



Ultrafiltration (UF) Systems

Ultrafiltration (UF) is a low pressure membrane filtration process uses hydrostatic pressure to force water through a semi-permeable membrane. With a usual pore size from 0.01 to 0.1 micron, UF provides barrier to suspended solids, sand, dirt, silt, bacteria, viruses, endotoxins and other pathogens to produce water with very high purity and low silt density index (SDI). UF membranes are usually constructed from cellulose acetate (CA), polyvinylidene fluoride (PVDF), polypropylene (PP), polyethersulfone (PES) etc., UF membrane also comes in different type such as hollow fiber, flatsheet which may be arranged in cross flow or dead-end configuration and the system design solemnly depends on the UF application, source water quality and on particle size removal. The UF process is used in a wide variety of applications and industries and typical feed sources include seawater, surface,

Ultrafiltration System (A brief)

Ultrafiltration (UF) is a highly efficient way to remove suspended solids, bacteria, viruses and other pathogens larger than the membrane pore size from feed water. Ultrafiltration provides a constant water quality, regardless of the feed water's total suspended solids (TSS). With very high retention rates for bacteria (99.9999%) and viruses of 99.99%, UF is often used alone or in combination with other system for potable water treatment. Ultrafiltration is used as a pretreatment for surface water, seawater, groundwater, biologically treated effluent, and to prepare water for further treatment with NF and RO. UF is strategically combined with various other purification technologies in a complete water system to categorially enhance the performance of the overall system.



What we offer



Water 2000 design and manufacture UF systems for a wide variety of applications and available water challenges. Our understanding of the UF membrane technology is reflected in our standard and custom-engineered ultrafiltration systems utilizing both spiral-wound and hollow-fiber UF membrane modules. Our systems are suitable for various municipal, industrial, commercial, residential water purification and water reuse applications. Capacities of upto 10 MGD are available.

With decades of standard product development experience devoted to water engineering and hundreds of successful installations across the country, you can rely on Water 2000 for your water purification needs using UF membranes. Our portfolio of UF systems includes those specifically engineered and designed for large industrials, medium sized commercial, small community water treatment applications and trailer-mounted mobile systems for temporary and emergency applications as well.

Applications

- Municipal potable water treatment
- Dairy industries
- Community water filtration system
- Surface water treatment
- Hospitals, medical and dialysis
- Universities, colleges & schools

- Food and beverage industry
- Pre-treatment for RO, NF or ion exchange
- Energy & power generation
- Ground water treatment
- Motels, resorts & restaurants
- Water reuse /recycling



Water 2000, Inc
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Ultrafiltration (UF) Systems

Salient features

- Reliable and compact process design
- Produces consistent quality product water
- Outside-In UF Configuration
- Heavy duty power coated skid
- PVC corrosion resistant piping
- Simple automation
- Saves thousand on depth cartridge replacements
- Low maintenance
- Low power consumption
- Backed with quick, reliable and efficient after sales service and customer support
- Quick installation and start-up
- Pure, crystal-clear potable water at all times
- High removal efficiency of bacteria & viruses
- Low fouling hollow fiber UF membranes
- ABS/PVC UF membrane housings
- Excellent filtration performance with high flux
- Reduced need for chemicals
- Completely leak-free operation
- Easy to use and maintain

Optional features (At an extra cost)

- PLC– control
- Automatic backwash screen filter
- Separate backwash pump
- Variable speed motor drive
- System for air scouring
- Module integration
- Membrane cleaning system
- Cross flow flat sheet membrane
- SS pump
- Inside-Out Configuration



Parameters effecting the system design / Water softener size selection support (Input required as per your requirements) *

- ◆ Feed water source
- ◆ Average flow rate required (m^3/hr)
- ◆ Daily soft water required (m^3)
- ◆ Air source
- ◆ Air blower available (If yes, Capacity)
- ◆ Control mode (Manual, semi-automatic, automatic)
- ◆ Chemical cleaning options
- ◆ Instruments and control (SS Pressure gauge (Inlet/outlet), backwash flow controller, flow meter, tank level controller, PLC, etc)
- ◆ Feed water turbidity (NTU)
- ◆ Feed water suspended solids (TSS)
- ◆ Feed water storage tank (Yes/No)
- ◆ If yes to FWST (Capacity in m^3)
- ◆ Filtered water storage tank (Yes/No)
- ◆ If yes to SWST (Capacity in m^3)
- ◆ Pre-treatment options Coagulation, flocculation, Alum/ Flocculent dosing,
- ◆ Downstream water treatment systems

* Some of these may sharply increase the cost

For quote or any other details, please contact



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