

UF Series Ultrafiltration Systems

High-Efficiency Turbidity & Fine Particle Filtration

- Filtration down to 0.02 microns
- Service flow rates up to 12 gpm
- Lower pressure drop compared to cartridge filtration systems
- No disposable cartridges to replace
- Ideal for continuous operation in commercial applications



The A. O. Smith UF Series Ultrafiltration Systems provide reliable removal of turbidity, silts, clays, and fine suspended solids for commercial, light industrial, and specialty water applications. Utilizing advanced 0.02 micron outside-in membrane technology, the UF Series delivers consistent filtration performance without the need for disposable cartridges.

Designed for simplicity and durability, UF systems operate at normal line pressure and use an automated water- only backwash process to maintain membrane performance. The result is a low-maintenance, high-efficiency filtration solution ideal for pre-treatment, polishing, and water reuse applications.

Features

- **0.02 micron ultrafiltration** for effective turbidity and fine particle removal
- **Outside-in membrane flow design** for reduced clogging and superior backwashing
- **Continuous service flow rates** up to 12 gpm
- **Backwashable membrane system** using water only — no chemicals required
- **Low wastewater discharge** during cleaning cycles
- **Non-biodegradable membranes** with strong mechanical and chemical resistance
- **Bottom drain connection** for easy system drainage and maintenance
- **Designed to protect system** performance during intermittent power conditions

Options

- Automatic flush kit for scheduled membrane cleaning
- Separate source backwash kit for high turbidity water conditions
- Twin unit configurations for increased flow or redundancy
- Manual or automatic control valve configurations

UF Series – System Components & Performance

Control & Operation



UF systems operate using simple, water-only backwash cycles to clean the membrane surface. Systems may be configured with automatic control valves for scheduled cleaning or manual in/out style valves for basic operation. Normal line pressure is sufficient for operation, eliminating the need for booster pumps in most installations.

Tank & Vessel Design

The system features a patented membrane tank design that integrates the UF module into a durable pressure vessel. A standard bottom drain allows for easy blowdown and cleaning of accumulated solids. For applications with elevated turbidity levels, optional auto-flush and separate source backwash kits help maintain optimal system operation.



Ultrafiltration Membranes

The UF Series utilizes high-strength hollow fiber membranes capable of removing suspended solids, colloidal material, and fine particulate matter down to 0.02 microns. The membrane module operates with flow from the outside to the inside of the fibers, maximizing surface area and improving filtration efficiency.

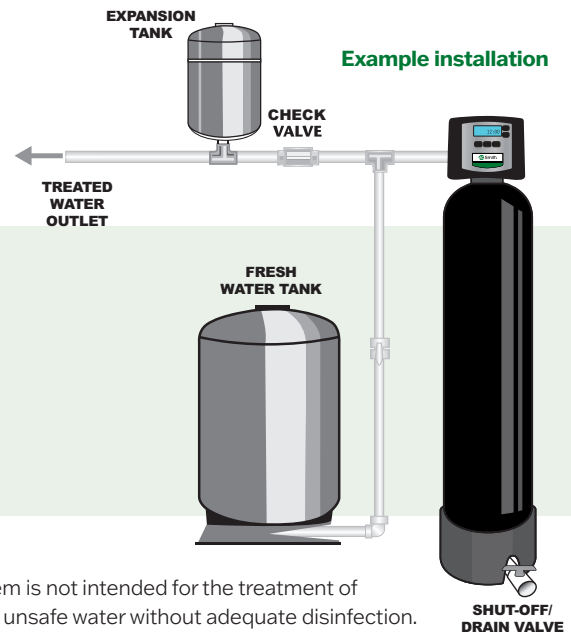
Membranes are non-biodegradable and engineered to withstand repeated backwash cycles, ensuring long service life and consistent filtration performance.



Shown: Select applications.

The UF Series supports a broad range of commercial uses.

Explore applications at aosmith.com/commercialwatertreatment



Note: This system is not intended for the treatment of microbiologically unsafe water without adequate disinfection.

