



GLOBAL FILTER

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# BOTTLED WATER INDUSTRY

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Filtration Applications for the  
Bottled Water Industry



**GLOBAL FILTER**  
Filtration Group®

# BENEFITS OF OPTIMIZING YOUR FILTRATION AND SEPARATION SYSTEM

## WHY USE GLOBAL FILTER SOLUTIONS



### Improve Water Quality

Remove both particulate and bacteria for improved water quality and safer consumption for consumers



### Protect Process Equipment

Protect equipment by installing filters at critical process points to reduce fouling



### Increase Product Output

Process more product in less time increasing your output while generating more revenue



### Minimize System Downtime

Reduced frequency of filter change outs which lowers operating costs

## Filtration Importance

The bottled water industry is one of the fastest growing liquid beverage markets. The expansion of this market is attributed to the rising consumption of bottled water and technological advances in water processing equipment. Typical sources and types of bottled water will vary, but include:

- **Spring Water**
- **Mineral Water**
- **Purified Water**
- **Sparkling Water**

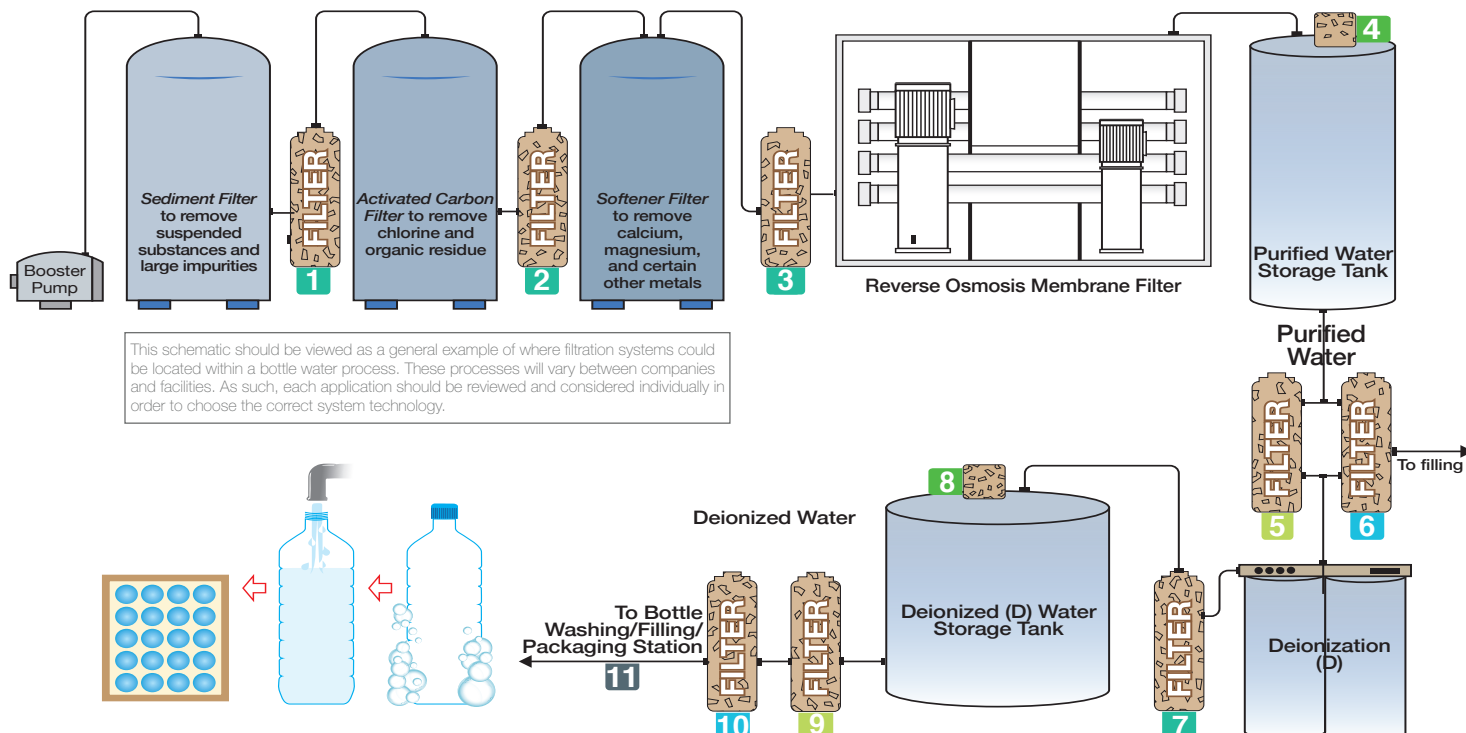
The bottled water market is highly diversified and competitive, and comprises a large number of companies, including both established and start-up firms. Critical process operations are required to meet government legislation, ensure the integrity of the system and product, and to lower the costs per unit of bottle water.

