








GENERAL INFORMATION

-  ORLÚ (FRANCE)
-  PRESSURE DROP: 90 METERS
-  FLOW: 1,9 LITERS/SECOND
-  GENERATED POWER: 500W
-  SELF-CONSUMPTION BATTERY CHARGING TURBINE

BACKGROUND

The client has a drinking water tank which receives water from a reservoir with almost 10 bars of pressure. At the same time, in the installation, there are small energy consumptions from a chlorine analyzer, a chlorine dosing pump and a monitoring system. It is intended to take advantage of the pressure at the entrance to the deposit to generate the energy necessary for this equipment and avoid the placement of solar panels that can be stolen, in addition to being an area of low solar radiation.

THE SOLUTION

Thanks to the installation of the turbine, energy is generated taking advantage of the inlet pressure to the tank. In addition, a solenoid valve is installed to stop the turbine when the batteries are charged. In order for the water to continue entering the tank when the turbine stops, a by-pass is mounted on it. The entire installation is monitored so that the client, through MODBUS, extracts all the operating data for correct use and maintenance.