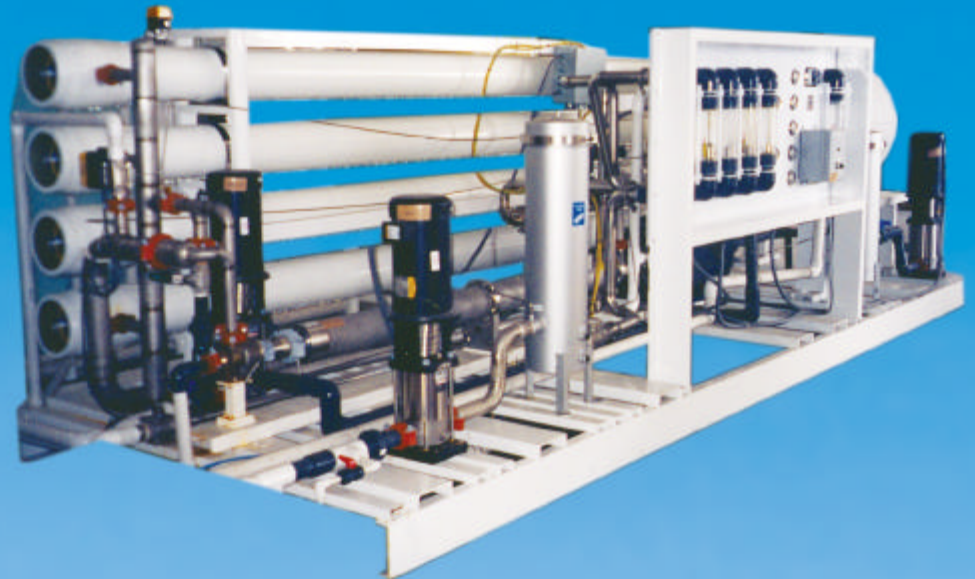
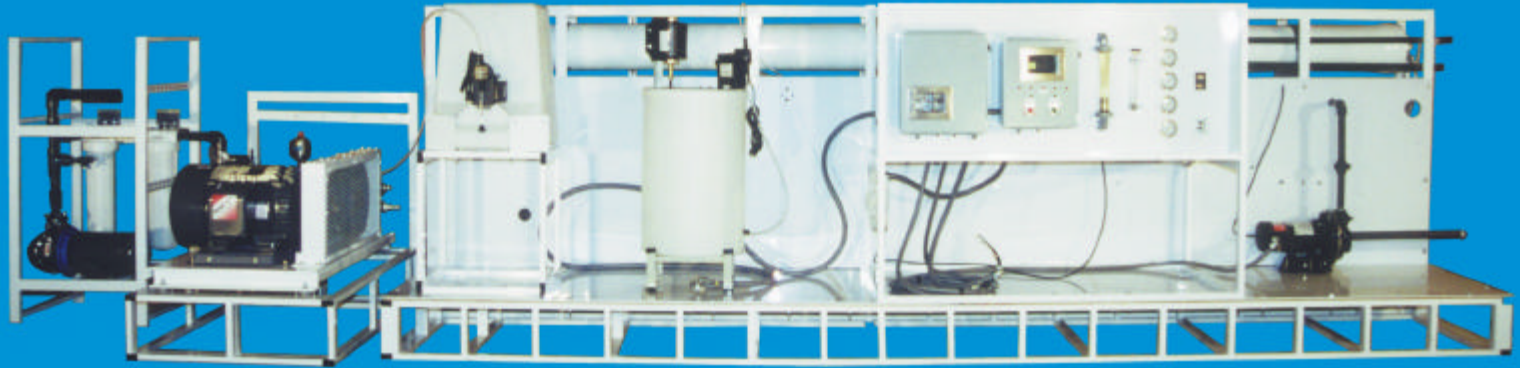


# Seawater, Brackish, Tap Water Desalination Plant

Capacity : 10,000 gpd ~ 1,500,000 gpd Containerized Systems Available



Made In U.S.A. by ZYI Corporation



# Forever Pure

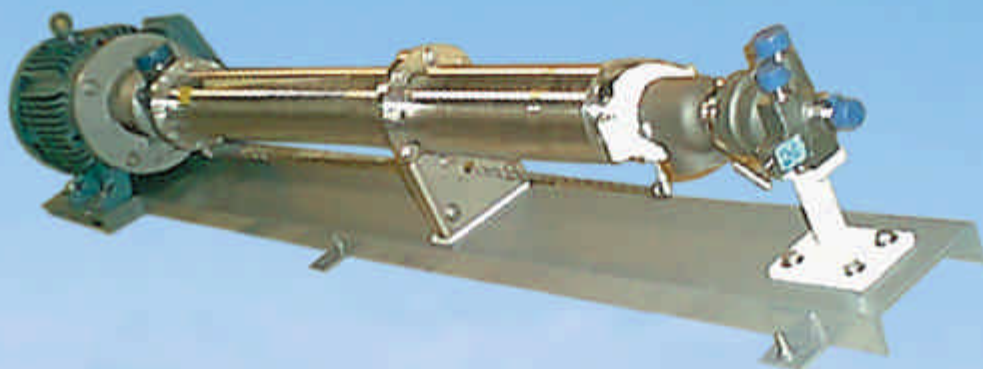
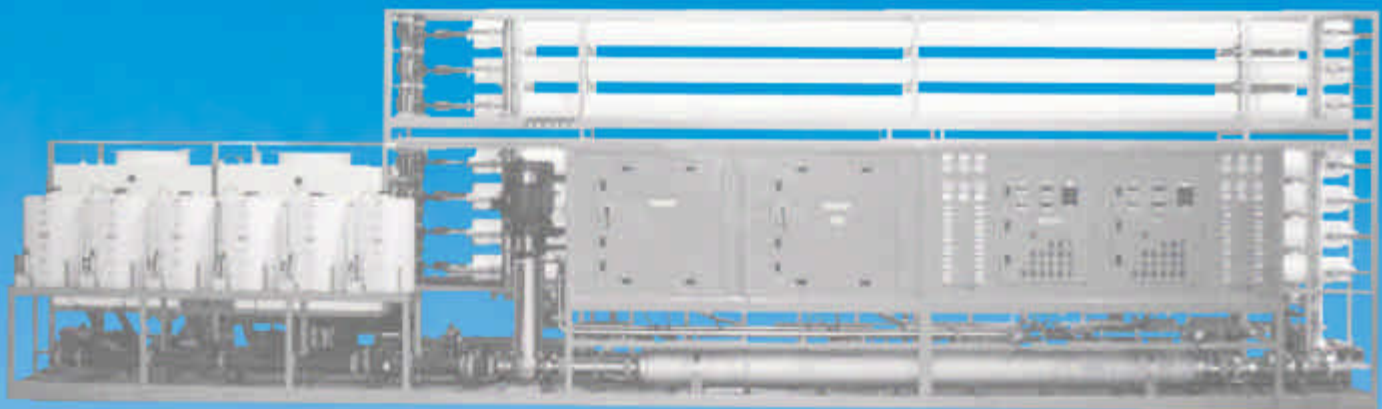


**Made In U.S.A. by ZYI Corporation**

# *Forever* Pure

**446,400 ~ GPD ( 1690 M<sup>3</sup>/day ) Seawater RO Plant**

**with Energy Recovery Turbine**



**Made In U.S.A. by ZYI Corporation**

# Seawater Desalination Plant General Specification

\*Desalination plant design will depend on individual customer's requirements.

