MEMBRANE FILTRATION SYSTEMS

POWERED BY:



Hydroponic Specific Reverse Osmosis





Custom Engineered For Your Facility and Cultivation Approach

Pure water is the foundation of any high-performance cultivation approach. Current Culture H2O has partnered with AXEON Water Technologies, a global leader in membrane filtration technologies, to develop a premium line of cultivation specific commercial water filtration systems. Ranging in capacities from 8,000 – 20,000 gallons per day, these high-efficiency packaged, "plug & play" water filtration systems are specifically engineered to remove micro-organisms and impurities that can impact plant productivity.



Plug & Play Pre-Plumbed & Wired Skid



Ultra Efficient High Recovery Rate



Computer Controlled



Improve Nutrient Efficiency



CCH20 COMMERCIAL MEMBRANE FILTRATION SYSTEMS

► HIGH PERMEATE RECOVERY RATE

Up to 80% recovery - 4 parts product water to 1 part waste water

COMPUTER CONTROLLER

Monitor permeate TDS, operational parameters and recovery rates

COMPACT FOOTPRINT

Space saving design professionally plumbed and wired for ease of use and serviceability

GROWER SUPPORT

Industry leading support & service

CUSTOM ENGINEERED

Designed specifically for your source water and cultivation application

PREMIUM FEATURES

Blend valve, permeate flush, and TDS monitoring included standard

LEAK & PERFORMANCE TESTED

Plug & Play skid systems are factory plumbed and wired

MADE IN USA

Designed, manufactured and built in the USA

Premium Features for Professional Cultivators





R1-SERIES COMMERCIAL REVERSE OSMOSIS SYSTEMS

R1 — Series Reverse Osmosis Systems are designed for overall superior performance, high recovery rates, minimal energy consumption and offer great savings with low maintenance and operation costs.

R1 — Series Reverse Osmosis Systems feature a new, innovative modular design. These systems feature only the highest quality components, including a programmable computer controller with many built—in standard features, a stainless steel booster pump for high performance and corrosion resistance, extra low energy membranes and fiberglass membrane housings for enhanced performance and durability.

R1 — Series Reverse Osmosis Systems have been engineered for capacities ranging from 8,000-20,000 gallons per day.



BENEFITS

- Fully Equipped and Customizable
- Skid Mounted
- Decreased Size of Dimensional Footprint from Standard Reverse Osmosis Systems
- Components Easily Accessible
- Pre—Plumbed, Wired and Assembled

- Performance Tested and Preserved
- Low Operation and Maintenance Costs
- Easy Maintenance and Servicing
- 20% Less Energy Use than Standard Reverse Osmosis Systems
- Modular Frame Design
- Made in the U.S.A.

FEATURES

- S 150 Computer Controller
 - LCD Backlit Display
 - Pre-Treatment Lockout
 - Tank Level Input
 - Low Pressure Monitoring and Alarm
 - TDS Monitoring
 - Feed Flush
 - Hour Meter
- Permeate Flow Meter
- Concentrate and Recycle Flow Meter with Integrated Needle Valve
- Pre—Filter 0 100 psi Panel Mounted Glycerin Filled Gauges
- Pump Discharge and Concentrate 0 300 psi Panel Mounted Glycerin Filled Gauges

- Goulds® Multi-Stage Booster Pump
- Chemical Injection Port and Electrical Connection
- ASCO® 212 Series Normally Closed Composite Feed Solenoid Valve
- Stainless Steel Throttle Globe Valve
- Pentair® 20" Big Grey Cartridge
- AXEON® SDF Series 5 Micron Sediment Pre-Filter
- AXEON HF5 Series Extra Low Energy Membrane Elements
- AXEON FRP Series Membrane Housings 300 psi
- Feed Low Pressure Switch
- White Powder Coated Aluminum Frame
- 1—Year Limited Warranty



