








GENERAL INFORMATION:

-  MURCIA (SPAIN)
-  NET PRESSURE DROP: 4 BAR
-  FLOW: 37,5 LITERS/SECOND
-  POWER: 10 kW
-  USE OF THE ENERGY: GRID TIED SELF-CONSUMPTION

BACKGROUND

The Charco Lentisco pumping station has several pumps that raise the water to different water networks. Next to the pumping station, there is a pressure reducing valve where the water is received with a pressure of 9 bar and at the outlet it is regulated at 5 bar. It is intended to take advantage of this excess pressure to generate electricity for self-consumption at the nearby pumping station.

THE SOLUTION

Thanks to the installation of a PAT in parallel with the existing pressure reducing valve, it is possible to generate 10 kWh and make self-consumption in the adjacent pumping. With this solution, the aim is to reduce such high electrical consumption since the hours when the pumps are started coincide with the hours where the turbine is intended. In addition, the installation is monitored at all times to check the correct operation of the turbine.