




GENERAL INFORMATION

-  GUADALAJARA (SPAIN)
-  PRESSURE DROP: 5 METERS
-  FLOW: 52 LITERS/SECOND
-  GENERATED POWER: 1800W
-  SELF-CONSUMPTION BATTERY CHARGING TURBINE

BACKGROUND

On this occasion, we find an abandoned village made up of 4 houses that do not have access to the electrical network and that have a small abandoned waterfall. In the location itself there are restrictions on the size of a photovoltaic plant, so the client is looking for a hybrid solution together with a turbine to have 2 alternative energy sources.

THE SOLUTION

14 solar panels of 500 watts each are installed, making a total of 7 kw, a 1800 watt hydraulic turbine is installed, all charging a battery bank of more than 40 kW in storage and with a 5000 watt inverter. The installation is monitored at all times and is prepared to expand in the future with another turbine with similar characteristics and with another extra 5,000-watt inverter to be able to extract up to 10,000 watts of instantaneous power.