

VANTAGE™

Reverse Osmosis Systems

H SERIES



THE RIGHT SOLUTIONS,
FLEXIBLE AND ECONOMICAL

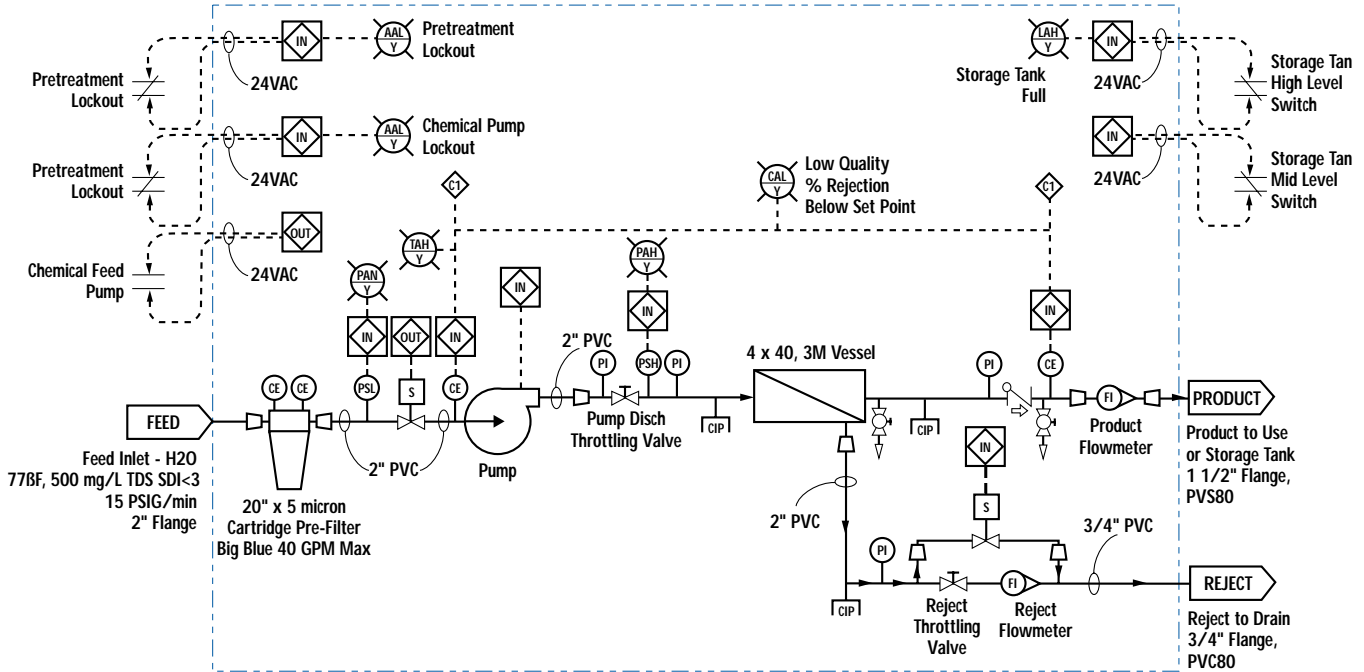
Vantage™ Reverse Osmosis units are pre-engineered systems specifically designed for a variety of industrial applications. Vantage systems offer you the greatest flexibility possible from a standard system. The control system is an advanced microprocessor based system that is very easy to use. The W, L, V and H Series families range in product flow from 0.1 to 23 gpm. With the many pre-packaged options available, we'll find the right solution for you.

*Custom solutions through
advanced standardization*

Capabilities

- ◆ TFC RO Membranes ensure optimum water quality
- ◆ Microprocessor-based controller provides user-friendly programmable controls
- ◆ High quality components ensure continuous, reliable operation
- ◆ Pre-engineered systems mean easy installation
- ◆ Clean-in-place connections maximize system availability
- ◆ Dial-up capability enables real-time remote monitoring
- ◆ Auxiliary equipment interface provides system wide control

H Series Process Flow Diagram



DESIGN PARAMETERS

Configuration	.....
Inlet Pressure Requirements	.....
Feed Water Temperature	.....
Feed Water Source	.....
Prefiltration Requirements	.....
Feed Water Fouling Index	.....
System Recovery (Nominal)	.....
Product Pressure Available	.....
Membrane Salt Rejection	.....
Performance Basis	.....

GENERAL SPECIFICATIONS

Pressure vessels	.....
Conductivity sensor	.....
Flow indicator	.....
Flow indicator (reject)	.....
Control System	.....

