

Application data sheet

On-line flow rate measurement for the regulation of chlorine injection into the drinking water system

Customer: SEDIF

Operator: Générale des Eaux

Sites: "Ile de France" network

Description of the application:

Regardless of the water treatment process performed in the plants, sterilisation of water distribution systems is inevitable to take into account:

- The risks of bio-terrorist threats,
- The reduced harmlessness of the water related to the time it spends in the pipes (from a few hours to several days or weeks) and the type and quality of the pipes.

To do this, drinking water distribution companies inject chlorine into their supply system at various points. Injection is regulated according to the residual rate of chlorine and the instantaneous flow rate.



Description of the supply:

Combined with the chlorine injection system, our flow meters deliver the value of the instantaneous flow rate in analogue (4-20mA) or digital (RS232 or 485 using a MODBUS or JBUS protocol) format.

The flow meters are made up of a UF322-L1 or Minisonic 600/2000 converter combined with a pair of intrusive or clamp-on ultrasound probes, depending on the constraints of the sites.

All of the equipment is generally grouped together in an equipment room or a separate booth.

Special technical specifications and advantages:

Choosing Ultraflux flow meters for this type of application has the following advantages:

- Large measurement scope (day/night regulation),
- Bidirectional measurement and without loss of pressure,
- Capacity of the probes to withstand clogging, pressure and corrosion,
- Rapid response times,
- Little or no mechanical intervention on the pipes depending on the type of ultrasound probe chosen.

Similar applications have also been produced for export (e.g. Bangkok - see photo opposite).

