



**Standard are the Obvious Con-Serv Qualities:**

User Friendly ■ Quality Construction ■ Performance ■ Low Cost to Operate ■ Inexpensive to Purchase

**MANUFACTURING**

## Ultra-Filtration and UF/RO Combination Systems



Shown: UF system 4 gpm

The UF system is completely self-contained and includes storage tanks for both the raw water and the treated water. All equipment is skid-mounted and controlled by a single local control system.

Visit us at the  
ICA Show  
May 2<sup>nd</sup> – 4<sup>th</sup>  
Booth #1273

### Standard Features

- Hollow-Fiber or Ceramic Membranes
- Many MWCO and Micron Ratings Available
- Stainless Steel Pumps, Valves, Pressure Gauges
- Corrosion Resistant Piping
- 60HZ/230v-460v, 3 phase TEFC motor
- Automatic Backwash System (hollow fiber only)
- Filtrate and Concentrate Flowmeters
- Total Automatic Operation with PLC Control
- Self-backwashing Sediment Strainer



Shown: Combination UF(8 gpm)/  
Spot Free Rinse System (3 gpm)

**Ultrafiltration** - An ultrafiltration (UF) system uses a hydrophilic capillary membrane to separate a high percentage of suspended and dissolved molecules. Only certain types of molecules, like water, can pass through the membrane. Other larger molecules, like organic compounds, proteins, oils, and suspended solids do not pass through the membrane and are left behind. The membrane is made of thin "hollow-fibers" with an inside diameter of between 0.8 and 2.0 mm with microscopic pores that let water pass through while acting as a barrier to stop dissolved and suspended particles.

# UF Systems (Hollow Fiber and Ceramic)

## Hollow Fiber Membrane UF System

PRODUCTION GPD	m3/D	SYSTEM CONFIGURATION				APPROXIMATE SHIPPING DIMENSIONS			APPROXIMATE SKID DIMENSIONS		
		RECOVERY (%)	NUMBER AND SIZE ELEMENTS	MOTOR		(LxWxH) (Inches)	(LxWxH) (cm)	WEIGHT (lbs/Kg)	(LxWxH) (Inches)	(LxWxH) (cm)	WEIGHT (lbs/Kg)
7,200	27	86	4 (4" x 40")	8	4.4	124 x 40 x 72	315 x 102 x 183	1176/534	108 x 32 x 80	274 x 81 x 162	876/388
14,400	55	86	7 (4" x 40")	8	4.4	120 x 60 x 72	315 x 127 x 183	1300/681	108 x 42 x 80	274 x 98 x 162	1000/465
21,800	82	86	2 (8" x 40")	8	4.4	188 x 60 x 72	427 x 127 x 183	1476/870	168 x 42 x 80	398 x 98 x 162	1160/523
28,800	109	86	2 (8" x 80")	10	8	188 x 80 x 72	427 x 152 x 183	1700/773	168 x 52 x 80	398 x 132 x 162	1360/814

## Ceramic Membrane UF System

PRODUCTION GPD	m3/D	SYSTEM CONFIGURATION				APPROXIMATE SHIPPING DIMENSIONS			APPROXIMATE SKID DIMENSIONS		
		RECOVERY (%)	NUMBER AND SIZE ELEMENTS	MOTOR		(LxWxH) (Inches)	(LxWxH) (cm)	WEIGHT (lbs/Kg)	(LxWxH) (Inches)	(LxWxH) (cm)	WEIGHT (lbs/Kg)
7,200	27	100	5	1	0.75	124 x 40 x 72	315 x 102 x 183	1176/534	108 x 32 x 80	274 x 81 x 162	876/388
14,400	55	100	10	2	1.5	120 x 60 x 72	315 x 127 x 183	1300/681	108 x 42 x 80	274 x 98 x 162	1000/465
21,800	82	100	14	3	2.2	188 x 60 x 72	427 x 127 x 183	1476/870	168 x 42 x 80	398 x 98 x 162	1160/523
28,800	109	100	19	5	4	188 x 80 x 72	427 x 152 x 183	1700/773	168 x 52 x 80	398 x 132 x 162	1360/814

Design Assumptions: Feed water of up to 500 ppm Tss @ 25c, Turbidity , 15 NTU  
Flow Rate, flux, and recovery in accordance with Membrane manufacturer's recommendations

Combination UF / RO systems are custom designed based on Required Flow for Wash and Spot Free Rinse Water. **Call for quote today.**

## Typical Contaminants found in Carwash Reclaim Water

- Oil and grease, which contain hazardous materials such as benzene, lead, zinc, chromium, arsenic, pesticides, herbicides, nitrates, and other metals
- Detergents, including biodegradable detergents, that can be poisonous to fish
- Phosphates, which are plant nutrients and can cause excessive growth of nuisance plants in water bodies
- Chemicals, such as hydrofluoric acid and ammonium bifluoride products (ABF), and solvent-based solutions that are harmful to living organisms
- Chemicals and oils used for the maintenance of cleaning machinery (for automatic systems)
- Debris that can clog storm sewer inlets and grates and thereby prevent storm water drainage to the sewer

