

# **BENCH OF STUDIES OF THE AUTOMATISMS - FUNCTIONS TOR / TIME**



Non contractual photo

SERVICE : POWER SUPPLY: 220 V MONO, -0.15 KW DIMENSIONS : 1000 X 400 X 1200 MM

# REFERENCE : MP131A

The system consists of a stirred mixing tank fed by two bins. Each bin has an electric drain valve and a manual drain valve and a low level sensor. The mixing tank also has a high level sensor.

Study the automated control and control systems associated with hydraulic installations (pump speed variation, pH regulation, level measurement, basin emptying, basin agitation).

Identification of sensors, actuators, process to be controlled, treatment of different signals, Writing a GRAFCET,

#### The bench consists of a PVC-coated stainless steel frame and mounted on table jacks :

- Three 5 liter PVC tanks with emptying,
- Three electric solenoid valves,
- Four capacitive level sensors,

An agitator (motor and propeller).
A 600x400x250 painted steel cabinet with: 1 padlockable switch, 1 emergency stop, 1 reset button, 1 power on indicator, 1 start and 1 stop button, 4 switches, PLC wiring terminals, control and the agitator protection, 1 24V relay relay and solenoid valve, 1 contactor, 1 continuous 24V supply for the PLC.

## **Technical specifications :**

## The MP131A bench is available in three versions

#### Version 1 :

- 1 TWIDO TéIémécanique PLC, PID control and control of the 180V DC pump, time stamp function.

- 1 screen for man / machine communication Software

## Version 2 :

- 1 controller M221: relay outputs (including analog functions, PID and time stamp) grafcet ladder

- 1 screen for man / machine communication

Locigiel

#### Version 3 :

- 1 M241 controller: relay outputs (including analog, PID and time stamp functions) and grafcet grahiques
  - 1 screen for man / machine communication Locigiel