the filter system after changing the filter bag. It is a trend for the bag filter to replace partly the cartridge filter. A. The small filter bag can filter large amount of liquid.

  The filter bag is key to filtering. According to the result of research from a famous company, for over 30 years, filter bags have been a critical component of filtration systems worldwide.

  The quality of the filter bag determines the result of filtration to a great extent. SAM follows strict engineering standards in sourcing raw materials and in the manufacturing process of all filter bags to ensure that they are 100% good quality. The cloth of SAM filter bag is selected from world-famous enterprises.

- **Application Range**
  Products have been widely used in the following areas:
  - Automobile industry / Electronics industry / Food and beverage industry /
  - Petrochemical, Chemical industry / Biopharmaceutical industry
  - Environmental Protection / Printing, Furniture industry

- **Product Specifications**

<table>
<thead>
<tr>
<th>No.</th>
<th>1# bag</th>
<th>2# bag</th>
<th>3# bag</th>
<th>4# bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>7”×17”</td>
<td>7”×32”</td>
<td>4”×8”</td>
<td>4”×14”</td>
</tr>
<tr>
<td>Materials</td>
<td>PP, PE, Nylon etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craft</td>
<td>Sewing, Welded</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top-Ring Material</td>
<td>PP, PE, Stainless steel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micron Rating</td>
<td>0.5µm-1000µm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Product Show**
Dust Collector Filter Bag

Product Description

The filter bags are the key elements which determine the dust collection efficiency and working temperature. Renewal of bags creates major cost in maintaining bag-housing. So, the lifetime of qualified bag can last from two years to six years under the condition of reasonable usage.

Appropriate Filter Media Selection

Temperature, moisture level and chemical characteristics of air, as well as particle size, weight, shape, abrasive behavior, dust concentration, filtration velocity, cleaning style, emission concentration and working system of baghouse should be considered for media selection. In general, needle felt bags are used in pulse jet baghouse, Woven-fabric bags are used in section reverse flow or mechanical shake bag house.

Reasonable Structure Design

The filter bag structure should meet the requirement of filtration and dust collecting in the corresponding baghouse. At the same time, it should be easy to install, have good sealing while having relevant filtration area and condition, and be easy to be cleaned with the least wearing. It should good fit to the related parts.

For example, the Synthetic fabric bag for external filtration should have gap with cage, the fiber glass bag must cling to the cage of which the space between vertical wires are smaller than that of synthetic fabric bag cage. The bag tension has to be considered in internal filtration bag.

Excellent Sewing Skill

- Advanced technology. The dimension of bag is up to the drawing. The shrinkage should be considered according to both working temperature and filter media.
- Complete equipment. The stitch arrangement is reasonable. Neither skip stitch nor broken stitch is allowed. At the same time, the sewing thread meets the requirement.
- All the accessories should be excellent and meet the requirement. In order not to damage the bag, any burrs or damaged parts will not be allowed.

Dimension Recommended

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Length</th>
<th>Applicable fro</th>
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<tbody>
<tr>
<td>120</td>
<td>2000</td>
<td>2400</td>
</tr>
<tr>
<td>130</td>
<td>3200</td>
<td>3600</td>
</tr>
<tr>
<td>152</td>
<td>4400</td>
<td>4800</td>
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<td>200</td>
<td>5600</td>
<td>6000</td>
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<tr>
<td>180</td>
<td>6000</td>
<td>8000</td>
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<tr>
<td>250</td>
<td>10000</td>
<td>12000</td>
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<tr>
<td>300</td>
<td></td>
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<tr>
<td>800</td>
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<td>3000</td>
</tr>
<tr>
<td>900</td>
<td>5000</td>
<td>6000</td>
</tr>
<tr>
<td>1500<em>750</em>25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Top-line Bag Filter Housing

**Product Description**

SAM Top-line bag filter housing adopts patent ring structure and relevant fittings. Their advantages are as follows:

- The sealed result is satisfactory, no side leaking;
- Effective filtering area is rather big, achieving more efficient filtering result;
- It is more convenient and swift to change the filter bag, thus to lower operating cost;
- The rational structure makes filtering more steadily and the result more reliable;
- The adjustable height makes the filter applicable to different occasions;
- Humanized design makes the filters most suitable for you.

**Application Range**

Products have been widely used in the following areas:
Automobile industry / Electronics industry / Food and beverage industry / Petrochemical, Chemical industry / Biopharmaceutical industry / Environmental Protection / Printing, furniture industry

**Product Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Filtration Area (m²)</th>
<th>Max Flow (m³/h)</th>
<th>Working Pressure (Mpa)</th>
<th>Connection Type (inlet/outlet)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAM-1S</td>
<td>0.25</td>
<td>20</td>
<td>1.0</td>
<td>2&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-2S</td>
<td>0.5</td>
<td>45</td>
<td>1.0</td>
<td>2&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-4S</td>
<td>0.1</td>
<td>10</td>
<td>1.0</td>
<td>1&quot;NPT</td>
<td>304/316</td>
</tr>
</tbody>
</table>

