






GENERAL INFORMATION



-  MALLORCA (SPAIN)
-  PRESSURE DROP: 6,5 METERS
-  FLOW: 14 LITERS/SECOND
-  GENERATED POWER: 500W
-  SELF-CONSUMPTION BATTERY CHARGING TURBINE

BACKGROUND

The client has an isolated tank that does not have an electrical connection but where the water reaches with excess 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 a hybrid solution is sought with the combination of different renewable energy sources.

THE SOLUTION

A hybrid installation is proposed where, thanks to the installation of the microturbine and together with the installation of 2 photovoltaic panels, they provide the tank with sufficient electrical autonomy, making it 100% self-sustaining. The customer has a motorized valve to be able to stop and start the turbine depending on the state of the batteries. In addition, the installation is complemented by a monitoring system to consult the operating parameters remotely.