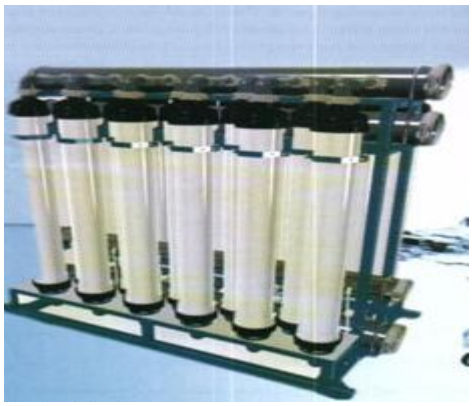
Ultrafiltration



Ultrafiltration is a type of membrane filtration. Industries such as chemical and pharmaceutical manufacturing, food and beverage processing, and waste water treatment, employ ultrafiltration in order to recycle flow or add value to later products.

Ultrafiltration (UF) is proven to be a competitive treatment compare with conventional ones. The production of clear and sparkling water that is safe as far as disease is concerned usually require chemical precipitation, adsorption, sedimentation, and filtration. Each step of this process has to be controlled to get an optimal performance of the overall process, which results in a complex control system. Nowadays, UF is used to replace clarification step in conventional water treatment plant, i.e., coagulation, sedimentation and filtration and can be defined as a clarification and disinfections membrane operation. Ultrafiltration membranes are porous, however, all particulate contaminants such as viruses and bacteria, including macromolecules are rejected.

These system are very effective when dissolve are less, put other impurities which require effective pretreatment are in significant

Installation of Ultrafiltration enhances life of R/O system and when used tertiary treatment in STP will able to produce potable water.

Applications

- Purification of surface water, groundwater and spring water to make drinking water and process water
- Treatment of waste water
- Pretreatment in sea water desalination plants in combination with reverse osmosis or thermal treatment
- Water for industrial use to close water cycles