## Chlorine Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chlorine Dosing System adds chlorine to feed water source, protecting the system from bio-fouling.

## Booster Pump

Delivers feed water to RO plant at 40~50 psi under required feed water flow rate. Grundfos, Tonakflo or others. 316 stainless steel.

## Multi-Media Filter

Multi-media filtration system is used to filter sand and sediment (turbidity) down to approximately 20 Microns. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Activated Carbon Filter

Activated carbon filtration system is used to remove chlorine from feed water, which protects TFC membrane from damaging chemical reaction with chlorine. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Pre-Filtration System

5 micron cartridge type sediment filter further reduces suspended solids in the feed water stream to RO system.

## Sodium Metabisulfite Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Sodium Metabisulfate Dosing System neutralizes chlorine, which is added in the feed water to reduce bacteria. The residual serves as an excellent biocide, which prevents membranes from bio-fouling.

## Acid Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chemical Dosing System prevents membrane scaling.

## Antiscalant Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Antiscalant Dosing System prevents the membrane from scaling.

## Caustic Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Caustic Dosing System adjusts product water pH.

## Chlorine Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Chlorine Dosing System sterilizes product water.

## UV Sterilization System (Post Treatment)

Sterilizes product water by alternating the DNA structure inside bacteria.

## Ozone System (Post Treatment)

Sterilizes product water by burning off the outer membrane of bacteria.

## RO System :

- 1. Membrane Housing:** corrosion resistant, fiberglass construction, 1000 psi rating.
- 2. Membranes:** Dow Filmtec or Fluid Systems seawater, TFC membranes.
- 3. High pressure RO Pump:** On smaller units. CAT 316 SS plunger pump or equivalent. On larger units ZYI uniquely design pumping system, including multi-stage centrifugal pump, energy recovery turbine, and variable frequency drive, making it one of the highest quality, quietest, and most efficient pump system available on the market today.
- 4. Motor :** 415V/380V/230V/208V/120V, 50hz/60hz, single phase or three phase
- 5. High pressure side piping material :** 316 SS
- 6. Low pressure side piping material :** schedule 80 PVC
- 7. Concentrate control valve:** 316 stainless steel
- 8. Water quality monitor:** seawater and product water digital TDS meter, seawater and product water pH meter, ORP meter. Ashcroft, Marshal, Signet, Fisher or equivalent.
- 9. Flow meters:** Panel Mount Digital Flow Meters or rotameter for feed water and product water
- 10. Pressure Gauges:** on the inlet and outlet of every filtration stage, and before and after each RO membrane vessel.
- 11. System controls (automatic or manual operation):**

- **PLC control** to provide start/stop, sequential, and alarm control.
- **RO System start permissible conditions :**
  1. Power On
  2. Start button pushed
  3. low pressure switch closed
  4. permeate water tank level below low level ( low and high level switches are on open position)
  5. Raw water tank water level switch closedSix conditions will cause the RO to shut down the machine:
  1. high working pressure,
  2. low inlet pressure (<20 psi)
  3. starter overload trip
  4. raw water storage tank level low
  5. product water storage tank level high
  6. emergency shut-down button pushed.
- Low Feed Pressure Shut Off with indicator light
- High pressure shut-off switch
- Product Water and raw water Tank level control
- System On switch with light
- Power On switch with light
- Mimic panel (twin led type)
- PH Audio and visual alarm
- ORP Audio and visual alarm
- Brine flow audio and visual alarm
- Feed water Temperature audio and visual alarm
- High TDS diversion
- High turbidity diversion

## Membrane Cleaning/Flushing System

Includes high flow pump, 316 SS, heater. It cleans membranes when needs, extends membrane life. Use chemicals for cleaning. Automatic cleaning/flushing. Installed with automation, valves. Etc. With common service tank for product/cleaning/flushing. The cleaning system has pressure transmitter at In/Out of each membrane vessel. If Delta P is greater than design Delta P, then audio and visual alarm will trigger.

## ZYI Corporation

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www.foreverpure.com sales@foreverpure.com



# *Forever* Pure

**132,000 ~ GPD ( 500 M<sup>3</sup>/day ) Seawater RO Plant**

**with Energy Recovery Turbine**



**Made In U.S.A. by ZYI Corporation**

# *Forever* Pure

**20,000 ~ 264,000 GPD Seawater Desalination System**

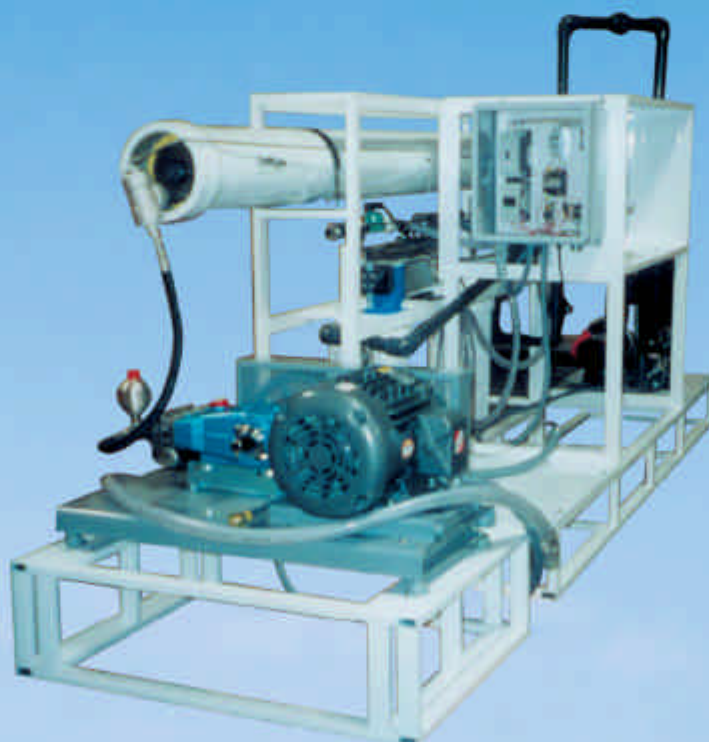


**Made In U.S.A. by ZYI Corporation**



# *Forever* Pure

10,000 ~ 20,000 GPD Seawater Desalination System



Made In U.S.A. by ZYI Corporation

# *Forever* Pure

**3,000 ~ 10,000 GPD Seawater Desalination System**



**Made In U.S.A. by ZYI Corporation**



# *Forever* Pure

**500 ~ 1500 GPD Seawater Desalination System**



**Made In U.S.A. by ZYI Corporation**

# Seawater Desalination Plant General Specification

\*Desalination plant design will depend on individual customer's requirements.

