



# **Filter leaf**

Filter Leaves for Pressure Leaf Filters



SEPARATECH has been working on several developments concerning the design of our filter leaf for decades. Thanks to these improvements our filter leaf is now more efficient, more durable and more economical in operation.

Filter leaf OEM from SEPARATECH cover a wide range of configurations and manufacturers of leaf filters. We have the capabilities to supply with many filter leaf element designs including, circular, rectangular, conical, and tubular shaped filter leaves, as well as other suppliers' products.

#### Understanding the Structure of Filter Leaves

Filter leaves are precision-engineered components designed to capture impurities and solid particles from liquids, leaving behind a clear and purified substance.

Filter leaf is also called leaf filter elements, they are flat, circular plates that have a porous mesh on both sides. The mesh can be made of metal, synthetic, or natural fibers, depending on the type and size of the particles to be filtered. The mesh is attached to a central drainage pipe that collects the filtrate (the liquid that passes through the filter).

The leaf filter elements are arranged in a vertical or horizontal configuration inside a pressure vessel. The vessel is filled with the slurry (the mixture of liquid and solid particles) to be filtered. The pressure inside the vessel forces the liquid to flow through the mesh, leaving behind the solid particles on the surface of the leaf filter elements. The solid particles form a cake that can be removed by backwashing, scraping, or vibrating the leaf filter elements.

#### Materials of Construction

- Frame

Stainless steel 304, 316L, 904L, S32205

Vibrator Block

Stainless steel 304, 316L, 904L, S32205



- Nozzle

Stainless steel 304, 316L, 904L, S32205

- Support and Drain Mesh

Stainless steel 304, 316L, 904L, S32205

- Filter Mesh

Stainless steel 304, 316L, 904L, S32205, Nylon or Polypropylene

- Closure Gaskets

NBR, EPDM, Neoprene, Viton, Teflon, Silicone, and others available upon request)



# Style of Construction

- No. of mesh
- 3-ply, 5-ply, 7-ply
- Fixing type
- Riveted, bolted
- Wire mesh selection

Wire mesh always depends on the application. The mesh size and material selection are key success factors for the filtration process. The right selection of wire mesh will lead to excellent filtration results as well as lower operating and maintenance costs.

Common wire mesh sizes are Plain Dutch Weave, Plain Weave, Twill Weave, and so on.



## Reorder checklist for filter leaves

Please use the following information as a guideline to determine your existing filter model as well as the specifications and configuration of the filter leaves:

- Make and model of filter vessel
- Height (B), width (A) and number of leaves
- Height from nozzle surface to fork-end bottom (C)
- Top mesh type and material
- Nozzle diameter (D)
- Gasket groove width (E)
- Vibrator block opening width (F) and thickness (G)
- Leaf corner radius (R)
- Type of application



- Chemicals

## Applications

- Edible oil
- Biodiesel
- Oleochemicals

- Inks & resins
- Gelatine
- Sweeteners and sugars



# How to contact SEPARATECH

Contact details for all countries are continually updated on our website. Please visit:

www.separatech.com

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