Sewer lift station

Lifting and conveying sewage through gravity sewerage systems and force mains requires monitoring to ensure that system capacities are not under or over-utilised. Moreover, the amount of effluent entering, being treated and discharged from sewer treatment plants is a critical measure.

The MACE FloPro XCi is an ideal instrument for use throughout the transfer and treatment systems of municipal departments. For use in lift stations, the FloPro XCi provides an extremely accurate and inexpensive solution. By using a MACE insertion velocity sensor, the MACE FloPro can be used in pipes from 100 mm to 2.5 m (4 in. to 100 in.) in diameter. Furthermore, with a FloPro XCi, up to five pumps can be monitored using one meter. A very cost effective innovation when more than a single pump is used at a pump station. With the addition of an I/O card, the FloPro can monitor float switches and the like to alarm, low and/or high levels in wet wells.

The FloPro XCi can be used throughout the whole treatment process. Inflows on rising mains can be monitored with the full-pipe insertion sensor, whilst in process flows traditionally measured using flumes, can be recorded using a depth sensor (either submerged or ultrasonic) and the FloPro's inbuilt flume/weir look-up tables. Volumes of discharges from the treatment process can be equally measured using either full or partially-full pipe sensors and assessed using water quality sensors attached to the various analogue or digital inputs.

With a MACE WebComm card installed, these readings are available 24/7 on the MACE website, as well as having the ability to be alarmed via SMS/email to any mobile phone.