REVERSE OSMOSIS PREFILTRATION

Reverse Osmosis is a water treatment process that removes dissolved contaminants from water by using pressure to force water molecules through a semipermeable membrane. RO water has a wide variety of uses ranging from hospitals and pharmaceutical production to food and beverage and wastewater treatment. In order to ensure that RO membranes continue to operate at their optimum level, incoming water must be prefiltered prior to entering the reverse osmosis system.

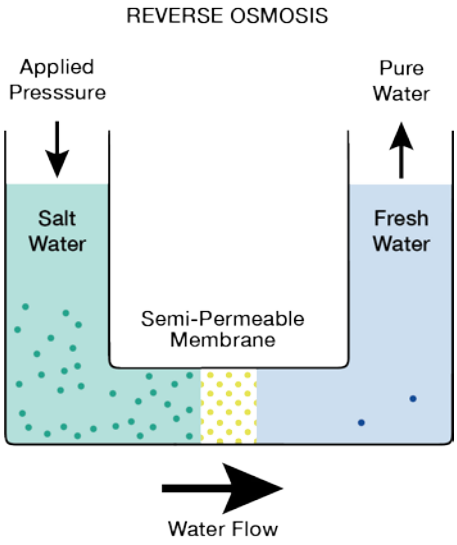
Filtration Technologies

Unprotected membranes are prone to fouling due to sediment and/or microbial contamination. This causes the membranes to lose separation efficiency and flow capacity. In addition to causing premature and expensive membrane replacement, this fouling reduces the system's ability to produce quality water. At a minimum, industry standards recommend use of a 5 micron nominal prefilter for RO membrane protection. This level of filtration will typically remove detrimental sediment that could otherwise build up and cause membrane fouling. Popular choices include Global Filter's GWTB & GCTB Series meltblown polypropylene cartridges as well as GP Series polypropylene string-wound filter cartridges.

While 5 micron nominal filters are incapable of removing and retaining microorganisms that could cause bio-film formation on RO membranes, pleated depth filter cartridges can, even at sub-micronic levels. When used as RO prefilters, these cartridges can significantly reduce the possibility of microbial contamination/bio-fouling. Global Filter's PP & PPE Series filter cartridges are excellent options .

In addition to higher removal efficiencies at lower micron ratings, pleated cartridges can offer significantly higher loading capacities due to additional surface area. This reduces change-out frequencies, which minimizes operational labor while providing superior membrane protection.

Global Filter's GTCHB and GTCH series cartridge vessels are ideal for this application and can accommodate meltblown, string-wound, or pleated cartridges at flowrates up to 1300 GPM. These vessels available in 304 and 316 stainless steel construction are typically available to ship from stock.



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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:

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

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

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

Advantages To Working With Us:

- 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, Europe and Japan.
- Products designed to maximize your productivity, product quality and bottom line.
- Ability to quickly adjust to your changing needs.
- Technical support from initial conversations to implementation and beyond.
- Shortest lead times and highes value in the industry.

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