## Chlorine Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chlorine Dosing System adds chlorine to feed water source, protecting the system from bio-fouling.

## Booster Pump

Delivers feed water to RO plant at 40-50 psi under required feed water flow rate. Grundfos, Tonakflo or others. 316 stainless steel.

## Multi-Media Filter

Multi-media filtration system is used to filter sand and sediment (turbidity) down to approximately 20 Microns. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Activated Carbon Filter

Activated carbon filtration system is used to remove chlorine from feed water, which protects TFC membrane from damaging chemical reaction with chlorine. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Pre-Filtration System

5 micron cartridge type sediment filter further reduces suspended solids in the feed water stream to RO system.

## Sodium Metabisulfite Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Sodium Metabisulfate Dosing System neutralizes chlorine, which is added in the feed water to reduce bacteria. The residual serves as an excellent biocide, which prevents membranes from bio-fouling.

## Acid Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chemical Dosing System prevents membrane scaling.

## Antiscalant Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Antiscalant Dosing System prevents the membrane from scaling.

## Caustic Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Caustic Dosing System adjusts product water pH.

## Chlorine Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Chlorine Dosing System sterilizes product water.

## UV Sterilization System (Post Treatment)

Sterilizes product water by alternating the DNA structure inside bacteria.

## Ozone System (Post Treatment)

Sterilizes product water by burning off the outer membrane of bacteria.

## RO System :

1. **Membrane Housing:** corrosion resistant, fiberglass construction, 1000 psi rating.
2. **Membranes:** Dow Filmtec or Fluid Systems seawater, TFC membranes.
3. **High pressure RO Pump:** On smaller units. CAT 316 SS plunger pump or equivalent. On larger units ZYI uniquely design pumping system, including multi-stage centrifugal pump, energy recovery turbine, and variable frequency drive, making it one of the highest quality, quietest, and most efficient pump system available on the market today.
4. **Motor :** 415V/380V/230V/208V/120V, 50hz/60hz, single phase or three phase
5. **High pressure side piping material :** 316 SS
6. **Low pressure side piping material :** schedule 80 PVC
7. **Concentrate control valve:** 316 stainless steel
8. **Water quality monitor:** seawater and product water digital TDS meter, seawater and product water pH meter, ORP meter. Ashcroft, Marshal, Signet, Fisher or equivalent.
9. **Flow meters:** Panel Mount Digital Flow Meters or rotameter for feed water and product water
10. **Pressure Gauges:** on the inlet and outlet of every filtration stage, and before and after each RO membrane vessel.
11. **System controls (automatic or manual operation):**

- **PLC control** to provide start/stop, sequential, and alarm control.
  - **RO System start permissible conditions :**
    1. Power On
    2. Start button pushed
    3. low pressure switch closed
    4. permeate water tank level below low level ( low and high level switches are on open position)
    5. Raw water tank water level switch closed
- Six conditions will cause the RO to shut down the machine:
1. high working pressure,
  2. low inlet pressure (<20 psi)
  3. starter overload trip
  4. raw water storage tank level low
  5. product water storage tank level high
  6. emergency shut-down button pushed.
- Low Feed Pressure Shut Off with indicator light
  - High pressure shut-off switch
  - Product Water and raw water Tank level control
  - System On switch with light
  - Power On switch with light
  - Mimic panel (twin led type)
  - PH Audio and visual alarm
  - ORP Audio and visual alarm
  - Brine flow audio and visual alarm
  - Feed water Temperature audio and visual alarm
  - High TDS diversion
  - High turbidity diversion

## Membrane Cleaning/Flushing System

Includes high flow pump, 316 SS, heater. It cleans membranes when needed, extends membrane life. Use chemicals for cleaning. Automatic cleaning/flushing. Installed with automation, valves. Etc. With common service tank for product/cleaning/flushing. The cleaning system has pressure transmitter at In/Out of each membrane vessel. If Delta P is greater than design Delta P, then audio and visual alarm will trigger.