Proper filtration systems are critical in ensuring the biological safety, quality, and shelf-life of the product, as well as protecting downstream equipment. To meet required water quality standards and remain competitive, systems must integrate several filtration processes to reduce particulates, remove microorganisms, and protect equipment. When a proper filter "train" is not installed, bacteria and particulate can impact flavor and overall quality which can be potentially harmful for human consumption.

Common particulates include sand, silt, and organic materials from the source water, as well as scale, rust and other debris from transfer piping, hoses and storage tanks. In addition, microorganisms can enter the bottled water process through contaminated carbon/sand beds, air/gas supply and damaged piping/valves. A poorly designed filtration system will lead to frequent and unnecessary element changes, unsafe product, excessive downtime and increased operating costs.

Our commitment to excellence in cleanliness, efficiency, quality, and service is driven by our goal to exceed the requirements of our customers. Our goal is complete customer satisfaction and it is reflected in everything we do.





## FILTRATION SOLUTIONS FOR THE BOTTLED WATER INDUSTRY

### Sediment, Particulate & Trap Filter Stages: 1, 2, 3, 7

#### Pleated Polypropylene

PP, PPE, HF Series

#### Pleated Microglass

FG, FGE Series

#### Polypropylene Meltblown

GWTB, GCTB, GATB Series

Removes large particulate from sediment filtration & protects the carbon filter systems and increases carbon bed efficiency

### Bio-Burden Filter Stages: 5 & 9

#### Pleated Polypropylene

PP, PPE, HF Series

#### Pleated Microglass

FG, FGE Series

Removes fine particles and suspended organic matter and serves as pre-filtration to bottling line for filling prior to deionization

### Sterilizing Filter Stages: 6 & 10

#### Polyethersulfone (Hydrophilic) Membrane

GFPE Series (Food & Beverage Grade)  
BRPE Series (Bio-Burden Reduction Grade)

Reduces biological contaminants and serves as final filtration to bottling line prior to deionization

### Tank Filter Stages: 4 & 8

#### PTFE (Hydrophobic) Membrane

GGPTFE Series (General Grade)  
PPTFE Series (Sterilizing Grade)

#### Polysulfone (Hydrophobic) Membrane

PSH Series

Serves as storage tank vent filtration that allows for bacteria-free air to pass during filling and evacuation, protecting the storage tank and its contents from contamination

### Gas Filter Stages: 11

#### PTFE (Hydrophobic) Membrane

GGPTFE Series (General Grade)  
PPTFE Series (Sterilizing Grade)

#### Polysulfone (Hydrophobic) Membrane

PSH Series

Serves as filtration during the bottling and packaging stage where CO<sub>2</sub> or N<sub>2</sub> is present





## Total Filtration Solutions

Global Filter offers a complete line of filtration solutions for all your bottled water processing needs. As a premier supplier of depth, pleated depth, pleated membrane cartridges and vessels, Global Filter is your one stop shop for the bottled water industry.

Single Cartridge Vessels like the **GFHD Series** can be used in storage tank venting applications. Multi-Cartridge Vessels like the **GTCH & GTCHB Series** and **GBFV Series** bag filter vessel can be used in a wide variety of high purity liquid applications.

At Global Filter, we continually strive to improve the quality of our products as well as the processes that develop and manufacture them. These improvements have resulted in increased capacity and shortened lead times while enhancing the cleanliness of our rinsed products and our entire range of filter elements.

Most Global Filter filter cartridges carry NSF 61 Certification including **GWTB, GCTB, GATB, PP and PPE Series**, ensuring your products meet the most stringent standards for quality and safety.



**GFHD Series**



**GTCH Series**



**GBFV8 Series**



**GTCHB Series**

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