

2.2 Desalination Technologies and Filtration Processes

Out of the several desalination processes considered, reverse osmosis, ion exchange, distillation and electro dialysis are the major processes used in desalination. Of lesser significance due to their practical application as well as their less beneficial operation, are refrigerant freezing, vacuum freezing, vapor compression and piezodialysis.

Reverse osmosis is in general the most economical process for desalination of brackish water and sea water. As a widely accepted technology, reverse osmosis became more and more competitive and is superior to the traditional thermal process when a comparison is made of capital investment and energy consumption.

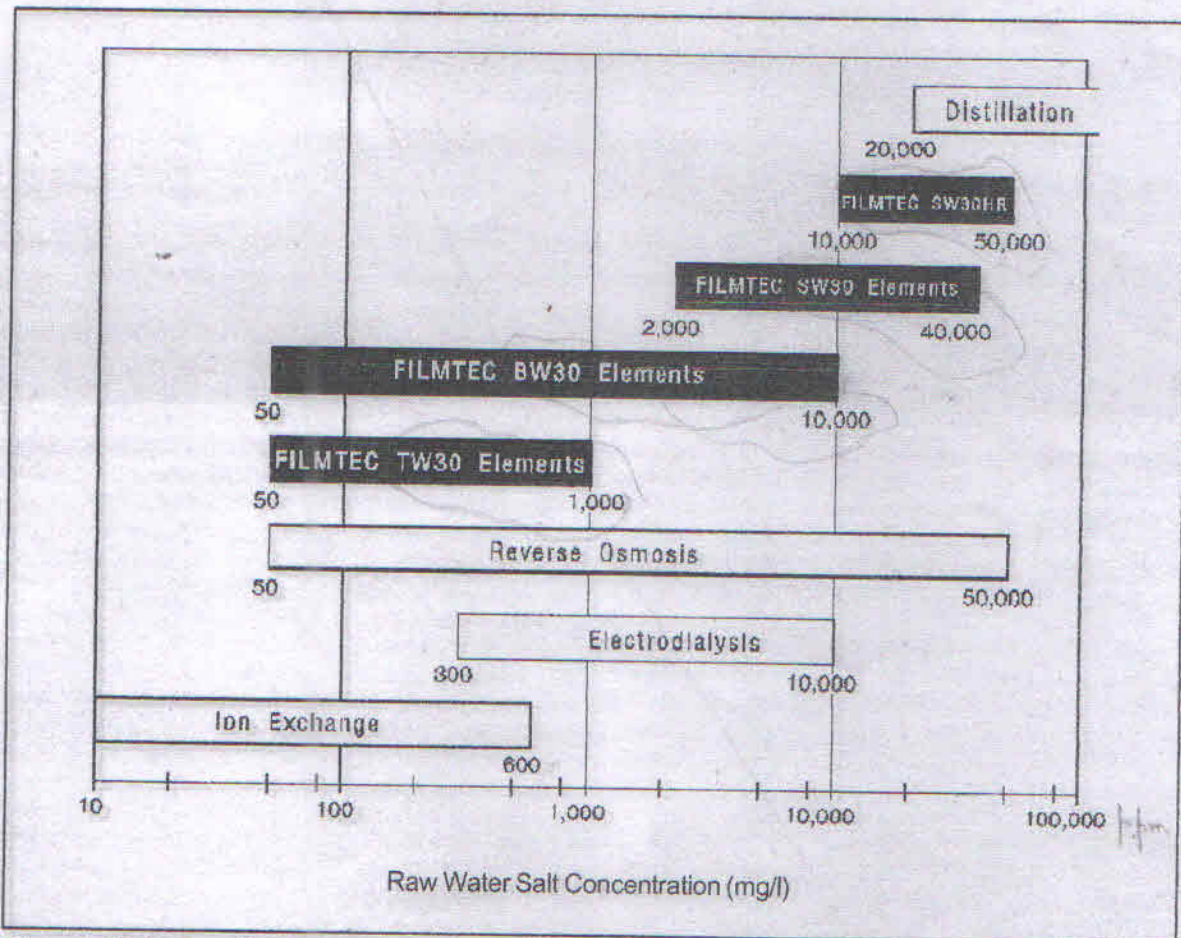


Figure 1: Major Desalination Processes