



Reverse osmosis desalination equipment

Product introduction:

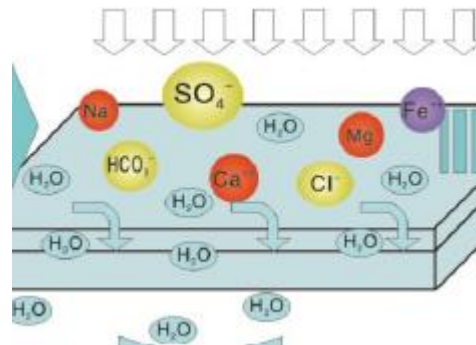
Reverse osmosis desalination equipment, which is a new membrane separation technology developed in the 1960s. It is a membrane separation and filtration technology powered by pressure difference. It originated from the research of Aerospace Science and technology in the United States in the 1960s, and



then gradually transformed into civil use. At present, it has been widely used in scientific research, medicine, food, beverage, seawater desalination and other fields. In the preparation of industrial ultrapure water, such as electronic and electric ultrapure water, chemical industry, electroplating ultrapure water, boiler make-up water and pharmaceutical ultrapure water, it is often used as the primary treatment of deionization and electrodeionization (EDI). Compared with the traditional pretreatment process using ion exchange resin as the primary pretreatment process, reverse osmosis has the advantages of economy, energy saving and stable operation, The utility model has the advantages of reliable water quality, and can greatly prolong the regeneration cycle of the later stage ion exchange resin and the cleaning cycle of electrodeionization (EDI).

Working principle:

Penetration is a physical phenomenon. If two kinds of water containing different concentrations of salts are separated by a semi permeable film, it will be found that the water on the side with less salt content will penetrate into the water with high salt content through the film, but the salt content does not penetrate. In this way, the salt concentration on both sides will be gradually integrated until it is equal. This process is called natural infiltration. Reverse osmosis is a pressure driven separation method that separates solute and solvent in solution by means of selective interception of semi permeable membrane.



In the water purification system, pressure is applied to the solution of the concentrated solution to counter the osmotic pressure, forcing the water from the solution of the concentrated solution to pass through the RO membrane and collect it to obtain pure water.