

Ultra Pure

UF Membrane Systems

Miller-Leaman is committed to filtering, treating, and purifying our most precious resource...WATER. With less than 1 percent of the world's water being of fresh quality, we recognize the need to replenish and reuse our water supply. Some states have set optimistic goals for water reuse; Florida and California alone are expected to reuse over 1 billion gallons per day within the next few years.

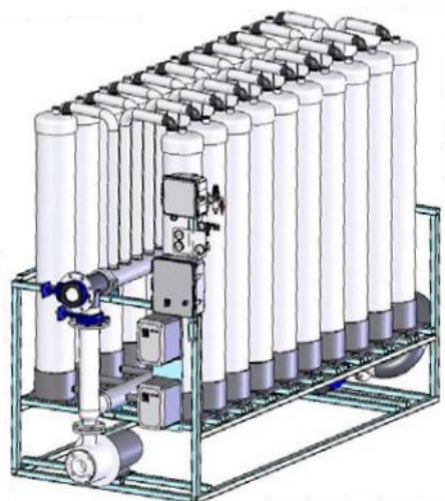
Since 1991, Miller-Leaman and our strategic partners have been committed to investing in Research & Development with the goal of generating unique, innovative, and reliable filtration products. Our automatic **Ultra-Pure** UF Membrane Systems represent the newest such product.

The **Ultra-Pure** UF Membrane System was designed for Low Pressure, High Efficiency, Dead-End Filtration. With simplicity in mind, our turnkey systems are designed for easy installation and quick startup, efficient operation, and minimal maintenance. Equipped with our state-of-the-art menu-driven Backwash Controller, operation of the system is very user-friendly.

Our array of filtration products are used all over the world, in a variety of industries and applications. Whether it is with our new **Ultra-Pure** UF Membrane System or one of our other unique filtration products, we hope to be the solution to your next challenging filtration project. Call today to discuss your application.



Model # ML-02



Model # ML-20

APPLICATIONS:

- Waste and Effluent Treatment
- Recovery of Valuable Process Streams
- Water Purification –
Removing Suspended Solids, Turbidity, Bacteria & Viruses
- Potable Water from Rivers, Ponds, Streams, etc.
- Water Pre-Treatment –
RO, Seawater Desalination, Ion Exchange
- Wastewater Reuse from Many Industries -
Food Processing, Textile, Mobile Emergency Water Purification, Process & Cooling Tower Make-up
- Machining & Grinding – Water Soluble Coolants
- Wash Water / Rinse Water Recycling
- Remove Haze Components from Juice, Wine, Beer (Clarification)
- Milk and Dairy Processing
- Replace Coagulation, Flocculation and Settling Process Media
- Partial Dewatering
- Landfill Leachate
- Treatment of Dye Effluents
- Surface & Ground Water Clarification
- Car Wash Effluent



Membrane Specifications:

- **Configuration:** Hollow Fiber (outside-in filtration)
- **Operating Temperature:** < 122°F
- **Operating Pressure:** < 15 PSI
- **pH Range:** 2 - 11
- **Filtrate Turbidity:** < 1 NTU / < 3 SDI
- **Flux Rate:** 45 GFD maximum
(depends on feed water quality)
- **Fiber Size:** Outer Diameter 2.0mm
(other sizes available)
- **Surface Area:** 460 square feet per membrane
- **Membrane Casing:** 8" Diameter x 60" Length
- **Material:** Hydrophilic Modified PAN (Optional PVDF Membranes)
- **Operation:** Dead-End Filtration with Air Scouring Backwash
- **Electrical:** 230/380/460/575V / 50/60Hz / 1 or 3 Phase

BENEFITS:

- Reduces Water & Energy Usage
- Removal of Bacteria / Viruses
- Turbidity of < 1 NTU with 95% Recovery Rate
- Removal of Total Suspended Solids > 0.1 Micron
- Reduce SDI to < 3
- Features High Performance Air Scouring Backwash
- Minimal Operation and Labor Costs
- Lower Capital Investment
- Minimal Pretreatment & Chemicals Needed
- Automated Design with Continuous Operation
- High Concentration Minimizes Disposal Costs
- Tangential Flow Along the Membrane Surface
Limits Membrane Fouling
- Small Footprint & Easy Future Expansion

Ultra-Pure UF Systems are equipped with our state-of-the-art Backwash Controller

System Specifications:

Model*	Flow Rate**	~ Length	~ Width	~ Height	~ Weight
ML-01	7 - 10 GPM	32"	28"	71"	176 lbs.
ML-02	14 - 20 GPM	32"	40"	87"	287 lbs.
ML-04	28 -40 GPM	51"	40"	87"	507 lbs.
ML-06	42 - 60 GPM	79"	47"	87"	772 lbs.
ML-08	56 - 80 GPM	95"	47"	87"	1,036 lbs.
ML-10	70 - 100 GPM	110"	47"	87"	1,653 lbs.
ML-12	84 - 120 GPM	126"	47"	87"	1,940 lbs.
ML-14	98 - 140 GPM	148"	47"	87"	2,227 lbs.
ML-16	112 - 160 GPM	154"	47"	87"	2,513 lbs.
ML-18	126 - 180 GPM	165"	47"	87"	2,800 lbs.
ML-20	140 - 200 GPM	177"	47"	87"	3,087 lbs.

* Systems can be manifolded to achieve higher flow rates

** Minimum and maximum flow rates depend on feed water quality.