## ZYI Corporation

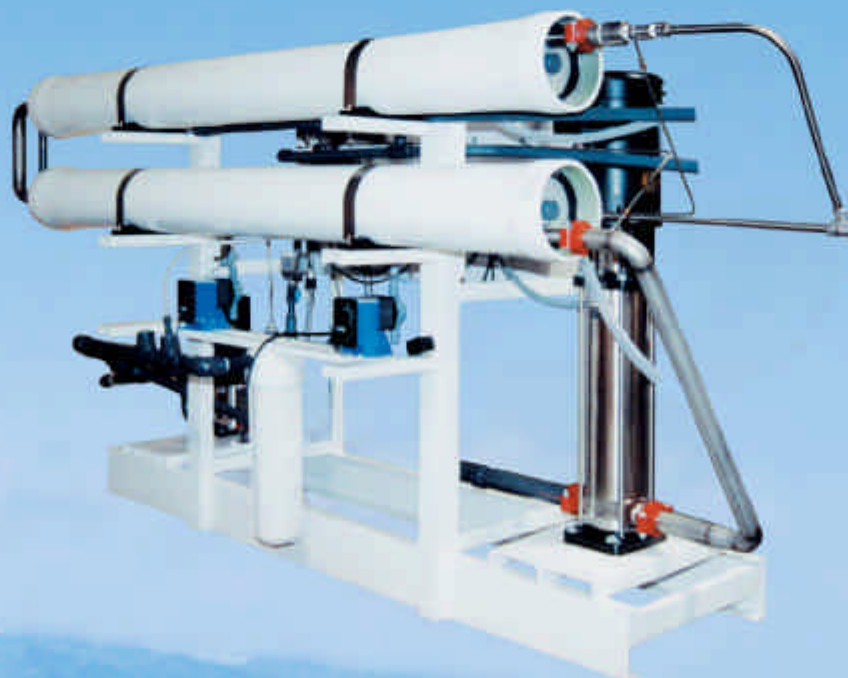
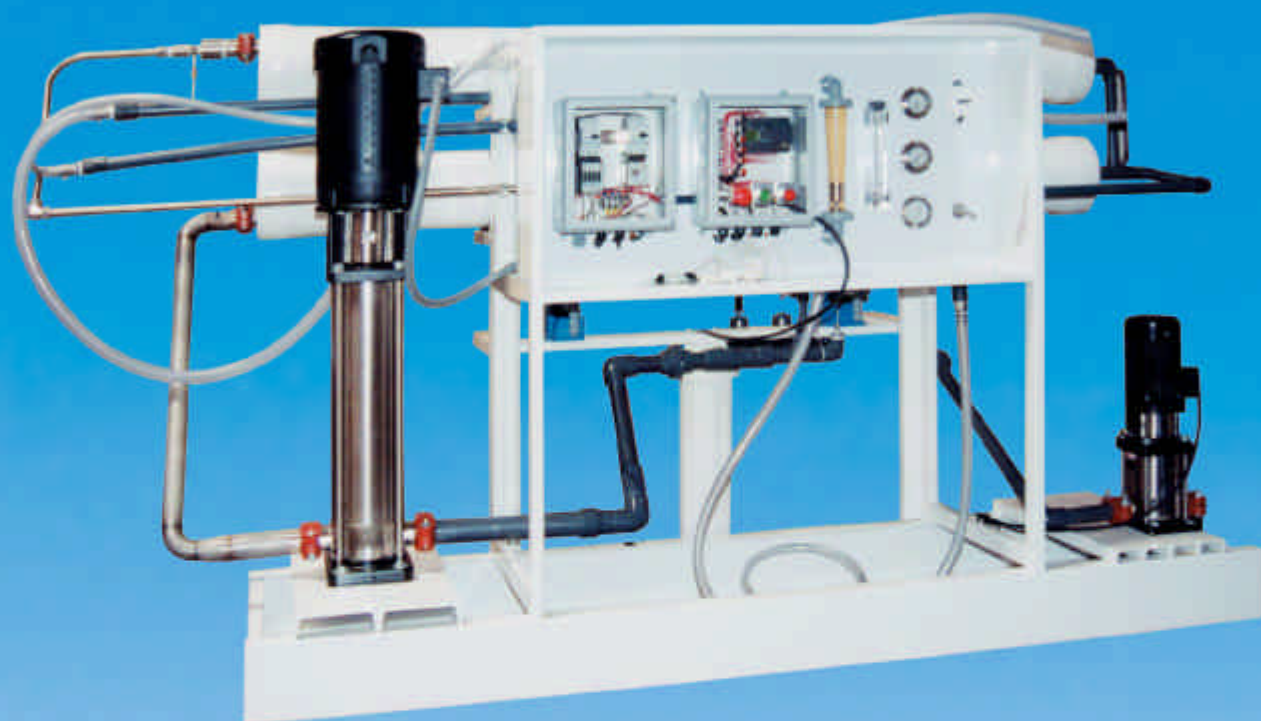
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E-mail : sales@foreverpure.com Webpage : <http://www.foreverpure.com>



# *Forever* Pure

**20,000 ~ 50,000 GPD Brackish Water Desalination System**



**Made In U.S.A. by ZYI Corporation**

# Brackish Water Desalination Plant General Specification

\*Brackish water desalination plant design will depend on individual customer's requirements.

## Chlorine Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chlorine Dosing System adds chlorine to feed water source, protecting the system from bio-fouling.

## Booster Pump

Delivers feed water to RO plant at 40~50 psi under required feed water flow rate. Grundfos, Tonakflo or others. 316 stainless steel.

## Multi-Media Filter

Multi-media filtration system is used to filter sand and sediment (turbidity) down to approximately 20 Microns. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Activated Carbon Filter

Activated carbon filtration system is used to remove chlorine from feed water, which protects TFC membrane from damaging chemical reaction with chlorine. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Pre-Filtration System

5 micron cartridge type sediment filter further reduces suspended solids in the feed water stream to RO system.

## Sodium Metabisulfite Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Sodium Metabisulfate Dosing System neutralizes chlorine, which is added in the feed water to reduce bacteria. The residual serves as an excellent biocide, which prevents membranes from bio-fouling.

## Acid Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chemical Dosing System prevents membrane scaling.

## Antiscalant Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Antiscalant Dosing System prevents the membrane from scaling.

## Caustic Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Caustic Dosing System adjusts product water pH.

## Chlorine Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Chlorine Dosing System sterilizes product water.

## UV Sterilization System (Post Treatment)

Sterilizes product water by alternating the DNA structure inside bacteria.

## Ozone System (Post Treatment)

Sterilizes product water by burning off the outer membrane of bacteria.

## RO System :

1. **Membrane Housing:** corrosion resistant, fiberglass construction, or 316 stainless steel. 400psi or 600 psi.
2. **Membranes:** Dow Filmtec or Fluid Systems brackish water, TFC membranes.
3. **High pressure RO Pump:** multi-stage centrifugal, 316 stainless steel. Grundfos, Tonakflo or others.
4. **Motor :** 415V/380V/230V/208V/120V, 50hz/60hz, single phase or three phase
5. **High pressure side piping material :** 316 SS
6. **Low pressure side piping material :** schedule 80 PVC
7. **Concentrate control valve:** 316 stainless steel
8. **Water quality monitor:** brackish water and product water digital TDS meter, brackish water and product water pH meter, ORP meter. Ashcroft, Marshal, Signet, Fisher or equivalent.
9. **Flow meters:** Panel Mount Digital Flow Meters or rotameter for feed water and product water
10. **Pressure Gauges:** on the inlet and outlet of every filtration stage, and before and after each RO membrane vessel.
11. **System controls (automatic or manual operation):**

- **PLC control** to provide start/stop, sequential, and alarm control.
- **RO System start permissible conditions :**
  1. Power On
  2. Start button pushed
  3. low pressure switch closed
  4. permeate water tank level below low level ( low and high level switches are on open position)
  5. Raw water tank water level switch closed

Six conditions will cause the RO to shut down the machine:

1. high working pressure,
  2. low inlet pressure (<20 psi)
  3. starter overload trip
  4. raw water storage tank level low
  5. product water storage tank level high
  6. emergency shut-down button pushed.
- Low Feed Pressure Shut Off with indicator light
  - High pressure shut-off switch
  - Product Water and raw water Tank level control
  - System On switch with light
  - Power On switch with light
  - Mimic panel (twin led type)
  - PH Audio and visual alarm
  - ORP Audio and visual alarm
  - Brine flow audio and visual alarm
  - Feed water Temperature audio and visual alarm
  - High TDS diversion
  - High turbidity diversion

## Membrane Cleaning/Flushing System

Includes high flow pump, 316 SS, heater. It cleans membranes when needs, extends membrane life. Use chemicals for cleaning. Automatic cleaning/flushing. Installed with automation, valves. Etc. With common service tank for product/cleaning/flushing. The cleaning system has pressure transmitter at In/Out of each membrane vessel. If Delta P is greater than design Delta P, then audio and visual alarm will trigger.

