REVERSE OSMOSIS PILOT

Non contractual photo

SERVICE : 220 V SINGLE PHASE, 50 HZ; 2.2 KW.
DIMENSIONS : ABOUT 1500 X 800 X 1900 MM
WEIGHT : 200KG

REFERENCE : MP20

This water treatment process is a membrane separation technique whose motive force is a pressure gradient. Its interest lies in the fact that some molecules (10-6 to 10-7m) and some ions are stopped, while the molecules of the solvent pass. The energies involved are lower than those of processes with similar objectives. This technique makes it possible to obtain a pure solvent and to concentrate in ion, hence its use in applied fields such as the desalting of seawater, softening. This pilot makes it possible to understand the study of the performance of membrane processes for concentrating NaCl solutions or desalting seawater.

The permeability of the membrane will be calculated and its performance will be checked according to the following hydraulic and chemical parameters :

- Input pressure of the module
- Discharge rate
- Rejection recycling rate
- NaCl concentration

Technical specifications :

- Spiral membrane cartridge with durable polyester protection
- Vertical stainless steel centrifugal pump
- 3-rod level sensor
- Feed tank of
- Receiving can of the permeate
- 3 flow meters
- 2 manometers
- Conductivity meter with probe and transmitter
- Control cabinet including pump control, emergency stop, conductivity meter display, main switch
- PVC tubes, stainless steel frame with aluminum nuts