



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.



Shown: 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 60Hz (HP) 50Hz (KW)	(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	1300/591	108 x 42 x 80	274 x 98 x 162	1000/455
21,800	82	86	2 (8" x 40")	8 4.4	188 x 60 x 72	427 x 127 x 183	1476/670	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	1360/614

Ceramic Membrane UF System

PRODUCTION GPD	m3/D	SYSTEM CONFIGURATION			APPROXIMATE SHIPPING DIMENSIONS			APPROXIMATE SKID DIMENSIONS		
		RECOVERY (%)	NUMBER AND SIZE ELEMENTS	MOTOR 60Hz (HP) 50Hz (KW)	(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	1300/591	108 x 42 x 80	274 x 98 x 162	1000/455
21,800	82	100	14	3 2.2	188 x 60 x 72	427 x 127 x 183	1476/670	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	1360/614

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

