

## Pumping station

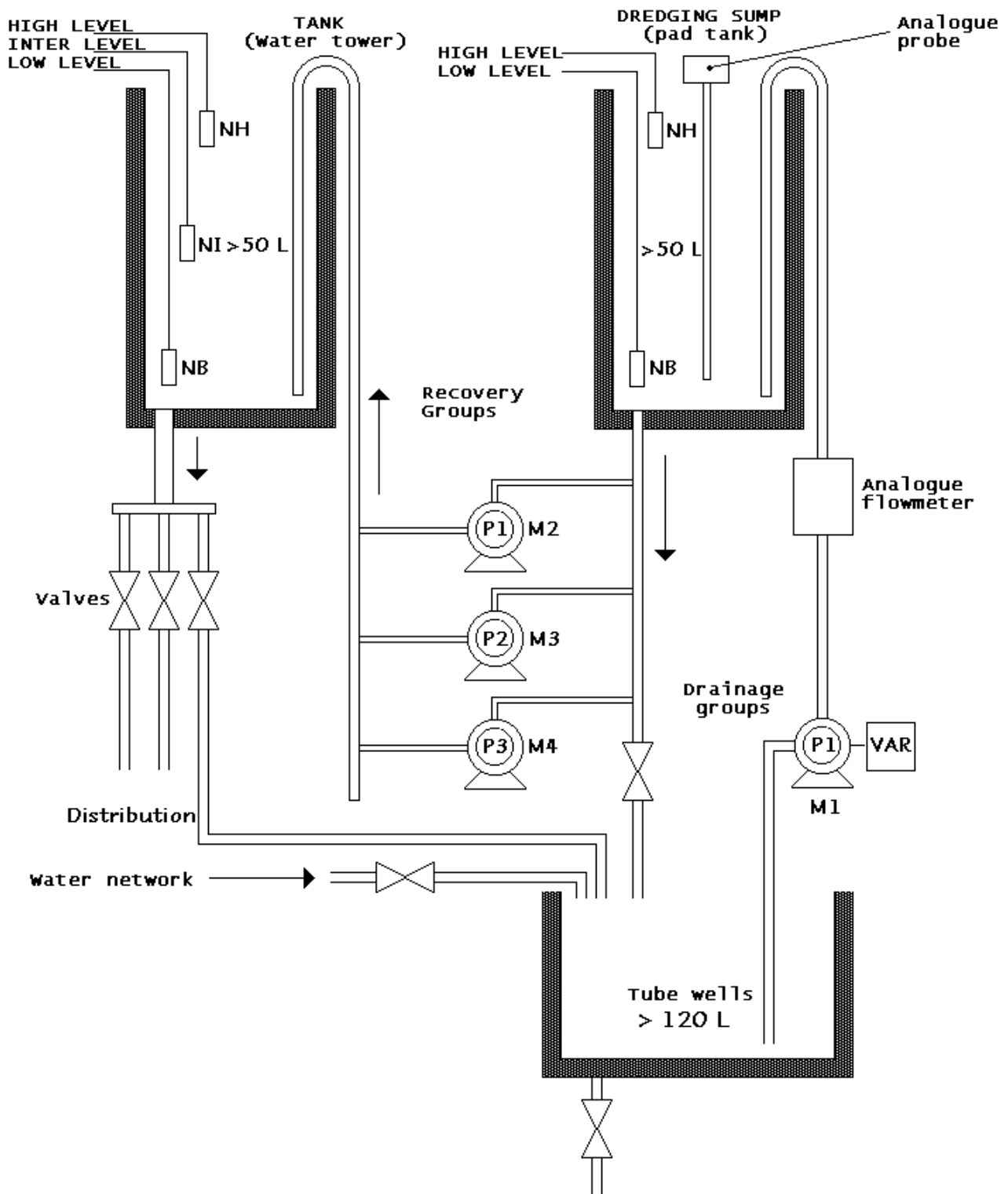
### DESCRIPTION

- The system is composed of a chainage group in charge of feeding a pad tank from p tube well of a water gathering and 3 groups of recovery in charge of feeding the water chamber. (water tower) from the pad tank.
- The output is about 2.5 m<sup>3</sup>/h, the pipework in transparent PVC.
- This system simulates a real water supply network. It is managed by an industrial programmable controls and checking software.

### PEDAGOGIC APPLICATIONS

- Study of a pumping station concept
- Important parameters measurements on a station
- PID-TOR regulation
- Working cycle analysis
- Industrial type architecture
- API programming

## SCHEMATIC DIAGRAM



## TECHNICAL CHARACTERISTICS

- Hydraulic circuit  
Polypropylene tanks, transparent PVC pipeline
- Engines
  - Tube wells pump associated to a flow vectorial control variator – self-priming
  - Pad tank pump in charge of the aspiration
- Sensors
  - analogue level on the capacitive type pad tank
  - TOR level on the pad tank and relay conductive type tank
  - analogue output on the pad tank
- Automatism
  - industrial programmable automation with a programmed keyboard
    - E/S TOR
    - E/S ANA for level sensors and output and frequency variator
  - Control
    - PID for level and flow rate
    - TOR for level
- Checking  
The unit can be connected to the checking system on a PC in order to collect working parameters and the alarm management

## UTILITIES

Electric feeding : 400 V TRI + NEUTRAL + LAND  
Network water feeding : around 10 l/min – 4 bars maxi

## DIMENSIONS

Length : 1800 mm  
Width : 800 mm  
Height : 2300 mm  
Weight : 350 kg