

EDI Water Treatment

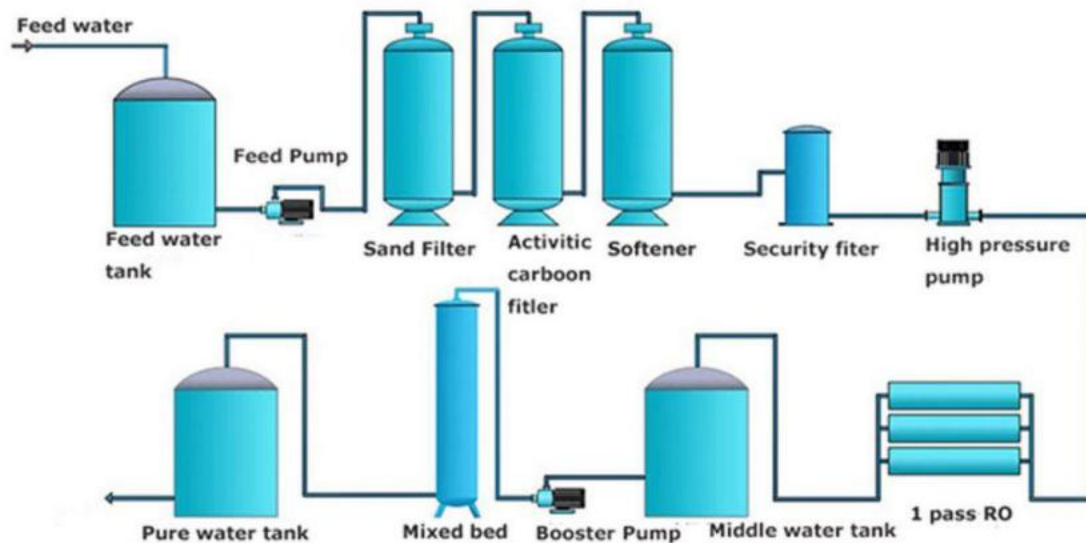
Deion (Electrodeionization), or EDI, is a pure water manufacturing technology that combines ion exchange technology, ion exchange membrane technology and ion electromigration technology. It is a high-tech, green and environmental protection technology. EDI water purification equipment has the advantages of continuous effluent, no acid and alkali regeneration and unattended, and has gradually replaced the mixed bed as the refined treatment equipment in the system of preparing pure water.

Working principle of EDI ultra pure water DI water equipment system:

The electric deion (EDI) system is a scientific water treatment technology under the action of the DC electric field, the dielectric ions in the water of the partition, and the water quality is purified by the exchange membrane.

Between a pair of electrodes of the electrodialysis device, usually composed of negative membrane, positive membrane and partition (A and B), constitute a thick chamber and a light

chamber (that is, cation can pass through the positive membrane, and anion can pass through the negative membrane). The cation in the light chamber water moves through the negative electrode and is trapped by the negative membrane in the thick chamber; the anion moves into the negative membrane in the positive electrode and the negative membrane in the thick chamber. In the water in the thick chamber, the concentration becomes thick water, thus achieving the purpose of desalination, purification, concentration or refining.



Advantages of EDI ultrapure water DI water equipment system:

1. No need for acid and alkali regeneration: in the mixed bed, the resin needs to be regenerated with chemical acid and alkali, and the workshop needs safe storage of acid and alkali. There is a large amount of harmful waste water and waste to be treated, which increases the difficulties in environmental protection and safety. And EDI eliminates the treatment and heavy work of these harmful substances. Protect the environment.

2. Continuous and simple operation: in the mixed bed, due to each regeneration and water quality change, the operation process becomes complicated, while the water production process of EDI is stable and continuous, the water quality is constant, there is no complex operation procedure, and the operation is greatly simple.

3. Reduce the installation requirements: the EDI system has a lower volume compared with the mixing bed with considerable water treatment. It adopts the building block structure, which can be flexibly constructed according to the height and scenting of the site. The modular design enables the EDI to be easily maintained during production work.

Main uses of EDI ultra pure water DI water equipment system:

1. Make the ultra-pure water required for the production of electronic industry, such as imaging tube glass shell, imaging tube, monocrystalline silicon semiconductor, silk road board, liquid crystal display, calculator hard disk and integrated circuit chips;
2. Make the softened water and desalting water required for the water supply of power generation boilers and low-voltage boilers in factories and mining enterprises;
3. Make pure water for medical infusion, agent, injection, biochemical products, medical sterile water and pure water for artificial kidney dialysis needed by the pharmaceutical industry;

4. Drinking pure water, distilled water, pure water for alcohol production and blending, water for saccharification of beer and pure raw beer filtration;
5. Make pure water required for the manufacturing process of chemical industry;
- 6, the manufacturing of textile printing and dyeing process required for hardness and salt water;
7. Pure water and ultra-pure water for cleaning before making optical glass coating;
8. DI water for electroplating process, pure water for battery production process and pure water for surface painting and cleaning of automobiles, home appliances and building materials;
- 9, seawater, brackish water to make domestic water and drinking water;
10. Quality water supply network system and swimming pool circulating water treatment system for hotels, buildings, communities and airport real estate and housing industry;
11. Make distilled water for the laboratory.



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