

# Flavorings, Fragrances And Edible Oils

Filtration of flavors, fragrances and extracts, both naturally occurring and synthetic, is key to achieving a consistent product. Whether the goal is eliminating undesirable flavor characteristics, optimizing color & clarity or maximizing shelf life, Global Filter's extensive line of liquid filtration products fit the bill.



GSD-Series Stacked Disc

## Depth Filtration for Particulate Removal

Global Filter's depth filter products, which include [liquid filter bags](#), [meltblown polypropylene depth cartridges](#), [pleated depth cartridges](#), and our new [GSD Series lenticular stacked disc cartridges](#), offer nominal or absolute filtration and high particulates loading capacity. From capturing high-volume bulk solids to removing sub-micronic fine particulates, our depth filter portfolio is one of the most versatile and economical on the market.

## Membrane Filtration for Product Stability, Sterility and Maximized Shelf-Life

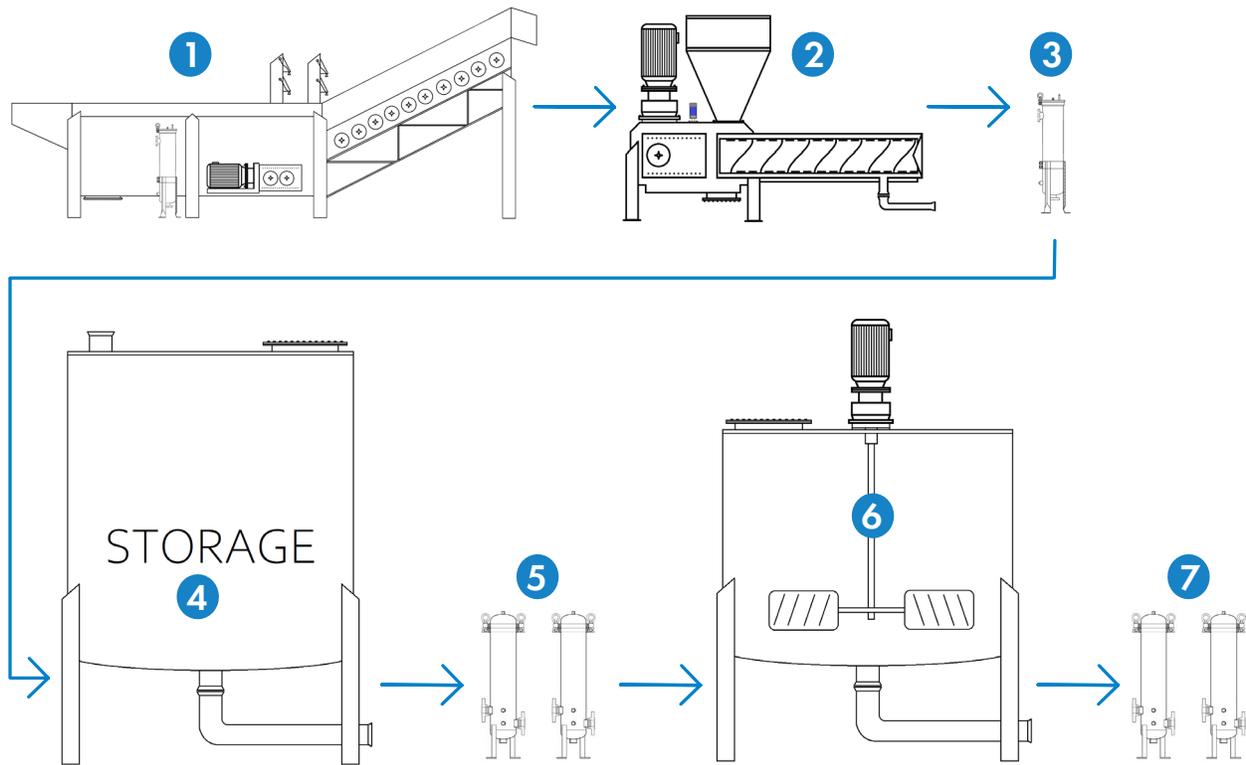
Global Filter's [pleated membrane](#) product families offer extreme versatility and industry-leading value. Available in various end configurations, materials of construction, and with varying levels of testing and certifications, these products offer the ability to remove ultra-fine particulates and spoilage micro-organisms. This allows users to consistently deliver high product quality at affordable prices.



PES Membrane Cartridges

OUR PLEATED MEMBRANE CARTRIDGES ARE MANUFACTURED TO ORDER AND SHIPPED IN 12 BUSINESS DAYS OR LESS.

# EDIBLE OILS PROCESSING & FILTRATION



## FILTRATION PROCESS STEPS

### Step 1:

Fruit is washed to remove any chemicals or debris that may have accumulated during the growing season, harvest, or transport. Water used in this equipment is recirculated through a basic particulate filter, such as a GPO Series bag filter, to capture any large debris that may restrict spray nozzles and to reduce the amount of water required for washing.

### Step 2:

After washing, fruit is processed for oil extraction. Some fruit is processed in multiple stages to separate the flesh, peel, and seeds, while others are processed whole. The desired components are crushed and pressed to extract oils. A screw press is commonly used as it is very efficient at extracting a high percentage of oils.

### Step 3:

Oil is filtered by a basic particulate filter, such as a GPO Series felt filter bag, to prevent large particulate buildup in storage tanks downstream. This is also the first step in processing of the oils.

### Step 4:

Oil is sent to storage tanks until enough has been extracted to continue processing. The storage tank has a vent filter that allows it to fill or drain without creating a positive pressure or vacuum. Particulate filters, such as the PP Series pleated depth polypropylene cartridge will prevent intrusion of particulates, but other options, like the BRPTFE Series membrane cartridge, will prevent the introduction of particulates, moisture, or micro-organisms.

### Step 5:

Once there is enough oil in storage to blend and process into the final product, it is once again filtered. The PP Series pleated depth polypropylene cartridges are a great option for this step, which is normally a two stage process to filter to 10 micron absolute.

### Step 6:

Oil is blended with any flavorings, colors or preservatives that will maximize shelf life and ensure the oil is the correct color and consistency.

### Step 7:

Once blending is complete, the product is filtered one last time to ensure anything added during blending is fully dissolved and the product is of uniform consistency. This is usually accomplished through the use of sub-micronic pleated depth (PP series) or lenticular (GSD series) particulate filters. If necessary, pleated membrane cartridges, like the GFPE Series, may also be used for final filtration.





# INDUSTRY BEST NET VALUE

Global Filter designs innovative and efficient filtration solutions. Our high-quality filters combined with our technical expertise allow us to offer you solutions that take the guess work out of your process. Our solutions optimize the service life of filters, reducing waste to positively impact the environment, while increasing your productivity. Consistent, cost-effective and high-quality filters allow you to achieve a consistent, high-quality product while adding to your bottom line.

## Our Filtration Solutions Are:



### Safer

Our products meet US and EU standards for purity and safe use with food and beverages



### Healthier

We develop products that improve the quality of life for humans and animals



### More Productive

Our solutions allow you to produce more product at a lower cost, improving your bottom line

## Advantages To Working With Global Filter:

- Access to an extensive network of filtration professionals from all over the world who have experience with thousands of unique processes and applications
- Manufacturing facilities in North America and Europe
- Products designed to maximize your productivity, product quality and bottom line
- Built to grow with you and help navigate the challenges and changing landscapes of your industry
- Technical support from initial conversations to implementation and beyond
- Shortest lead times and industry-leading value