## ZYI Corporation

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E-mail : sales@foreverpure.com Webpage : <http://www.foreverpure.com>



# *Forever* Pure

**20,000 ~ 40,000 GPD Brackish Water Desalination System**



**Made In U.S.A. by ZYI Corporation**

# *Forever* Pure

**5,000 ~ 10,000 GPD Brackish Water Desalination System**



**Made In U.S.A. by ZYI Corporation**



# **Brackish Water Commercial Reverse Osmosis System Specification**

100 ~ 10,000 gallons per day

(\*based on feed water with TDS of 2000 ppm and temperature of 25°C (77°C) )

## **Standard Features :**

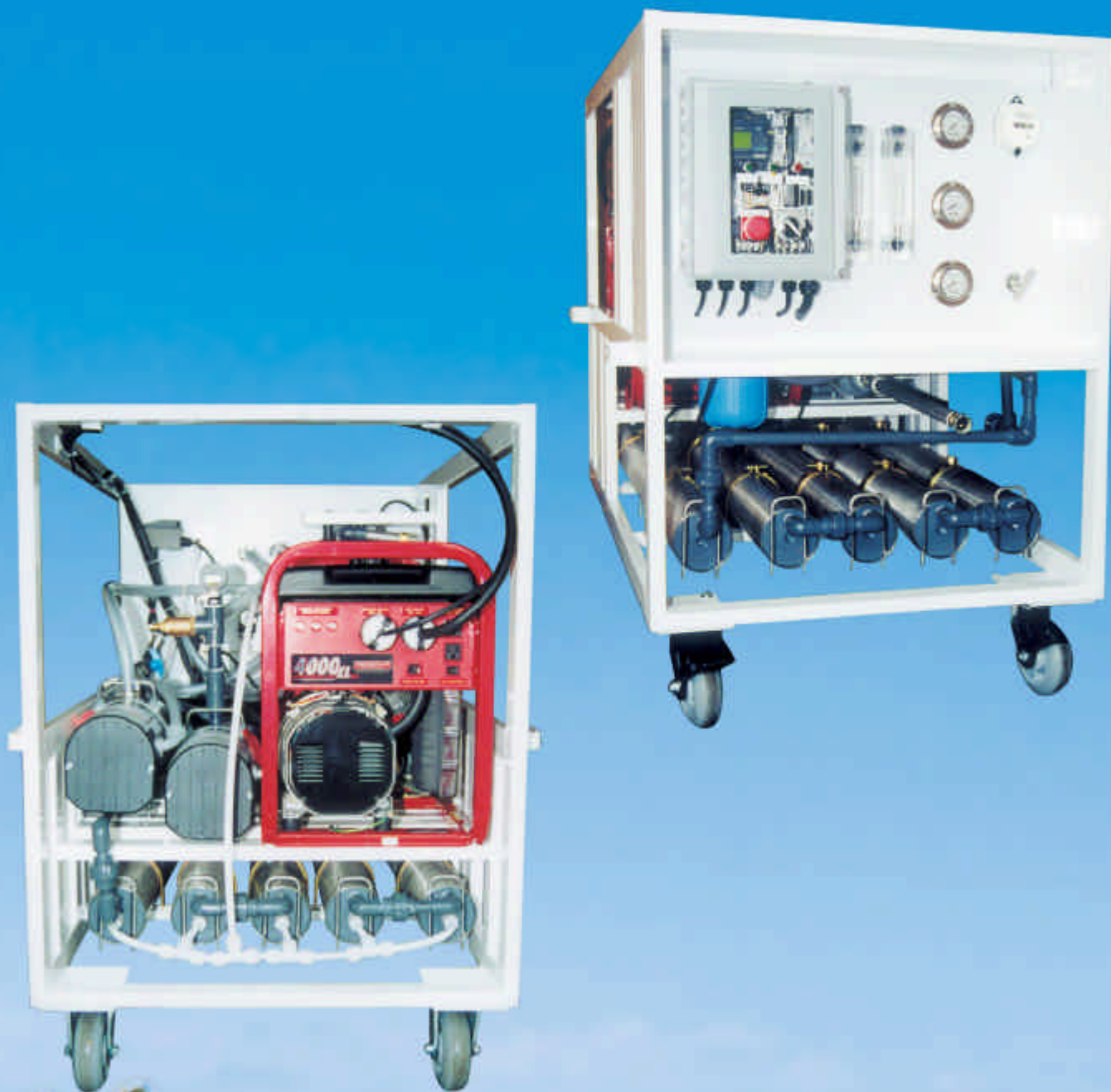
1. TFC high rejection, high performance brackish water membrane
2. Stainless steel high pressure RO pump
3. High pressure gauge
4. Product flow meter
5. Sediment filter in 20" housing
6. Carbon block filter in 20" housing
7. Solenoid valve
8. Fiberglass pressure vessels
9. Stainless tubing on high pressure side
10. Powder Coated Frame
11. Stainless steel concentrate control valve

## **Options :**

1. Reject flow meter
2. High pressure cut off
3. Low pressure cut off
4. 50 Hz motors
5. UV
6. Built-in Digital TDS meter
7. Ozone injection w/ pump
8. Repressurization system
9. Float switch Level control
10. Carbon filter w/ backwash
11. water softener
12. Multi-Media Filter
13. Stainless pressure vessels
14. LED Lights
15. Other options: please contact ZYI Corporation

# *Forever* Pure

**10,000 GPD Mobile Brackish Water Desalination System**



**Made In U.S.A. by ZYI Corporation**



# Mobile Brackish Water Desalination Plant General Specification

\*Mobile brackish water desalination plant design will depend on individual customer's requirements.

## Chlorine Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chlorine Dosing System adds chlorine to feed water source, protecting the system from bio-fouling.

## Booster Pump

Delivers feed water to RO plant at 40~50 psi under required feed water flow rate. Grundfos, Tonakflo or others. 316 stainless steel.

## Multi-Media Filter

Multi-media filtration system is used to filter sand and sediment (turbidity) down to approximately 20 Microns. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Activated Carbon Filter

Activated carbon filtration system is used to remove chlorine from feed water, which protects TFC membrane from damaging chemical reaction with chlorine. Both automatic and manual backwash option is available. Corrosion resistant, high performance composite & fiberglass tank will be used to hold the media.

