

RO Water Treatment Machine



Reverse osmosis (RO) is a water purification technology that uses a semipermeable membrane to remove ions, molecules, and larger particles from drinking water. It could apply to both industrial processes and the production of potable water.

- Working Principle -

Feed water pump—Sand filter—Active carbon filter—Softener—Cartridge filter—High-pressure pump—RO system.

- Feed water pump: provide the pressure to sand filter/active carbon filter/ softener.
- Sand filter: Get rid of turbidity, suspended solids, organic impurities and colloid etc.
- Active Carbon filter: Remove the color, free chloride, organic matter and harmful matter etc.
- Softener: Get rid of calcium, magnesium and bicarbonate ions in original/source water, reduce water hardness.

-Cartridge filter: prevent any deposition of large Particles, most of the bacteria, and viruses into the RO membrane, The accuracy is 5um, for holding back any large particulates such as large iron, dust, suspended matter, impurity.

-High pressure pump: Provide the high pressure to RO membrane (at least 2.0 Mpa).

-RO system: main part of pure water treatment plant. The desalination rate up to 99%, capable of removing over 99% of ions, bacteria, particles and organics.

RO water treatment machine can be divided to single stage RO water treatment and double stage RO water treatment according to the requirement.

Output capacity: 100L/H to 50000L/H.

*** System capacity changes significantly with water temperature and feed TDS, for higher TDS, a water analysis must be provided and could result In modifications to the system.***