Waste water level monitoring in sewage networks

In the waste water recovery system, the sewage network, waste water flows through small pipes that will join together in large sewer pipes underground. In these pipes the waste water is transported from one pump station to another towards the sewage treatment plant, often over large distances. Waste water level monitoring in sewage networks is undertaken in many installations to provide flow information and level monitoring, especially to control pumps in lifting stations and service pits.

To reduce the cost of transporting waste water from the user to the treatment plant, such pump stations / lifting stations are built, to lift the waste water to a higher level. By lifting it to a higher level, gravity can be used to enable a natural flow of waste water towards the treatment plant.

Service pits often provide a flood overflow discharge point in case the sewer becomes overloaded with storm water. This occurs when sewers are combined with rain water drainage and excessive rain or storm water flows overloads the network. As sewers flooding is a massive problem, a submersible pressure transmitter provides reliable information by efficient waste water level monitoring of the sewage network, information which is used for logging the changing levels of the waste water and to plot typical flow rates in the sewer. This data will be used to forecast problems of capacity and to alarm when the sewage network overflows, so maintenance may be scheduled or plans for more capacity optimization considered.

Additionally, waste water will often flow through weirs and flumes where high accuracy, low range submersible pressure transmitters are used for waste water level monitoring in sewage networks throughout the whole structure and give an accurate measurement of the flow at that point. Thereby the flow in the network is monitored to provide forecast data for the water treatment facilities.

Waste water level monitoring in sewage networks is an important tool for any sewage engineer, as by knowing the sewage level the operating efficiency of the sewage system can be enhanced and automated warnings on when sewage infrastructure overloads can warn the engineer of pending problems.

Please find further information on this topic on our information platform www.wika.com/hydrostatic-level