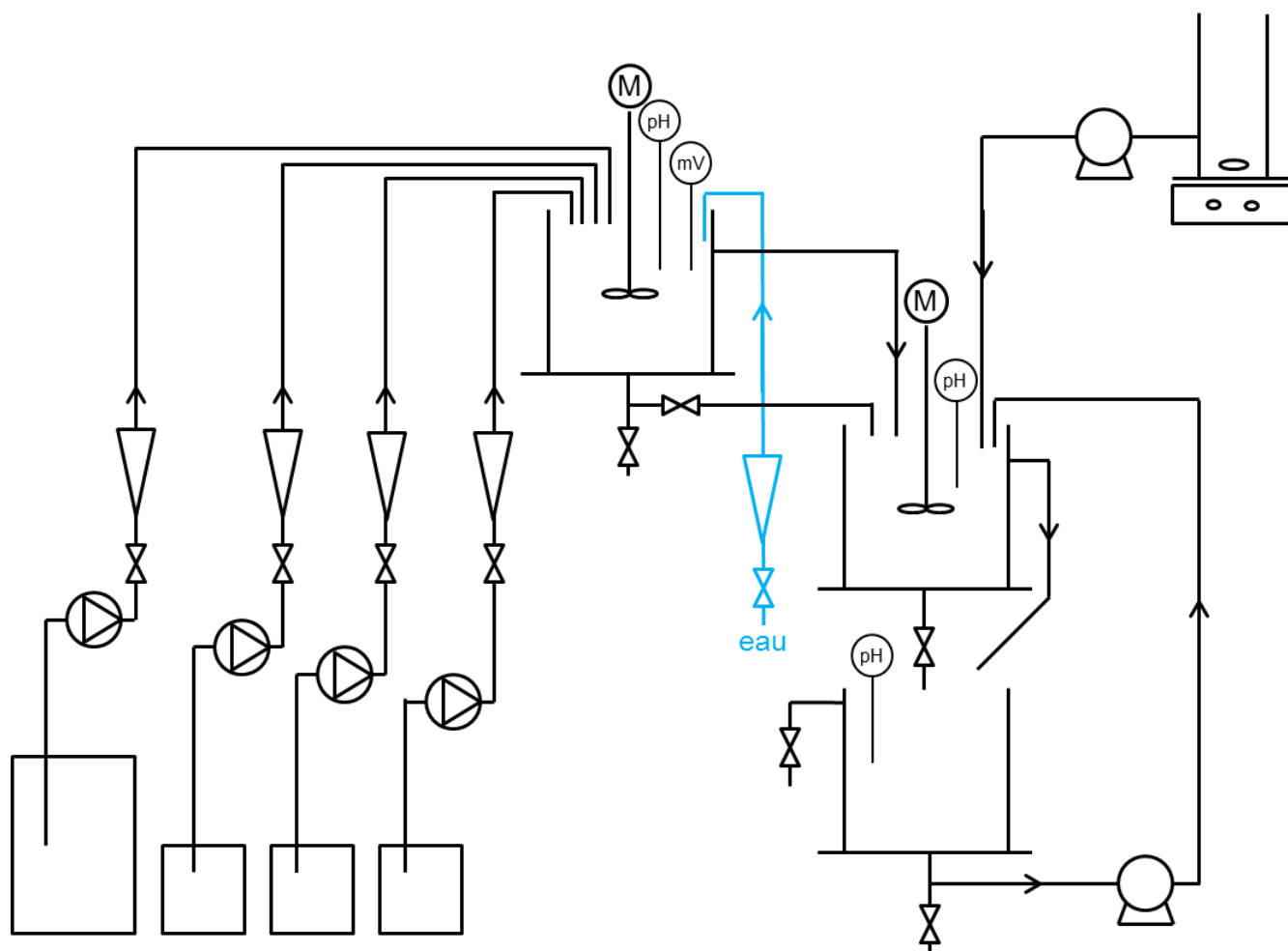


## WASTE TREATMENT PILOT



### Experimental capabilities

- Determination of the pH of effluent solutions (acids – bases) and their neutralization
- Treatment of effluents containing metal ions
- Treatment of oxidant effluents

## Operating principle

The GPT10 bench allows the study of waste treatment.

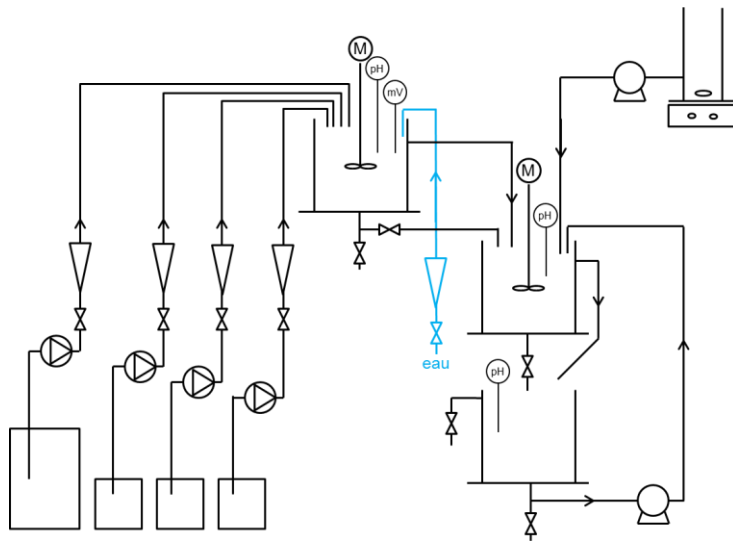
The pilot is made up of three reactors to carry out the neutralization of acidic or basic solutions, the treatment of solutions containing metal ions and oxidizing solutions. Different pumps will make it possible to supply the solutions to be treated with acids, bases or reducing solutions. These pumps will be controlled using the various sensors present in the various reactors.

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. **Effluent supply container:** capacity 20L
2. **3 supply cans:** 10L capacity acid, base and reducing solution
3. **Neutralization tank:** with transparent PVC lid, 15L capacity including: a variable speed stirrer, a drain and racking valve, a pH probe and a redox potential measurement probe
4. **Precipitation tank:** with transparent PVC cover 15L capacity including: variable speed stirrer, overflow, drain valve and pH probe
5. **Cylindrical tank with flat bottom:** 5L capacity in PVC, for the preparation of the precipitation reagent including a stirring system
6. **Decanter:** with transparent PVC cover 15L capacity including: a pH probe and a drain valve
7. **Peristaltic pump:** recycling of sludge to the precipitation tank.
8. **4 membrane dosing pumps:** liquid supply to be treated, reducing solution, acid and base Flow rate from 0 to 10L/h
9. **Electrical box with general power disconnecter and 30mA differential circuit breaker**

## Services required

- Electrical supply: 230 Vac – 50 Hz – 20 A
- Electrical network: 1 phase + Neutral + Earth.
- Water supply: 15 L/min – 3 bars
- Dimensions : (LxWxH mm): 1950 x 1000 x 2000
- weight (Kg): 150

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
- Lab exercises
- Wiring diagram
- Hydraulic diagram
- Certificate of conformity CE