OPERATING LIMITS

Maximum Feed Temperature	.....
Minimum Feed Temperature*	.....
Minimum Feed Pressure	.....
*Lower temperature may require larger booster pump	

FEED WATER REQUIREMENTS

Maximum SDI Rating	.....
Maximum Turbidity	.....
Maximum Free Chlorine and/or chloramine	.....
Maximum pH (continuous)	.....
Minimum pH (continuous)	.....
Maximum pH (cleaning -30 min.)	.....
Minimum pH (cleaning -30 min.)	.....

Common Specifications

Multi-Stage, Single Pass
25 PSIG
77°F
Well or Softened
5 μ nominal
Silt Density Index (SDI) < 3
75%
25 PSIG
99% nominal (based on 2000 ppm NaCl @ 225 PSI, 77°F, pH 8, and 15% recovery)
A specific computer projection must be run for each individual application

Fiberglass
Epoxy coated 3/4" MNPT
Rotameter, PVC/acrylic construction, 3/4" FPT connections
Rotameter, PVC/acrylic construction, 3/4" FPT connections
Microprocessor, NEMA 4X enclosure

113°F
50°F
15 PSIG

3
1 NTU
< 0.02 PPM
11
4
12
1

SYSTEM SPECIFICATIONS

Model Number	HZ03	HZ04	HZ05	HZ06
Product Flow* (gpm)	10.5	15	19	23
Feed Flow (gpm)	16.2	21.4	25.3	30.7
Reject Flow (gpm)	5.7	6.4	6.3	7.7
Cleaning Flow (gpm) at 60 PSIG max.	10	20	20	30
Connection				
Feed Inlet	2"	2"	2"	2"
Product Outlet	1"	1"	1-1/2"	1-1/2"
Reject to Drain Outlet	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT
Membranes				
Membrane/Vessel	3	3	3	3
Membrane Quantity	9	12	15	18
Membrane Type	BW30HP-4040	BW30HP-4040	BW30HP-4040	BW30HP-4040
Vessels				
Vessel Array	1:1:1	2:1:1	2:2:1	3:2:1
Vessel Quantity	3	4	5	6
Pump				
Pump Type	Vertical Multistage	Vertical Multistage	Vertical Multistage	Vertical Multistage
Pump Motor HP (ref.)	10	10	10	10
System Dimensions**				
HxVxD				
inches	63 x 23 x 129	63 x 23 x 129	63 x 23 x 129	63 x 23 x 129
cm	160 x 58 x 328	160 x 58 x 328	160 x 58 x 328	160 x 58 x 328
Shipping Weight				
lb	1110	1250	1400	1550
kg	505	568	636	705
Electrical				
High Voltage Service	480VAC	480VAC	480VAC	480VAC
High Voltage Amp Draw	12	12	12	12

*Product Flow rates are based on equipment design parameters. These Product Flow rates may not be appropriate for other feed waters.

**Does not include operating space requirements.

Standard Options	Description
Modem	This option provides a modem and necessary communication port to allow for remote operation, monitoring and linking multiple Reverse Osmosis units together; each individual unit must be fitted with a systems controller. The components for this option are internal to the systems controller.
Motor voltages	This option provides a standard model Reverse Osmosis unit with voltage specific wiring and electrical components designed to work with the electrical service available. Please note, when ordering the 380VAC 50Hz voltage option, RO performance is slightly de-rated from the other standard models.

STANDARD PRODUCT ORDERING INFORMATION				
Vantage RO Part Number Matrix / Single Pass Reverse Osmosis Units				
	VRO	HZ	04	AX
VANTAGE MODEL				
HZ	Horizontal w/ controller commercial RO centrifugal pump			
VESSEL QUANTITY DESIGNATION				
03	3 VESSELS			
04	4 VESSELS			
05	5 VESSELS			
06	6 VESSELS			
HZ OPTION DESIGNATIONS				
AM	208VAC 3PH 60 HZ WITH MODEM			
AX	208VAC 3PH 60 HZ WITHOUT MODEM			
BM	230VAC 3PH 60HZ WITH MODEM			
BX	230VAC 3PH 60HZ WITHOUT MODEM			
CM	460VAC 3PH 60HZ WITH MODEM			
CX	460VAC 3PH 60HZ WITHOUT MODEM			
DM	380VAC 3PH 50HZ WITH MODEM			
DX	380VAC 3PH 50HZ WITHOUT MODEM			

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- New system installations and upgrades
- Water sampling and analysis, and more

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