TEC025

WATER TREATMENT BY INDUSTRIAL REVERSE OSMOSIS

Experimental capabilities

- **Water treatment objective**
- **Design of a water treatment installation by industrial reverse osmosis**
- **Role of the different components**
- **Operation of a reverse osmosis unit**
- **Operation of a group of dosage**
- **Analysis of water by strips and by colorimetric method**

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version : FT-TEC025-STD-A

TEC025

Operating principle

The test bench consists of the elements necessary for the treatment of water intended to supply the equipment, they are fixed on frames made of aluminum profiles. The set mounted on castors is easily mobile.

The water network firstly underwent a treatment with sequestering then is sent to the osmosis membrane.

The osmosis water is stored in a special tank.

The dosage group and the RO group are autonomous in their functioning.

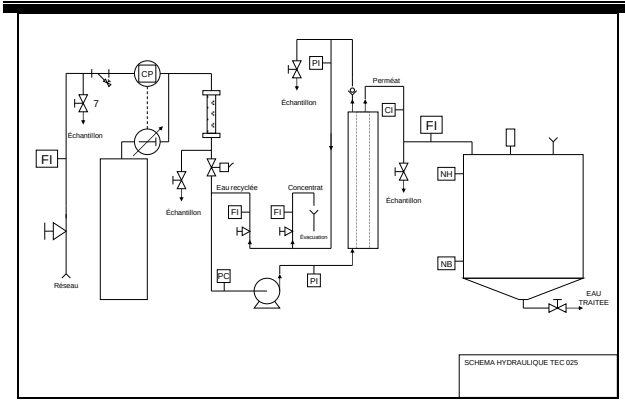
The RO group is instrumented for an extensive study of the operation.

The network is made in PVC tubes and stainless steel for the high pressure part

The robust design of this device makes it suitable for use in schools.
The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.
The manufacture of this equipment complies with the European standard for machinery manufacturing.

This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Illustrations



Technical details

COMPOSITION OF THE BENCH

Control valve of the supply of water flow rate
Dosing unit for the injection of sequestering (Bin, dosing pump, static mixer)
Solenoid valve of supply of osmosis group
A power safety pressure switch on the supply
A high pressure pump
An osmosis membrane
A water recovery tank of RO water with level detectors
Block of electronic management of osmosis pilot (Start, rinsing, processing, management of the levels ....)

INSTRUMENTATION

Feed water flow rate
Pressure membrane feed
Pressure concentrate
Recycled water flow rate
Discharged water flow rate
Permeate flow rate
Permeate conductivity

The bench is supplied with strips for measuring of the TH, of pH and a colorimetric test kit.

Services required

- Electrical supply : 400 Vac – 50 Hz
- Water supply : network
- Water drain : on the floor
- Dimensions: (LxWxH mm): 2500 x 800 x 1700
- weight (Kg): 250

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- :
- Certificate of conformity CE

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