

2000LPH INDUSTRIAL REVERSE OSMOSIS SYSTEM

SPECIFICATIONS SHEET

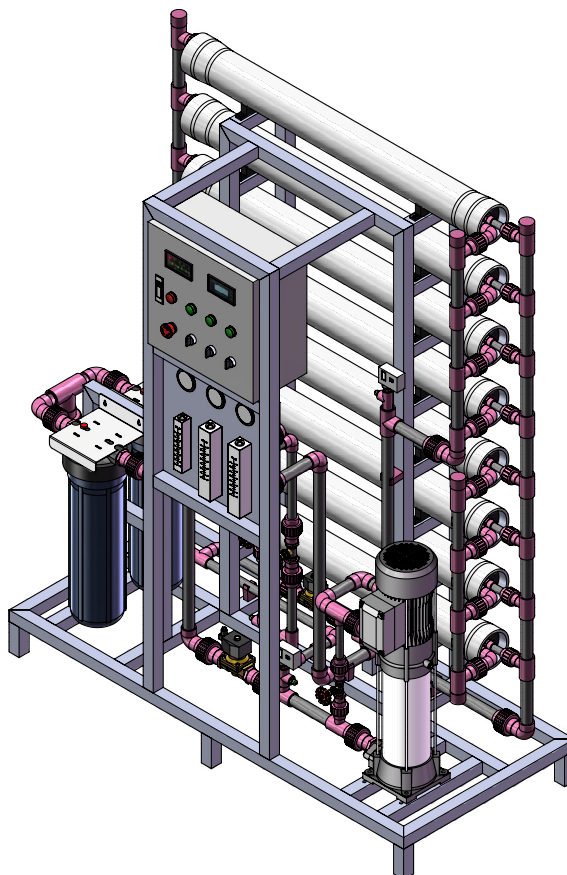
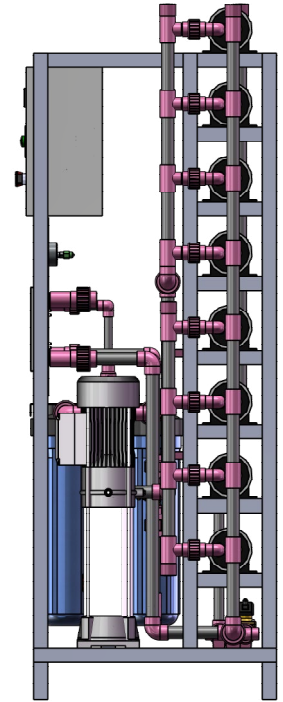
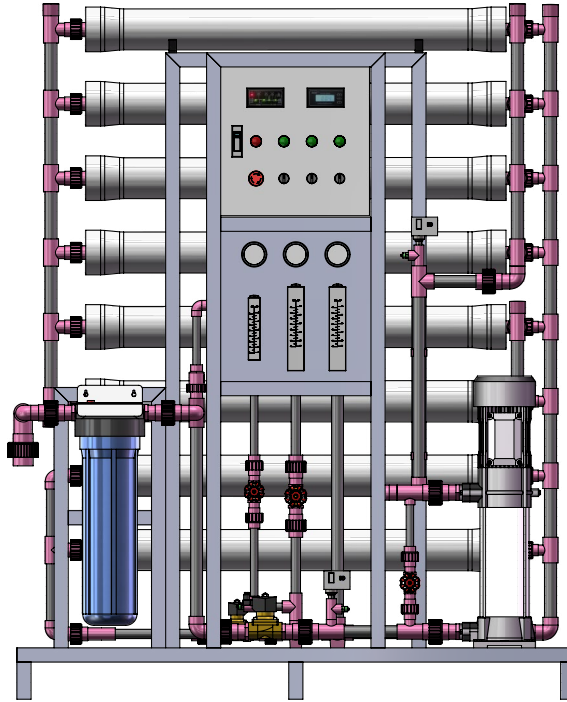
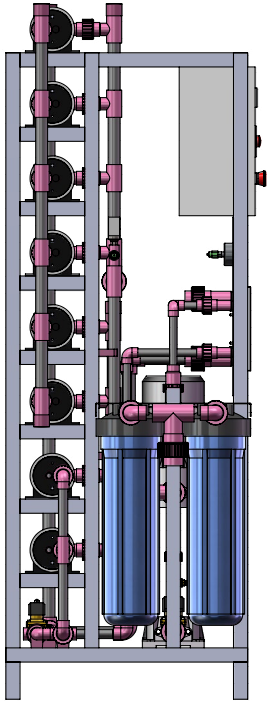
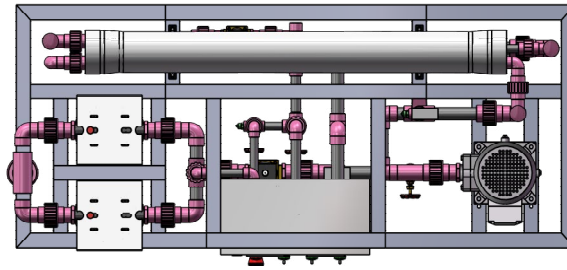