RI-SERIES COMMERCIAL REVERSE OSMOSIS SYSTEMS

SPECIFICATIONS

MODELS	CC-8,000	CC-12,000	CC-16,000	CC-20,000
DESIGN				
Configuration	Single Pass	Single Pass	Single Pass	Single Pass
Feedwater TDS max ppm†	2,000	2,000	2,000	2,000
REJECTION AND FLOW RATES††				
Permeate Flow Rate (gpd / lpd)	8,000 / 30,283	12,000 / 45,425	16,000 / 60,567	20,000 / 75,708
Permeate Flow Rate (gpm / lpm)	5.55 / 21	8.33 / 31.53	11.11 / 42.06	13.89 / 52.58
Concentrate Recycle Flow Rate	Up to 5 /	Up to 5 /	Up to 5 /	Up to 5 /
(gpm / lpm)	18.93	18.93	18.93	18.93
CONNECTIONS				
Feed (inch)	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Permeate (inch)	1 FNPT	1 FNPT	1 FNPT	1 FNPT
Concentrate (inch)	1 FNPT	1 FNPT	1 FNPT	1 FNPT
MEMBRANES				
Membrane(s) Per Vessel	1	1	1	1
Membrane Quantity	4	6	8	10
Membrane Size	4040	4040	4040	4040
Nominal TDS Rejection %	98.5	98.5	98.5	98.5
VESSELS				
Vessel Array	1:1:1:1	2:02:02	2:2:2:2	2:2:2:2:2
Vessel Quantity	4	6	8	10
PUMPS				
Pump Type	Multi-Stage	Multi-Stage	Multi-Stage	Multi-Stage
Motor HP	1.5	3	3	3
RPM at 60 Hz	3450	3450	3450	3450
SYSTEM ELECTRICAL				
Standard Voltage + Amp Draw	220V, 60Hz, 1PH, 9.8A*	220V, 60Hz, 1PH, 14A*	220V, 60Hz, 1PH, 14A*	220V, 60Hz, 1PH, 14A*
SYSTEM DIMENSIONS				
Approximate Dimensions**	32 x 26 x 60 /	32 x 26 x 60 /	32 x 50 x 60 /	32 x 50 x 60 /
LxWxH(in/cm)	81.28 x 66.04 x 152.40	81.28 x 66.04 x 152.40	81.28 x 127 x 152.40	81.28 x 127 x 152.40
Approximate Weight*** (lbs / kg)	370 / 167.83	470 / 213.19	510 / 231.33	550 / 249.48

Test Parameters: 550 TDS Filtered (5 — Micron), Dechlorinated, Municipal Feedwater, 65 psi / 4.50 bar Feed Pressure, 80 psi / 5.5 bar Operating Pressure, 77°F / 25°C, Recovery as stated, 7.0 pH. Data taken after 60 minutes of operation.

OPERATING LIMITS

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Maximum Feed Temperature (°F / °C)	85 / 29	Maximum Free Chlorine (ppm)	0
Minimum Feed Temperature (°F / °C)	40 / 4	Maximum TDS (ppm)	2,000
Maximum Ambient Temperature (°F / °C)	120 / 49	Maximum Hardness (gpg)	0
Minimum Ambient Temperature (°F / °C)	40 / 4	Maximum pH (Continuous)	11
Maximum Feed Pressure (psi / bar)	85 / 6	Minimum pH (Continuous)	2
Minimum Feed Pressure (psi / bar)	45 / 3	Maximum pH (Cleaning 30 Minutes)	13
Maximum Pressure (psi / bar)	200 / 14	Minimum pH (Cleaning 30 Minutes)	1
Maximum Feed Silt Density Index (SDI)	<3	Maximum Turbidity NTU	1

^{†††} System pressure is variable due to water conditions. Permeate flow will increase at a higher temperature and will decrease at a lower temperature.



[†] Low temperatures and feedwater quality, such as high TDS levels will significantly affect the systems production capabilities and pump performance. Computer projections must be run for individual applications which do not meet or exceed minimum and maximum operating limits for such conditions.

^{††} Product flow and maximum recovery rates are based on feedwater conditions as stated above. Do not exceed recommended permeate flow. Design conditions are not identical to test conditions, please contact the manufacturer or your supplier for more information.

^{*} Varies with motor manufacturer.

^{**} Does not include operating space requirements.

^{***} Does not include membrane.