



# Bag filter systems

**EUROWATER**  
A GRUNDFOS COMPANY

# Mechanical filtration of impurities in water

Demanding flow rates and challenging space conditions are what EUROWATER bag filters are made for. As stand-alone or in arrays, the bag filters are available with pumps, pressure gauges and stop-valves.

Efficient operation, easy installation, flexibility and low maintenance are just some of the defining characteristics of bag filter units from EUROWATER. The units can handle both demanding flow

rates and high pressure – and there is no rinse water consumption. Available for both hot, cold, basic (caustic) and acidic liquids, the filter units can be supplied as either single units or

frame-mounted or be combined for duplex plants.

The units are silicone free for use in surface treatment applications.

## Filter bags are specialized

The filter bags carry out the actual filtration and many types are available for a wide range of applications. They filter out particles, oil, grease, solvents, organics and are resistant to high temperatures.



### Bags for mechanical filtration | 1 to 800 micron

For filtering solids and particles from liquids. Available in either nominal or absolute mesh sizes



### Bags for oil filtration | 10 to 100 micron

The bags work by a combination of mechanical filtration and absorption. In order for the bag to function the oil must be in emulsion. Even volatile oils and organic solvents can be absorbed with a combination of filter bag and absorption media.



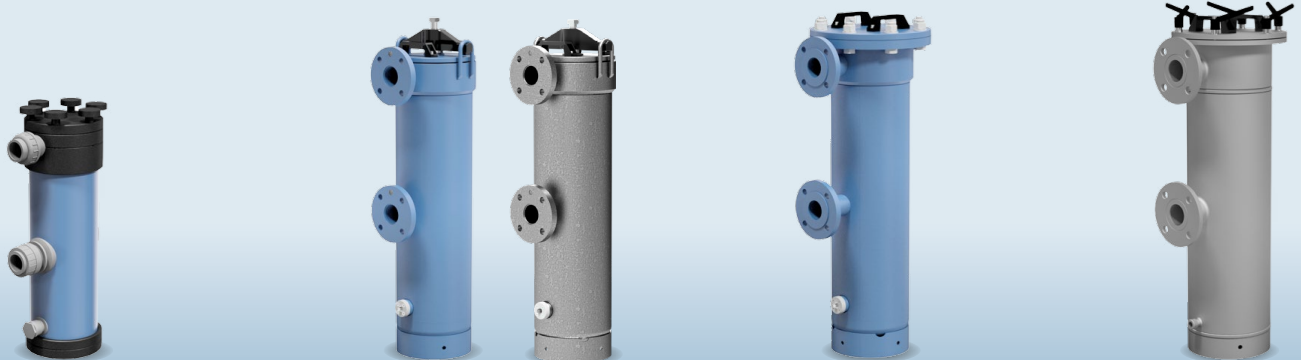
### Bags for bacteriological separation

Filter bags designed to prevent bacterial and algae growth in circulating systems. The filter lining contains metal fibers that emit positive metal ions to the negatively charged bacteria and algae, which disrupts the bacteria's metabolism. The filter bag also filters out pyrogenics.



### Bags for chemical filtration

Versatile filter bags intended to contain a multitude of filter media such as ion exchange resin and activated carbon. These filter bags are especially well suited in processes where the water flow is high compared to the amount of matter to be filtered out. The filter media is replaced when it is used up and no backwashing is needed. The filter media's short contact time also means that bacterial growth is limited.



**EF2**  
2 m<sup>3</sup>/h  
6 bar  
0 - 35 °C  
pH range 1-13

**EF5**  
16 m<sup>3</sup>/h  
6 bar  
0 - 35 °C  
pH range 1-13

**EFG5**  
22 m<sup>3</sup>/h  
6 bar  
0 - 100 °C  
7-13

**EFG7**  
22 m<sup>3</sup>/h  
16 bar  
0 - 100 °C  
pH range 7-13

**EFG8**  
22 m<sup>3</sup>/h  
6 bar  
0 - 100 °C  
pH range 3-13



# Wide range of applications

As a prefilter or partial flow filtration, a bag filter can serve many purposes. Here are some examples of the applications that can benefit from mechanical filtration.



## District heating

Removing particles, magnetite and sludge from district heating circuit water reduces the risk of downtime and corrosion as well as extends the useful life of heat meters, heat exchangers, pumps, valves, and other components in the district heating system. Particle filtration using a EUROWATER bag filter with magnetic insert is an efficient and long-lasting solution.



## Surface treatment

In the powder coating and galvanic industries it is highly recommended to circulate process baths through a bag filter. It significantly prolongs the life of each bath, reduces the quantity of waste water and the risk of clogging the nozzles and valves in the system.



## Cooling systems

In cooling systems, such as cooling towers, water treatment is carried out in order to minimize scaling and deposits, fouling, corrosion, and biological growth. A bag filter may be the first step to achieving a water quality suitable for cooling towers or evaporation. Correct treatment of cooling water gives optimum service conditions and extends the life of the cooling system significantly.

# Durable even in aggressive environments



0 - 100 °C



0 - 16 bar



0 - 22 m<sup>3</sup>/h  
Flow rate per unit



1-13



**EFG5P-F** Frame mounted unit with pump  
22 m<sup>3</sup>/h  
6 bar  
0 - 100 °C  
pH range 7-13



**2-EFG5-F** Frame mounted  
44 m<sup>3</sup>/h  
6 bar  
0 - 100 °C  
pH range 7-13



**4-EFG7P-F** Frame mounted unit with pump  
88 m<sup>3</sup>/h  
16 bar  
0 - 100 °C  
pH range 7-13

# Bag filters in industrial design

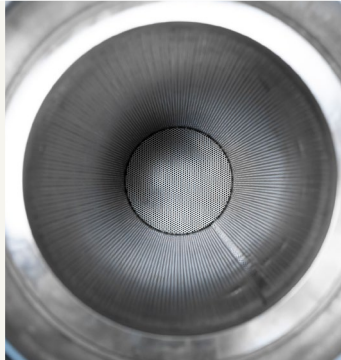
Technical know-how and selected high-quality components in combination ensure the compliance of the units with the highest industrial standards.

## Design and materials

The housing is either coated in PPA, painted, galvanized or made from stainless steel.

The support screen that holds the bag inside (photo) is either PVC, black steel or stainless steel.

The source water composition and factors such as pressure and flow rate dictate which material are best suited for a particular use.



## Magnet (Option)

A magnetic insert efficiently collects magnetite residue and other metallic particles.

The top with the magnetic insert fits all existing EUROWATER bag filters, making an upgrade easy and affordable.

*A partial stream filtration using magnets is particularly useful for circulating water, e.g. district heating plants, where magnetite naturally forms in the circuit water.*



## Filter bags with quick replace function

The filter bags are equipped with a sturdy metal ring that makes replacement easy and convenient when the time is due.

Two varieties of filter materials are available: *Polypropylene bags (nominal)* with pore sizes of 1-100 micron, and *Nylon/polyamide bags (absolute)* with pore sizes of 100-400 micron.

Custom bags for specialized purposes can also be supplied.



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