


GENERAL INFORMATION

-  LOGROÑO (ESPAÑA)
-  PRESSURE DROP: 100 METERS
-  FLOW: 2 LITERS/SECOND
-  GENERATED POWER: 500W
-  SELF-CONSUMPTION BATTERY CHARGING TURBINE

BACKGROUND

The customer has an isolated tank that does not have an electrical connection but where the water arrives with more than 10 bars of pressure. At the same time in the installation, there are different equipment such as a chlorinator and metering pump that need electrical energy to operate. It so happens that the energy demand coincides with the passage of water to the reservoir and that it is an area of low solar radiation to install photovoltaic panels.

THE SOLUTION

Thanks to the installation of the turbine, energy is generated by taking advantage of the inlet pressure to the tank. In addition, the installation is complemented by a system that stops the turbine when the batteries are charged. In order for the water to continue entering the tank, a by-pass is mounted to the turbine with a reverse logic valve so that when the turbine stops, water continues to enter the tank. The entire installation is monitored and the operating parameters can be consulted remotely.