## Pre-Filtration System

5 micron cartridge type sediment filter further reduces suspended solids in the feed water stream to RO system.

## Sodium Metabisulfite Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Sodium Metabisulfate Dosing System neutralizes chlorine, which is added in the feed water to reduce bacteria. The residual serves as an excellent biocide, which prevents membranes from bio-fouling.

## Acid Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Chemical Dosing System prevents membrane scaling.

## Antiscalant Dosing System

One metering injection systems will be supplied for controlling different elements in the feed water of the RO plant. The metering pump will allow controlling of different functions such as the stroke length and percentage rate. The Antiscalant Dosing System prevents the membrane from scaling.

## Caustic Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Caustic Dosing System adjusts product water pH.

## Chlorine Dosing System (Post Treatment)

One metering injection systems will be supplied for controlling different elements in the product water of the RO plant. The metering pump will allow to control different functions such as the stroke length and percentage rate. The Chlorine Dosing System sterilizes product water.

## UV Sterilization System (Post Treatment)

Sterilizes product water by alternating the DNA structure inside bacteria.

## Ozone System (Post Treatment)

Sterilizes product water by burning off the outer membrane of bacteria.

## RO System :

1. **Membrane Housing:** corrosion resistant, fiberglass construction, or 316 stainless steel. 400psi or 600 psi.
  2. **Membranes:** Dow Filmtec or Fluid Systems brackish water, TFC membranes.
  3. **High pressure RO Pump:** multi-stage centrifugal, 316 stainless steel. Grundfos, Tonakflo or others.
  4. **Motor :** 415V/380V/230V/208V/120V, 50hz/60hz, single phase or three phase
  5. **High pressure side piping material :** 316 SS
  6. **Low pressure side piping material :** schedule 80 PVC
  7. **Concentrate control valve:** 316 stainless steel
  8. **Water quality monitor:** brackish water and product water digital TDS meter, brackish water and product water pH meter, ORP meter. Ashcroft, Marshal, Signet, Fisher or equivalent.
  9. **Flow meters:** Panel Mount Digital Flow Meters or rotameter for feed water and product water
  10. **Pressure Gauges:** on the inlet and outlet of every filtration stage, and before and after each RO membrane vessel.
  11. **System controls (automatic or manual operation):**
    - **PLC control** to provide start/stop, sequential, and alarm control.
    - **RO System start permissible conditions :**
      1. Power On
      2. Start button pushed
      3. low pressure switch closed
      4. permeate water tank level below low level ( low and high level switches are on open position)
      5. Raw water tank water level switch closed
- Six conditions will cause the RO to shut down the machine:
1. high working pressure,
  2. low inlet pressure (<20 psi)
  3. starter overload trip
  4. raw water storage tank level low
  5. product water storage tank level high
  6. emergency shut-down button pushed.
- Low Feed Pressure Shut Off with indicator light
  - High pressure shut-off switch
  - Product Water and raw water Tank level control
  - System On switch with light
  - Power On switch with light
  - Mimic panel (twin led type)
  - PH Audio and visual alarm
  - ORP Audio and visual alarm
  - Brine flow audio and visual alarm
  - Feed water Temperature audio and visual alarm
  - High TDS diversion
  - High turbidity diversion

## Diesel Power Generator

Provides power to the brackish water desalination plant.

## ZYI Corporation

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# *Forever* Pure

20,000 GPD ~ 288,000 GPD RO Systems



**Made In U.S.A. by ZYI Corporation**



# IDRO Specification

## OPERATING PARAMETER

Operating pressure : 180 - 220 psig (12.4 - 15.2 bar)

Minimum inlet pressure : 30 psig ( 2.1 bar )

Operating temperature: 40-85 °F (4-29 °C)

## NOMINAL MACHINE IONIC REJECTION

95%-98%

## MEMBRANE HOUSING

304SS OR fiberglass

## CONNECTIONS

Inlet, permeate, and concentrate are PVC SOC type connections

## STANDARD ECONOMY (ECN) FEATURES

Energy saving membrane elements

SS high-pressure pipework

5-micron pre-filter and SS housing

Automatic inlet shut-off valve

Level control

Automatic flush system

Pre-filter, post-filter, primary, and final pressure gauges

Permeate and concentrate flow meters

Digital conductivity meter

External control capabilities

ALARMS : Low inlet pressure, starter overload trip, high permeate conductivity

## FRAME

Powder coated carbon steel

## CONTROL CIRCUIT

110VAC, single phase, 60 hz or 220VAC, single phase, 50 Hz

## PUMPS

Mutli-stage, centrifugal pump

## MOTORS

3-phase , TEFC, 460VAC, 60Hz or

3-phase, TEFC, 380VAC, 50Hz

## DELUXE (DLX) FEATURES - in Addition to ECN Features

Digital pH controller system

Chemical dosing system

Clean-in-place pump plumbed, wire and mounted; remote tank

Permeate purge

Permeate purge disable capabilities

ALARM(S): High permeate pressure, high/low pH

# *Forever* Pure

**25,000 ~ 100,000 GPD Tap Water RO Purification System**



**Made In U.S.A. by ZYI Corporation**



# *Forever* Pure

1000 ~ 10,000 GPD

Commercial Reverse Osmosis System



Made In U.S.A. by ZYI Corporation

# **Commercial Reverse Osmosis System Specification**

## **100 ~ 10,000 gallons per day**

(\*based on feed water with TDS of 500 ppm and temperature of 25°C (77°C) )

### **Standard Features :**

- 1. TFC high rejection, high performance membrane**
- 2. High pressure RO pump**
- 3. High pressure gauge**
- 4. Product flow meter**
- 5. Sediment filter in 20" housing**
- 6. Carbon block filter in 20" housing**
- 7. Solenoid Valve**
- 8. PVC pressure vessels**
- 9. High pressure tubings**
- 10. Powder Coated Frame**
- 11. Concentrate control valve**