ISO9001:2000  SAM-FILTER.COM
**Product Description**

A side-line vessel is a full-featured investment-cast filter vessel. A bead, not sand, blasted finish that makes cleaning easy and a cover that can be easily adapted to different opening directions are among Side-line’s many value added features:

- For filter bags sizes 01 and 02;
- 01 Size - 20,000 Lt per hour flow for Nominal rated bags;
- 02 Size - 40,000 Lt per hour flow for Nominal rated bags;
- Side entry inlet connection;
- Available in 304 or 316 stainless steel;
- 2” ANSI Inlet and Outlet;
- Buna NTM seals standard (Viton also available);
- Maximum operating pressure of 10 bar (standard model)
- Steam jacket (Optional)

**Application Range**

Products have been widely used in the following areas:

Automobile industry / Electronics industry / Food and beverage industry / Petrochemical, Chemical industry / Biopharmaceutical industry / Environmental Protection / Printing, furniture industry

**Product Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Filtration Area (m²)</th>
<th>Max Flow (m³/h)</th>
<th>Working Pressure (Mpa)</th>
<th>Connection Type (inlet/outlet)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAM-1P</td>
<td>0.25</td>
<td>20</td>
<td>1.0</td>
<td>2” flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-2P</td>
<td>0.5</td>
<td>40</td>
<td>1.0</td>
<td>2”flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-4P</td>
<td>0.1</td>
<td>10</td>
<td>1.0</td>
<td>1” NPT</td>
<td>304/316</td>
</tr>
</tbody>
</table>

**Product Show**

![Image of Side-line Bag Filter Housing]
Multi Bag Filter Housing

- **Product Description**
  - Eye Bolt Closure System - The user friendly, cost effective bag filter housing for high volume, multiple applications and processes:
    - The bag filter housing is designed with a proven swing eye-bolt or segment clamp closure mechanism;
    - Positive O-ring sealing offers easy and safe operation;
    - We can provide almost all kinds of multi-bag filters available, from double-bag type to 24-bag type, complete in specifications;
    - The flanges of the link outlet/inlet from 3" to 18";
    - The Max. flow of single unit are from 90 cubic m./h to 1,080 cubic m./h;
    - Available in carbon steel or Type 304 or 316 stainless steel for high corrosion resistance;
    - If you buy our multi-bag filters, you can wait for a long time to change the used bags;

- **Application Range**

  Products have been widely used in the following areas:
  Automobile industry / Electronics industry / Food and beverage industry / Petrochemical, Chemical industry / Biopharmaceutical industry / Environmental Protection / Printing, furniture industry

- **Product Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Filtration Area (m²)</th>
<th>Max Flow (m³/h)</th>
<th>Working Pressure (Mpa)</th>
<th>Connection Type (inlet/outlet)</th>
<th>Material</th>
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<tr>
<td>SAM-M2</td>
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<td>90</td>
<td>1.0</td>
<td>3-4&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M3</td>
<td>1.5</td>
<td>135</td>
<td>1.0</td>
<td>3-4&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M4</td>
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<td>180</td>
<td>1.0</td>
<td>3-6&quot;flange</td>
<td>304/316</td>
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<tr>
<td>SAM-M5</td>
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<td>3-6&quot;flange</td>
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<td>SAM-M6</td>
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<td>1.0</td>
<td>3-6&quot;flange</td>
<td>304/316</td>
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<tr>
<td>SAM-M7</td>
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<td>1.0</td>
<td>4-8&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M8</td>
<td>5.0</td>
<td>450</td>
<td>1.0</td>
<td>6-8&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M10</td>
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<td>540</td>
<td>1.0</td>
<td>6-10&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M12</td>
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<td>630</td>
<td>1.0</td>
<td>8-10&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M14</td>
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<td>720</td>
<td>1.0</td>
<td>8-12&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M16</td>
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<td>810</td>
<td>1.0</td>
<td>10-14&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M18</td>
<td>10.0</td>
<td>900</td>
<td>1.0</td>
<td>10-16&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M20</td>
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<td>990</td>
<td>1.0</td>
<td>12-18&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-M24</td>
<td>12.0</td>
<td>1080</td>
<td>1.0</td>
<td>14-18&quot;flange</td>
<td>304/316</td>
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</tbody>
</table>
Professional manufacturer of filtration system

Intermediate layer & Plastic Bag Filter Housing

- **Product Description**

  **SAM intermediate layer type bag filters** are constructed with two layers. Steam or warm oil can pass through the intermediate layers. The advantages of doing so are obviously to keep or raise the temperature of the fluids, so to prevent the fluids from solidifying, improve the speed of filtration of viscous liquid, or meet the requirements to the temperature of next process.

  **SAM X100 plastic filter** 100% with PP (polypropylene) filtration system taking advantages of excellent PP material, can be used for filtering a lot of chemical sour soda liquids. It is really an economical and practical fine product, as it has no seam, no dead angle, accurate specification with high-quality, high capacity and efficiency.