ABOUT REVERSE OSMOSIS

Reverse Osmosis is the process of removing dissolved elements from your water. For example, if you have a cup of water. Each time you add a teaspoon of sugar, The TDS will increase. So, the more sugar you add, the higher your tds will be. A filter system will not remove the sugar that's dissolved in the water. The only way to remove what's dissolved in the water is to put it through a reverse osmosis system.

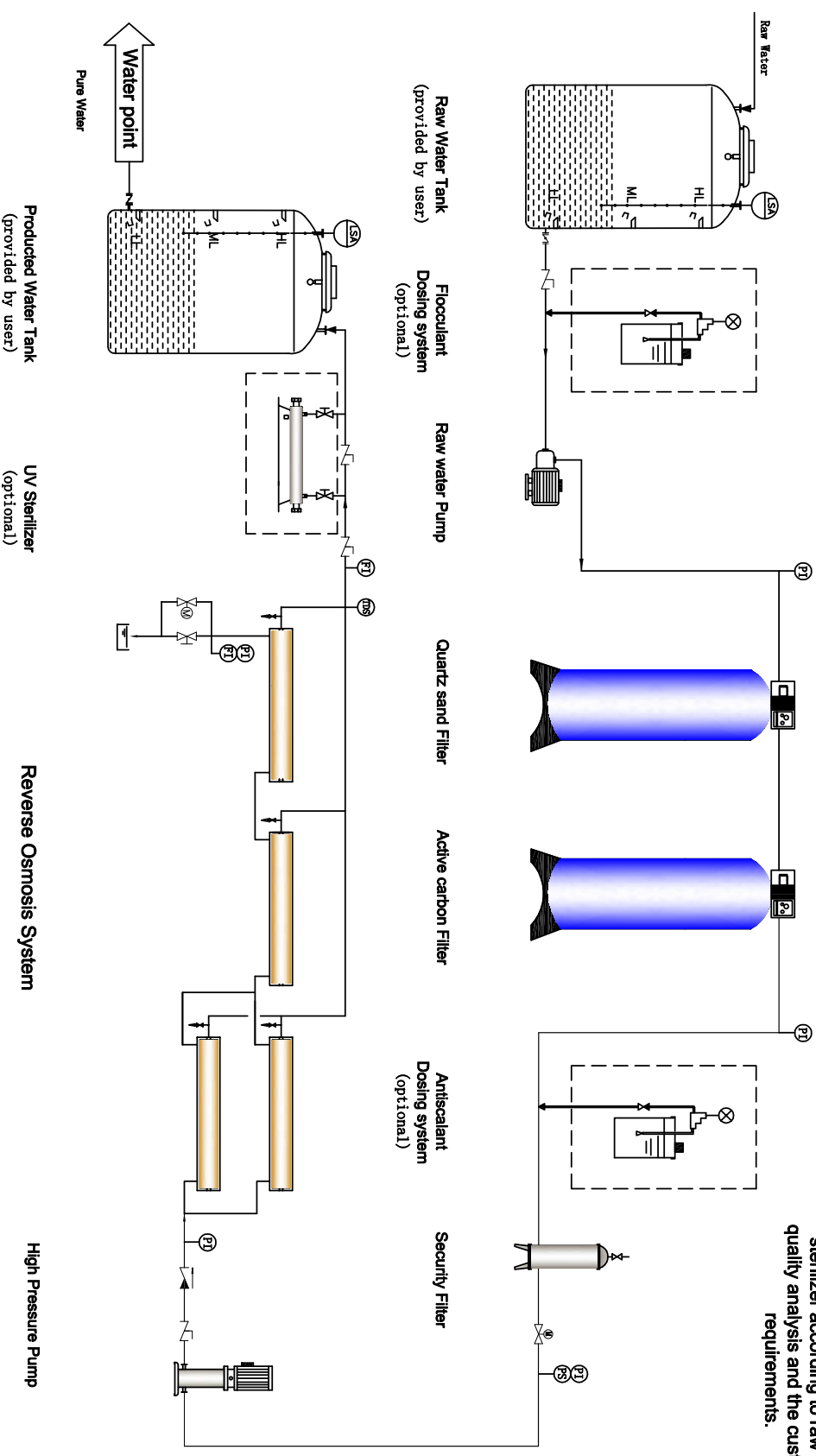
Reverse Osmosis is a technology that is used to remove a large majority of dissolved contaminants from water by pushing the water under pressure through a semi-permeable membrane. So if you have to put sweet water through the reverse osmosis system, you will have 2 outputs. Your pure water will have no taste (permeate), and the water water will be more sweet (concentrate)