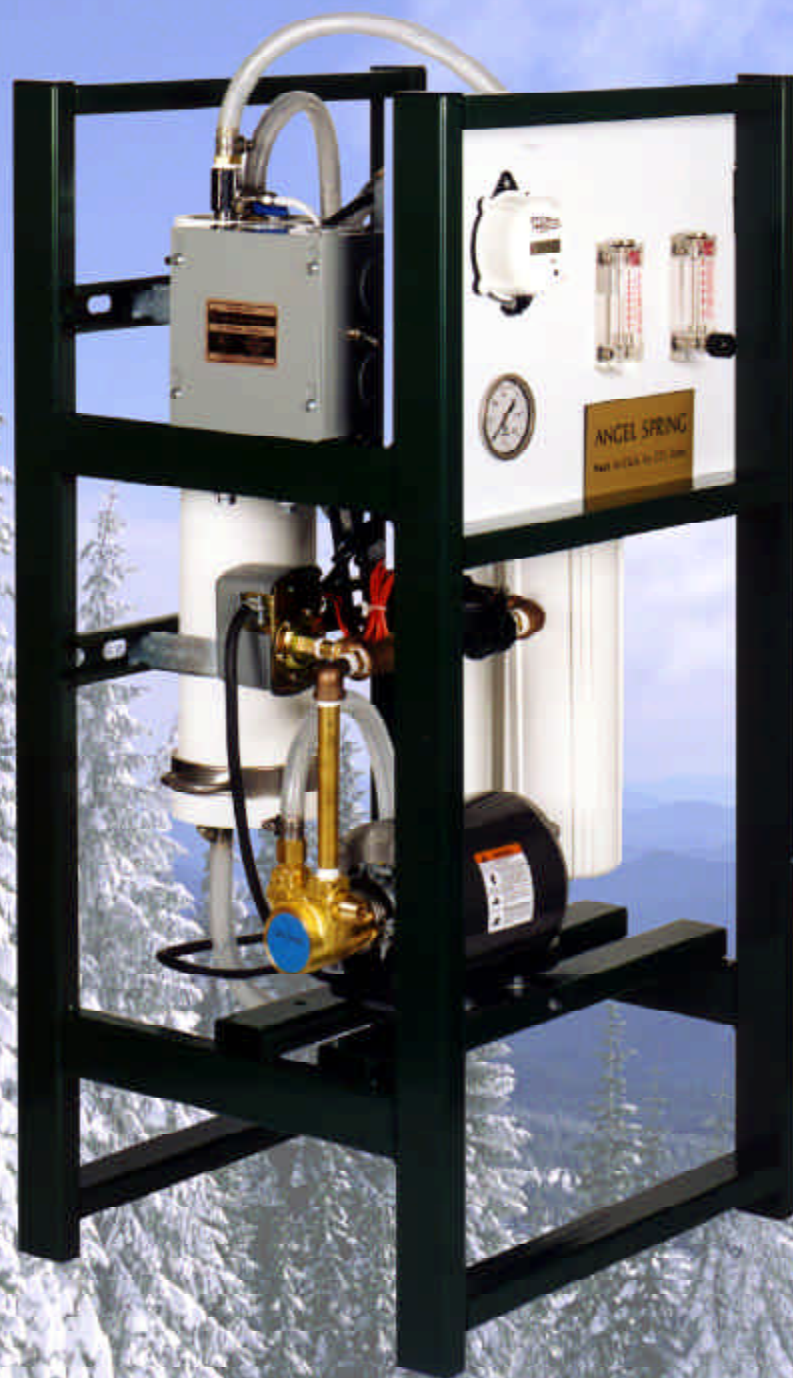
### **Options :**

- 1. Reject flow meter**
- 2. High pressure cut off**
- 3. Low pressure cut off**
- 4. 50 Hz motors**
- 5. UV**
- 6. Built-in Digital TDS meter**
- 7. Ozone injection w/ pump**
- 8. Repressurization system**
- 9. Float switch Level control**
- 10. Carbon filter w/ backwash**
- 11. water softener**
- 12. Multi-Media Filter**
- 13. Stainless Steel Pump**
- 14. Stainless pressure vessels**
- 15. LED Lights**
- 16. Other options: please contact ZYI Corporation**



# *Forever* Pure

**300 ~ 1,000 GPD  
Reverse Osmosis System**



**Made In U.S.A. by ZYI Corporation**



# *Forever* Pure

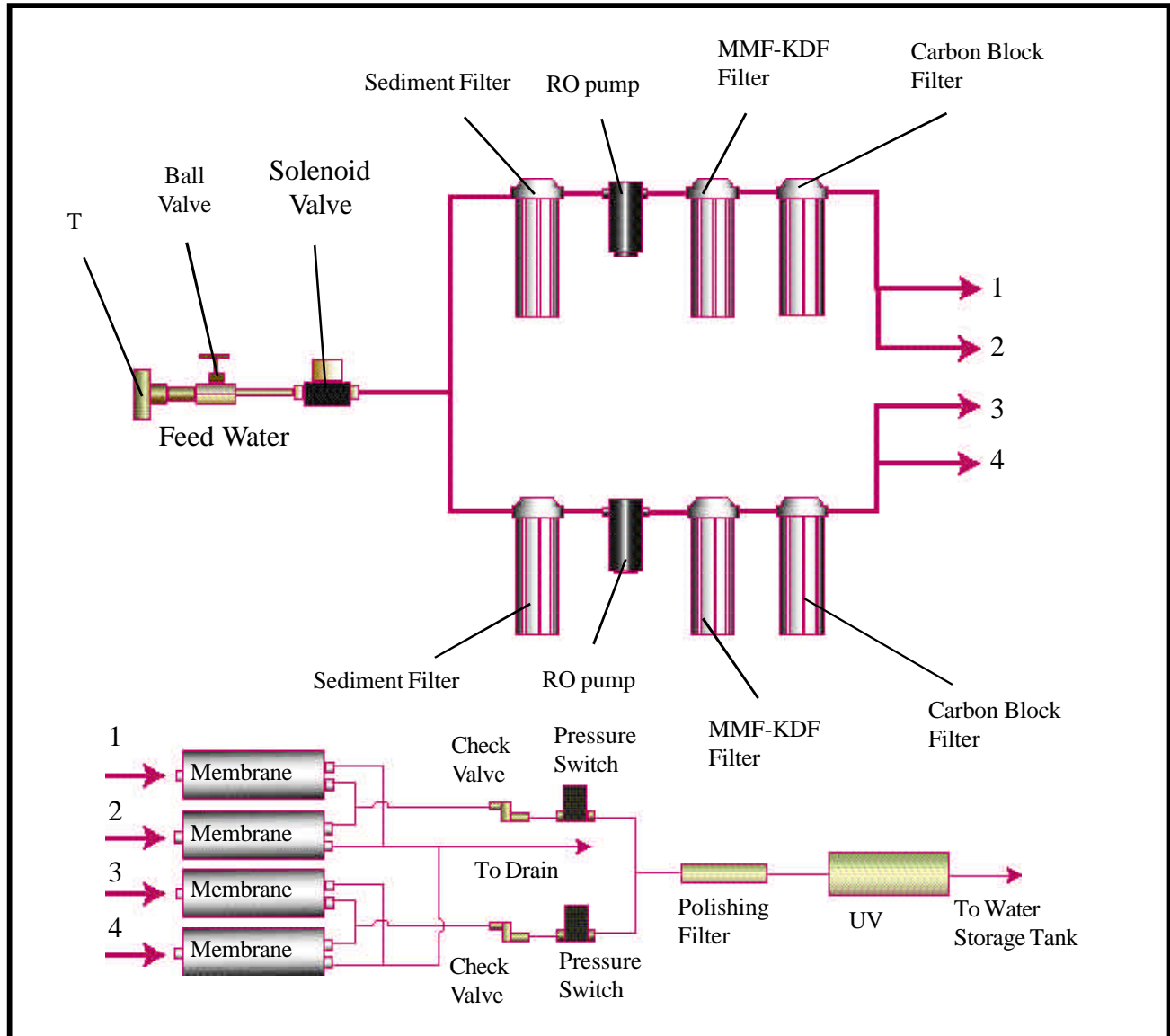
**200 GPD Compact Reverse Osmosis System**