- **Application Range**

  Products have been widely used in the following areas:
  Automobile industry / Electronics industry / Food and beverage industry / Petrochemical, Chemical industry / Biopharmaceutical industry / Environmental Protection / Printing, furniture industry

- **Product Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Filtration Area (m²)</th>
<th>Max Flow (m³/h)</th>
<th>Working Pressure (Mpa)</th>
<th>Connection Type (inlet/outlet)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAM-1J</td>
<td>0.25</td>
<td>20</td>
<td>1.0</td>
<td>2&quot;flange</td>
<td>304/316</td>
</tr>
<tr>
<td>SAM-2J</td>
<td>0.5</td>
<td>40</td>
<td>1.0</td>
<td>2&quot;flange</td>
<td>304/316</td>
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<tr>
<td>SAM-X100PP</td>
<td>0.1</td>
<td>10</td>
<td>0.6</td>
<td>2&quot;NPT</td>
<td>PP</td>
</tr>
</tbody>
</table>
Vortex Cartridge Filter housings

- **Product Description**
  Whirling Self-cleaning Filter is consisted of Novo Filter Element (the core element) and other relevant parts. By the advanced design, it can overcome the connatural disfigurement of the traditional back-wash self-cleaning ones, with its high efficiency and easy maintenance, working under multi-modes, moving flexibly and filtering all kinds of contaminated liquids:
  1) Water treatment (river, sea, lake), water supply and drainage, waste treatment;
  2) The pre-treatment of the exactitude filtration such like bag filter and cartridge;
  3) The filtration of the Acid and alkaline liquids, solvent, and kinds of chemicals;
  4) The viscous liquid filtration and eliminate the fibrous impurities;
  5) Available in 304 or 316 stainless steel;
  6) 2” ANSI Inlet and Outlet;
  7) The recycling use of the Coolants and rinsing liquid;

- **Application Range**
  Products have been widely used in the following areas:
  Automobile industry / Electronics industry / Food and beverage industry / Petrochemical, Chemical industry / Biopharmaceutical industry / Environmental Protection / Printing, furniture industry

- **Work Principle**
The parts of Bag Filter housings

The parts of filter housing contain: filter basket, filter O-rings, filter flange, filter bolts. All of the parts can apply to every bag filter housing.
You can choose the most suitable bag filter housing according to your needs.

**EX:** SAM-2S-304-2” F150PSI-G

- **Basic Part**
- **Optional part**

**Brand Code: SAM**

**SAM bag filter housing**

**Bag filter housing Code:**

- 1S: 1# standard bag filter housing
- 2S: 2# standard bag filter housing
- 4S: 4# standard bag filter housing
- 1P: 1# standard bag filter housing
- 2P: 2# standard bag filter housing
- 4P: 4# standard bag filter housing
- 1J: 1# dual bag filter housing
- 2J: 2# dual bag filter housing
- M2-M24: Multi bag filter housing 2-24

**Bag filter housing Code:**

- 304 Stainless Steel
- 316 Stainless Steel
- Carbon Steel
- PP

<table>
<thead>
<tr>
<th>Inlet/Outlet Connection:</th>
<th>GB</th>
<th>ANSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1”NPT</td>
<td>1”NPT</td>
<td></td>
</tr>
<tr>
<td>2”NPT</td>
<td>2”NPT</td>
<td></td>
</tr>
<tr>
<td>DN25F</td>
<td>1”F</td>
<td></td>
</tr>
<tr>
<td>DN50F</td>
<td>2”F</td>
<td></td>
</tr>
<tr>
<td>DN80F</td>
<td>3”F</td>
<td></td>
</tr>
<tr>
<td>~DN450F</td>
<td>~18”F</td>
<td></td>
</tr>
</tbody>
</table>

**Max working pressure:**

- 1.0MPa ≈ 150psi ≈ 10bar
- 2.0MPa ≈ 300psi ≈ 20bar

**Surface Treatment:**

- E: Electric Polish
- G: Stand Blasting
- FGP: Food Grade Polish
- PGP: Medical&Health Polish
- S: Clients Customization
Filter bags are manufactured according to the international standard, and have good compatibility with the similar products. Welcome to consultate the SAMFILTER to choose the best Filter bag according to your needs.

**EX:** SAM-PP-0.5-2-P-H - 02L

<table>
<thead>
<tr>
<th>Basic Part</th>
<th>Optional part</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAM Filter Bag</td>
<td></td>
</tr>
<tr>
<td>Brand Code: SAM</td>
<td></td>
</tr>
</tbody>
</table>

### Material of Filter Bag:

- PP
- PE
- NO: Stainless Steel 304
- PT: Stainless Steel 316
- AC: OA, Nomex

### Filter bag Accuracy:

0.5µm, 1µm, 5µm, 10µm, 25µm, 50µm, 75µm, 100µm, 150µm-1250µm

### Filter Bag Size:

1: 7”Dia *17”L(178mm*419mm)
2: 4”Dia * 8”L(102mm*209mm)
3: 7”Dia *32”L(178mm*813mm)
4: 4”Dia *14”L(102mm*355mm)

### O-ring of filter bag:

- PP SS PE T
- Welded Sewn

### Connection Way:

- 02L 2Layers
- 03L 3Layers

**SAM – PP – 0.5 – 2 – P – H – 02L**