

# Reverse Osmosis (RO) water treatment Plants BY-RO-200~50000LPH



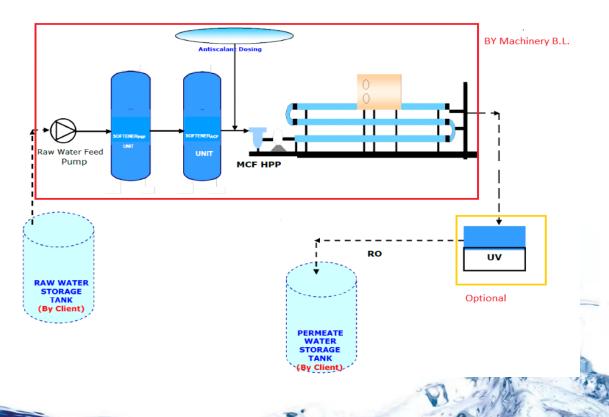


According to your request, we can adopt fiber-glass tank, stainless steel tank, fiber-glass filter vessel, stainless steel filter tank and pump & RO membrane of different brands for the reverse osmosis system, all of the electronic components are optional for you.

This reverse osmosis system has both automatic and manual modes. While in automatic mode, the RO membrane rinses, the device of reverse osmosis system operates automatically. It runs when the pure water is at low level, stops at high lever and at water shortage stage automatically.

Short circuit, and water shortage of pressure pump protection.

#### Treatment Scheme:





# **Process Description:**

# Pressure Sand Filter (PSF):

Raw water from raw water storage tank (By Client) is pumped by raw water feed pump to Pressure Sand Filter (PSF) where all the suspended solids are removed with the help of sand bed. The filter is backwash when differential pressure goes above 0.5 kg/cm2 or it stops giving desired output.

### Activated Carbon Filter (ACF):

Filtered water from PSF is feed to ACF to remove chlorine, remaining organics and color, smell with the help of carbon media. The filter is backwash when differential pressure goes above 0.5 kg/cm2 or it stops giving desired output.

### Antiscalant Dosing System:

The anti-scalant chemical is added online to protect the membrane from scaling/ fouling.

# RO System:

Then the water passes through the Micron cartridge filter (MCF) given at the suction of high pressure pump (HPP).

The water pressure is boosted up so as to filter the ions and from one side you get pure water (Permeate) and from other side you get impure (Reject) water.

The permeate water is stored into the product water storage tank (By client). The reject water is continuously drained out.

**Option:** UV device for final disinfection also could be provided as option with charge per Clint requirement.





# Main Technical Data:

No	item	water purification system specification
1	pump	CNP/south/nanfang brand or Equal brands
2	tank/vessel	stainless steel 304 or fiber glass optional
3	RO membrane	DOW/Hydranautics /Toary or equal brand are optional
4	CIP system	CNP/south/nanfang brand or Grundfos brand optional
5	PP filter	stainless steel 304
6	PLC	Omron/ Mitsubishi/ siemens brand
7	electronic component	Schneider brand
8	pipeline	SS304 or U-PVC optional

