

## ACTIVATED CARBON FILTRATION TRAINER



### Experimental capabilities

- Identification of the elements of a carbon filtration system and a water chlorination loop
- Commissioning, adjustment and recording of measurements
- Study of a treatment on activated carbon
- Study of the influence of the feed rate
- Study of a water chlorination loop
- Use of an additional UV sterilizer (option GPBT71)
- Measurement of the chlorine level by portable device (option GPBT72)
- Chlorine control loop with free Cl<sub>2</sub> probe and pH probe (GPBT73 option)

## Operating principle

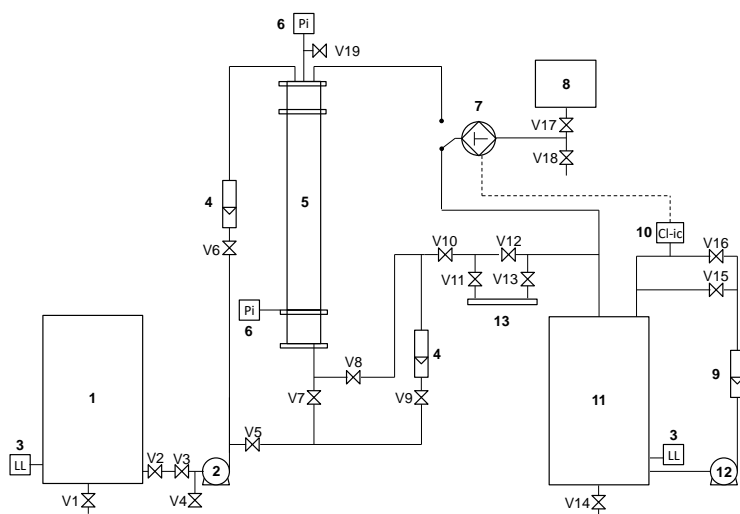
The GPBT70 trainer allows the study of an activated carbon filter and a chlorination loop with a dosing pump. The raw water is contained in the feed tank, a centrifugal pump will send it to the filtration column containing the activated carbon. It can then pass through a UV sterilizer (GPBT71 option) and then be collected in the treated water tank. A metering pump supplies the pipeline with chlorine. It operates manually and can be regulated (GPBT73 option) by a regulator with free Cl<sub>2</sub> probe and pH probe. Students will also be able to take samples and analyze the amount of chlorine in the water using the optional portable device (reference GPBT72).

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

## Technical details



### 1. Supply tank

- Material : Polyethylene
- Volume : 100 L
- drain valve and lid

### 2. Centrifugal pump

- Material : polypropylene
- Magnetic transmission

### 3. Detector of low level

### 4. Float flowmeters

- Scale : 50-500 L/h

### 5. PVC filtration column

- Diameter : 110 mm
- Height : 1200 mm

### 6. Two manometers

- Scale : 0-400 mbars

### 7. Chlorine feed peristaltic pump

- Q<sub>maxi</sub> : 10 L/h

### 8. Chlorinated product tank

- Material : PVC
- Volume : 10 L

### 9. Float flowmeters

- Scale : 10-100 L/h

### 10. Free chlorine measurement probe (option GPBT73)

### 11. Drip tray

- Materials: Polyethylene
- Capacity: 100L
- drain valve and cover

### 12. Recirculating centrifugal pump

- Materials: Polypropylene body
- with magnetic drive

### 13. UV sterilizer (GPBT71 option)

The bench is equipped with an electrical box with all the safety devices in force (general power supply disconnecter, emergency stop button, differential circuit breaker, etc.)

### Accessories included with the bench

- portable pH meter
- Drain and supply hoses

## Services required

## Documentation

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](http://www.didatec-technologie.com)  
 email : [service\\_commercial@didatec-technologie.com](mailto:service_commercial@didatec-technologie.com)

Reproduction interdite / copy prohibited– Copyright DIDATEC oct.-23- page 2

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

# GPBT70



- Electrical supply : 230 Vac – 50 Hz – 6 A
- Electrical network: 1 phase + Neutral + Earth.
- Water supply : filling of the tank (100L)
- Water drain : on the floor
- Dimensions: (LxWxH mm): 2100 x 695 x 1950
- weight (Kg): 150

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Wiring diagram
- 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

## Additional options not included

- UV sterilizer
- Portable chlorine measurement device
- Chlorine regulation system with Cl<sub>2</sub> probe and pH probe
- Ref: GPB T71
- Ref: GPB T72
- Ref: GPB T73

Option GPBT71 : UV sterilizer



Option GPBT72 : Portable chlorine measurement device



Option GPBT73 : Chlorine regulation system with Cl<sub>2</sub> probe and pH probe

