
RO Water Treatment Machine for Dialysis (1500L/H)

YJ-ROII/2 (single pass, 1500L)

YJ-ROII/2 (double pass, 1500L)



General Description:

Name: RO pure water treatment machine for dialysis.

Water capacity: 1500L/H.

Rated voltage: AC380V, 50Hz , 3-Phase 4-wire.

Desalination rate: 99.8%.

Recovery rate: 65%-85%.

Ion removal rate: 99.5%-99.9%

Bacteria & endotoxin remove rate: 99.8%

Working temperature: 5-40°C.

Tech adopted: pretreatment + RO system

Pre-treatment: Sand filter, Active carbon filter, Water softener.

Control: PLC control system adopted.

Note:

Warning alarms when anomalous water level/pressure. Protect from low/high pressure, short/open circuit, leakage and over current. Timing RO auto wash.

Pure water quality:

PH	5.0-7.0	Nitrate	≤0.06μg/ml
Cond.	≤5μS/cm	Nitrite	≤0.02μg/ml
Endotoxin	≤0.10 EU/ml	NH3	≤0.3μg/ml
TOC	≤0.50mg/L	Microorganism	100CFU/ml
Heavy metal	≤0.5μg/ml		

Working Process:

Booster pump → sands filter → active carbon filter → water softener → PP filter → high-pressure pump → RO system → RO tank → water using points

Detail introduction

❖ **Booster Pump**

Provide power for pretreatment & RO system. Boosters pump in the whole system adopt Chinese famous brand or other international brands (optional), which has high quality and long service life. SUS material.

❖ **Sand Filter**

Different size of quartz sand will be put in the sand filter. Get rid of turbidity, suspended solids, organic matter, colloid, etc. in the water.

❖ **Active Carbon Filter**

Remove color, free chloride, organic matter, harmful matter, etc. Remove 99% of the chlorine and organic chemicals. Provide enhanced reduction of taste, odor and color. Protect and prolong the life of RO seawater desalination membrane.

❖ **Water Softener**

Soft and reduce the hardness of water, make it healthy for dialysis.

❖ **PP Filter**

Prevent any deposition of large particles, for holding back any large particulates such as iron, dust, SS, impurity into the RO membrane.

❖ **High Pressure Pump**

Provide power for RO system, equipped with over-heat, protect and pressure controller. Pump in the whole system adopt Chinese famous brand or other international brands (optional), which has high quality and long service life. SUS material.

❖ **RO System**

Adopts high desalination rate USA world famous DOW membrane to treat water and get clean water for dialysis treatment. It removes the following water contaminants that may be present in water: lead, cooper, barium, chromium, mercury, sodium, cadmium, fluoride, nitrite, nitrate, and selenium.

❖ **Electrical Control System**

All pipeline & fittings adopted in the whole plant are anti-corrosion material.

Wire and cable will make use of CN famous brand which have good quality and long service life.

RO water treatment machine 1500L/H detail list

Components	Specification	Quantity	Remarks
Automatic sand filtration machine	1665 250kg	1 Unit	
Automatic carbon filter machine	1665 75kg	1 Unit	
Automatic softener	1665 120kg	1 Unit	
Salt barrel	200L	1pcs	
Raw water pump	CHL4-40	1 Unit	
High pressure pump		2 Units	Double pass
High pressure pump		1 Units	Single pass
Absolute Filters	5*20"	1 Unit	
PP filter	5 um	3pcs	
Pipe Fittings	U-PVC	1 batch	
Reverse osmosis membrane	4040 (Dow)	1 Units	Single pass
Reverse osmosis membrane	8040 (Dow)	3 Units	
Reverse osmosis membrane	4040 (Dow)	1 Unit	Double pass
Reverse osmosis membrane	8040 (Dow)	1 Unit	

Consumable replacing period:

Goods name	Specification	Life of usage	Function
Quartz sand	4-6,6-8	18-20 months	Large particles of impurities in water filtration
Activated carbon		18-20 months	Removal of chlorine, bleach and other oxides, organic
Cation resin	001*7	18-20 months	Removal of calcium and magnesium, to soften water
Coarse salt		Every week	Resin regeneration supplies
Security filter	20"×5um	20 days	Protection of Reverse osmosis membrane
Reverse osmosis membrane	4040 (Dow)	18-20 months	Removal of all metal ions \ salt \ bacteria \ Virus \ make water conductivity \ particulate matter, and so reach the water requirements
Reverse osmosis membrane	8040-400 (Dow)	18-20 months	Same as above