



## Series Sureflo Industrial Reverse Osmosis System

### STANDARD FEATURES

- ◆ Flow rates designed on temperatures of 25°C or 77°F
- ◆ Polyurethane coated steel or stainless steel frame
- ◆ Stainless steel high pressure Booster Pump with TEFC Motor
- ◆ Stainless steel prefilter housing with a maximum operating pressure of 150psi
- ◆ 5 Micron prefilter pleated cartridges
- ◆ 2" 3 Way Control Valve with 1/8 inch Solenoid for inlet and automatic flush
- ◆ Pressure Gauges Stainless steel oil filled
  - Prefilter 0 – 100 psi    Post Filter 0 – 100psi
  - Product 0 – 100 psi    Pump 0 – 600psi
  - Waste 0 – 600psi    Module 0 – 600psi
- ◆ Flow Controls for product, waste and recycle.
- ◆ Waste recycle reduces waste water cost by up to 80 percent
- ◆ Low feed pressure switch
- ◆ High pump pressure switch
- ◆ Reverse Osmosis tank level switches
- ◆ Product water TDS/conductivity meter
- ◆ Reverse Osmosis tank full override
- ◆ Operating temperature of 22°F to 140°F
- ◆ 8"x40" fiberglass filament wound or stainless steel membrane housing with/end caps
- ◆ 8"x40" low energy thin film composite membranes
- ◆ All plumbing will be high pressure Sch80 PVC pipe and fittings

### MICROPROCESSOR CONTROLLER STANDARD FEATURES:

- ◆ Universal AC Power 80 – 265 Vac 50/60 HZ
- ◆ 4 Lines x 40 Character backlit liquid crystal display
- ◆ 18 Key keypad with integral alarm light
- ◆ Programmable time delays and set points
- ◆ Real time clock with battery backup
- ◆ Non-volatile set point memory

- ◆ Audible alarm with timed alarm silence
- ◆ US or Metric readings
- ◆ Nema 4X hinged enclosure, 16"x14"x8", larger panel required
- ◆ Plug in terminal strips
- ◆ Led input/output indicators
- ◆ Pre-programmed R.O. functions

### MICROPROCESSOR CONTROLS AND MONITORS THE FOLLOWING:

- ◆ Feedwater valve relay
- ◆ Reverse Osmosis and Auxiliary pump control relays
- ◆ Permeate and feed TDS/Conductivity membrane flush valve relay
- ◆ Permeate divert valve relay temperature
- ◆ Operating hours
- ◆ Low feed pressure switch
- ◆ High pump pressure switch
- ◆ Pretreatment lockout
- ◆ Flow meter interface for permeate and concentrate
- ◆ Reverse Osmosis tank switches
- ◆ Reverse Osmosis tank low switch
- ◆ Remote alarm output
- ◆ RS232 serial port output

### OPTIONS:

- ◆ pH sensors with display and alarms set points
- ◆ IEC motor starters and control transformers flow sensors to display flow in GPM or LPM with percent recovery displayed and alarm set points for high and low flow rates
- ◆ Pressure sensors allowing display on LCD of pressures and differential pressures with programmable set points for high, low with differential pressure alarms
- ◆ Graphic display

## System Production Flow Rate Specifications

Model Number	EWRK206	EWRK306	EWRK309	EWRK312	EWRK315	EWRK318	EWRK424
Feed	41	47	64.3	85.7	107.1	128.6	171.40
Product (maximum)	20	28	42	60	75	85	115
Rejection	6	13	19.3	25.7	32.1	38.6	51.04
Rejection Recycle	15	10	2	1	12	1	1

## Skid Process Connection Specifications

Model Number	EWRK206	EWRK306	EWRK309	EWRK312	EWRK315	EWRK318	EWRK424
Feed Inlet 2	2	2	2	3	3	3	
Product Outlet	2	2	2	2	2	3	3
Rejection to Drain Outlet	1.5	1.5	1.5	2	2	2	2

## Unit Configuration Specifications

Model Number	EWRK206	EWRK306	EWRK309	EWRK312	EWRK315	EWRK318	EWRK424
Vessel array staging	1:1	1:1:1	1:1:1	2:1:1	2:2:1	3:2:1	3:2:1
Membranes/vessel	2	3	3	3	3	3	4
Membrane quantity	4	6	9	12	15	18	24
Vessel quantity	2	2	3	4	5	6	6
Pump model & HP	BVM18-80 7.5	BVM18-80 7.5	BVM16-50 10	BVM32-3 15	BVM32-4-2 15	BVM32-4 15	BVM32-5 20

## Skid Cleaning Connection Specifications

Model Number	EWRK206	EWRK306	EWRK309	EWRK312	EWRK315	EWRK318	EWRK424
Feed	2	2	2	2	2	2	2
Rejection	2	2	2	2	2	2	2
Product	2	2	2	2	2	3	3

## Skid Utility Requirements

Model Number	EWRK206	EWRK306	EWRK309	EWRK312	EWRK315	EWRK318	EWRK424
Max FLA@ 208-230/3/60	17	17	21.25	29.56	29.56	29.56	36.95
Max FLA@ 460/3/60	7.5	7.5	9.75	12.19	12.19	12.19	15.25
Max FLA@ 575/3/60	7.5	7.5	9.75	12.19	12.19	12.19	15.25
Motor HP (ref.)7.5	7.5	10	15	15	15	20	
Waste Drain (max. gpm)	12	20	20	35	40	60	60

Floor Drain A floor drain (in addition to a waste drain) should be supplied for general maintenance.

## Skid Physical Dimension Specifications

Model Number	EWRK206	EWRK306	EWRK309	EWRK312	EWRK315	EWRK318	EWRK424
Length*(inches)	160	160	160	160	160	180	180
Width*	50	50	50	50	62 /2	62 /2	62 /2
Height*	75	75	75	86	80	80	80
Shipping weight (lbs)	2400	2600	2800	3000	3200	3700	4000

## Operating Limits

<b>Temperature:</b>	
Maximum Feed Temperature	35°C - 95°F
Minimum Feed Temperature*	5°C - 41°F
<b>Pressure:</b>	
Maximum System Inlet Pressure	90 PSIG
Minimum System Inlet Pressure	25 PSIG
Design Membrane Feed Pressure (@ 77°F)	125 PSIG (Nominal)
Maximum SDI Rating	<3
Maximum Turbidity	1 NTU
Maximum Free Chlorine and/or chloramine	<0.02 PPM
Maximum pH (continuous)	11
Minimum pH (continuous)	4
Maximum pH (cleaning - 30 min.)	12
Minimum pH (cleaning - 30 min.)	2

\* If any of the feedwater parameters are not within the limits given, consult the factory for application assistance.

**Canada**

• 220 Bayview Drive Unit 18, Barrie Ontario L4N 4Y8 •