

ABSTRACT

AN IMPROVED SYSTEM FOR ESTIMATING WATER FLOWS AT THE BOUNDARIES OF A SUB-NETWORK OF A WATER DISTRIBUTION NETWORK

The invention relates to a system for measuring water flows in a sub-network of a water distribution network. The system comprises a plurality of sensors, for example pressure sensors, on the network. The system further comprises communication links between the sensor and one a computing device, and a measurement acquisition system. The computing device is configured to retrieve values of measurements, directly or through the measurement acquisition system; use values of measurements to determine values of control variables of a model of the water distribution network which minimize residue values between measurements values and predicted physical values on the network; then use the model parameter with said values of control variables to calculate water flows at the boundaries of the sub-network.

FIG. 3