SYSTEM'S 3D VIEW



RO-2000L/H(F/A) Pure Water System Flow Processing Diagram

Notes of optional parts inside the dotted lines:
 We will provide flocculant dosing system, ozone generator sanitizer and UV sterilizer according to raw water quality analysis and the customer's requirements.



The Legend

①	The TDS table	⊗	Solenoid valve	⌋	Supply Line
②	Pressure switch	⌋	Butterfly valve	⌋	Water Level sensor
③	Flow meter	⌋	Ball valve	⌋	Automatic multi-channel valves
④	Pressure gauge	⌋	Check valve	⌋	

DESIGNED BY	PROJECT	2000L/H(F/A) Pure Water System		SCALE
DRAWN BY	CHECKED BY	Process Flow Diagram		AI
APPROVED BY	DWG No.	RO-2000L-01	DATE	2016.8
	ARCHIVAL CODE			

FEATURES

- **Sediment Filter:**
 - ♦ 2x 20" Big Blue 5 Micron Sediment Filter that removes sediments and protects the system.
- **High Pressure Pump:**
 - ♦ 1HP Motor Vertical Multi-Stage Pump with flow rate of 1080 Liters/H. High quality stainless steel Shimgi Pump for long-life usage.
- **RO Membrane:**
 - ♦ One of the industry's leading brackish water RO elements - Vontron-4040.
- **Membrane Housing:**
 - ♦ 8 x 4.0" x 40" FRP Housing with 300PSI maximum operating pressure.
- **Pressure Gauges:**
 - ♦ Glycerin Filled Gauges for monitoring the system's operating pressure and per liter operating pressures.
- **Low Pressure Switch:**
 - ♦ Safety device to protect the pump from running dry when there is insufficient water feed pressure.
- **Solenoid Valves:**
 - ♦ To assist with the on/off functionality of the system and automatic membrane flush.
- **Flow Meters:**
 - ♦ One Product and One Waste Flow Meters - Enables operator to actually adjust product to waste ratio and monitor system's performance.
- **Regulator Valve:**
 - ♦ One Stainless Steel ANSI 316 Needle Valve - regulates the product to waste ratio (system's recovery).
- **Micro-Computer Controller:**
 - ♦ A specialized controller designed by Purltech for commercial systems with automatic controls and TDS monitors.

SPECIFICATIONS

- **RO Membrane:** 8 pcs
- **RO Pump:** 3HP
- **Voltage/Hertz:** 110V or 220V / 50Hz or 60Hz / Single phase or three phase
- **Pipe Size:** 1" Feed, 1/2" Permeate, 1/2" Concentrate, 1/2" Flush (BSP thread)

OPERATING PARAMETERS

- **Operating Pressure:** 180 PSI
- **Max. Feed TDS:** 1000 ppm
- **Normal Salt Rejection:** 99%
- **Max. Feed Hardness:** 15 ppm
- **Minimum Salt Rejection:** 96%
- **Feed pH Range:** 3.0 - 10.0 ppm
- **Operating Temperature:** 20 C - 45 C
- **Free Residual Chlorine:** 0.1 ppm
- **Minimum Feed Pressure:** 1.5Kg
- **Recovery Rate:** 60% - 75%