

DEMINERALIZATION UNIT/ION EXCHANGE DE RESIN



Experimental capabilities

- Visualization and understanding of the ion exchange process
- Ability of the different properties of resins: strong
- Comparison of raw water passing through the anionic column with a raw water passing through the cationic column
- Verification and study of resin regeneration system
- Monitoring the conductivity of the solution to be treated
- Effectiveness of the unit, study of saturation
- Flow rate Influence
- Direct supply of the water network

DIDATEC– Zone d'activité du parc – 42490 FRAISSES- FRANCE
Tél. +33(0)4.77.10.10.10 – Fax+33(0)4.77.61.56.49 – www.didatec-technologie.com
email : service_commercial@didatec-technologie.com

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Dans le cadre de l'amélioration permanente de nos produits, ce descriptif technique est susceptible d'être modifié sans préavis
As part of the continuous improvement of our products, this technical specification may be modified without previous notifying

Operating principle

The GPBT30 bench allows the study of demineralization of water with a system of ion exchanger resins.

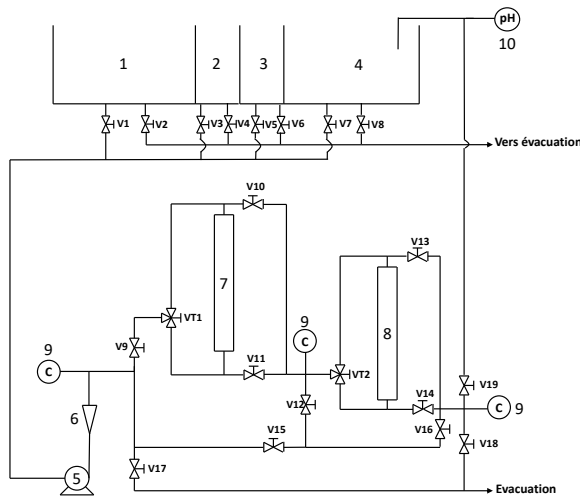
The raw water (or wastewater) is stored in a retention container. A centrifugal pump will power it in the various columns containing the different resins.

The ion exchanger resins are trapped the ions contained in the raw water therefore, on output the water will contain little of salt and have low conductivity. The treated water will be stored in a recovery container.

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.

Illustrations



The bench includes a power supply box that complies with European electrical standards with a general power switch, white voltage presence indicator, emergency stop button, earth connection and differential protection.

Technical details

- 1. Supply tray raw water**
- 2. Supply tray of HCl solution**
- 3. Supply tray of NaOH solution**
- 4. Drip tray**
- 5. Supply pump**
 - Polypropylene body
 - Q = 135 L/min and HMT = 11,7 m
- 6. Float flowmeter**
 - 10-100 l/h
- 7. The cationic resin**
 - Transparent PVC Column
 - DN 50 mm, 500 mm Lg
- 8. Anionic resin**
 - Transparent PVC Column
 - DN 50 mm, 500 mm Lg
- 9. Conductivity probes**
 - One digital display for the three conductivity probes on the different measurement points
- 10. pH probe**
 - One digital display for the ph probe

Services required

- Electrical supply : 230 Vac – 50 Hz – 16 A
- Electrical network : 1 phase + Neutral + Earth
- Water supply : 15 L/min – 3 bars
- Water drain : on the floor
- Dimensions: (LxWxH mm): 1600 x 800 x 1800
- weight (Kg): 120

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Hydraulic diagram
- Certificate of conformity CE

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