**Made In U.S.A. by ZYI Corporation**

# Flow Diagram For 200 GPD Compact RO

## Model : 8-TFC-200-B



### Features :

1. Two sediment filters
2. Two MMF-KDF filters ( multi media filter with KDF, GAC, water softening resin, and calcite )
3. Two 20,000 gallon capacity carbon block filters
4. Two booster pumps to supply high water pressure
5. 4 TFC membranes
6. Polishing filter to enhance taste of pure water
7. UV sterilizer to increase pure water quality

Distributed By :



# *Forever* Pure

**Water Store Equipment**



**Made In U.S.A. by ZYI Corporation**

# Water Store Equipment Specification

## Standard Features

- Programmable Logic Control
- 1.5 Cu. Ft. Twin Tank Water Softener With Auto Backwash
- 1.5 Cu. Ft. Carbon Filter With Auto Backwash
- 5 Micron Pre-Filter
- Stainless Steel Multi-Stage Pump
- TFC Membrane
- fiberglass or stainless steel Membrane Housing
- Adjustable Waste/Recycle Needle Valves
- Product/Waste Flow Meters
- 1 Hp Stainless Steel Repressurization Pump With 10 Gallon Pressure Tank
- Two 20" Carbon Block Post-Filters
- Pre And Post-Filter Gauges
- System PSI Gauge
- Stainless Steel 24 GPM Ultraviolet Water Sterilizer
- Stainless Steel Pre-Treatment Jackets
- Powder-Coated Steel Frame
- On/Off Switch
- Fused Power
- Time Delay
- UV Light Switch
- Repressurization Switch
- Dual Level Controller
- Automatic Flush
- TDS Meter
- System Control Switch
- Low Pressure Switch
- Low Pressure Off Delay
- Status Lights
- Hourly Flush
- Recycle Flow Meter
- Stainless Steel Needle Valves
- Pre-Treatment Lock-Out With Light
- Ozonation

## System Control ( automatic or manual operation )

**PLC control** to provide start/stop, sequential, and alarm control.

RO System start permissible conditions

1. Power On
2. Start button pushed
3. low pressure switch closed
4. permeate water tank level below low level

( low and high level switches are

on open position)

Five conditions will cause the RO to shut down the machine:

1. high working pressure,
2. low inlet pressure (<20 psi)
3. starter overload trip
4. product water storage tank level high
5. emergency shut-down button pushed.

Model	GPD Gal. Per day	Membrane Inch	Motor HP	Dimensions W x D x H (feet)	Weight (pounds)
WS-1	1500 – 2000	4 x 40 2 ea.	1	8 x 7 x 4	1800
WS-2	3000 – 4000	4 x 40 3 ea.	2	8 x 7 x 4	1900
WS-3	4500 – 6000	4 x 40 4 ea.	2	8 x 7 x 4	2100
WS-4	6000 – 8000	4 x 40 5 ea.	3	8 x 7 x 4	2500

## **ZYI Corporation**

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E-mail : sales@foreverpure.com Webpage : <http://www.foreverpure.com>

# *Forever* Pure

**3 or 4 Stage RO Demo Kit**



**Made In U.S.A. by ZYI Corporation**



# Reverse Osmosis Demo Kit Specification



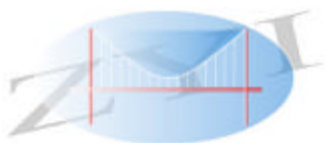
- 3 Stage Filtration ( Sediment, membrane, GAC )
- 60 GPD TFC Membrane
- Booster pump ( 220V/50hz or 110V/60hz )
- Various Faucet Adaptors For Each Connection
- Chlorine and PH Tester
- Hand-held Digital TDS Meter
- Water Proof Professional Carrying Case
- Long Reach Faucet
- 5.5 inches x 14 inches x 15.5 inches ( H x L x W )

Optional car-adaptor can be used to power the Demo-Kit, allow the user to perform demonstrations in a car, truck, or RV.

## Demo-Kit with Booster Pump



- 4 Stage Filtration ( Sediment, membrane, GAC )
- 75 GPD TFC Membrane
- Booster pump ( 220V/50hz or 110V/60hz )
- Various Faucet Adaptors For Each Connection
- Chlorine and PH Tester
- Hand-held Digital TDS Meter
- Water Proof Professional Carrying Case
- Long Reach Faucet
- Water storage container
- 5.5 inches x 14 inches x 15.5 inches ( H x L x W )



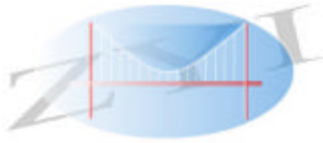
# ZYI Corporation

## 4000 – 5000 BPH Rotary Rinser/Filler/Capper Monoblock System For Liquid Bottling



- Rotary Design, Built for Continuous Operation
- 9 rinsing heads, 9 filling valves, 3 capping turrets
- Touch Screen Control
- Quick Change Over Neck Handling Design
- Space Saving ( 6'W x 7'L x 7.5'H )
- Capable of filling 300 ml to 1.5L size PET bottles
- Stainless steel construction
- Built-In Stainless steel and Plexiglas guard included
- Sanitary stainless steel pipes, valves and fittings
- No bottle no rinsing
- No bottle no filling
- No bottle no capping
- Magnetic Torque Capping Control
- Highly Accurate Fill Level
- Inlet and Exit bottle jamming protection

446 Nelo Street, Santa Clara, CA 95054, U.S.A  
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<http://www.zyicorp.com>



# ZYI Corporation

- Programmable Logic Controller (PLC) to Provides Highly Automated Operation



**Rinser/Filler/Capper Close Up View**



**Touch Screen Control**

**ZYI supplies complete bottling lines ranging from 70 BPM to 700 BPM for water, juice, wine, carbonated soft drink, chemical, sauces, oil, and etc..**

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