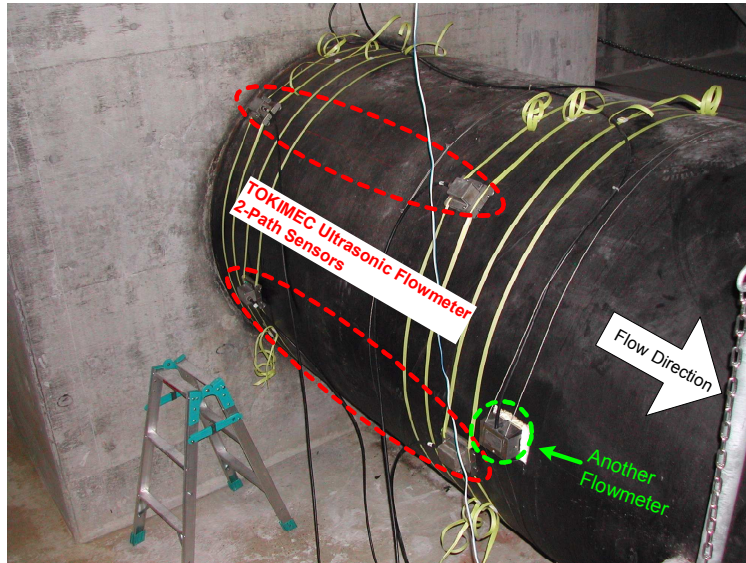


Ultrasonic Flowmeter Application Report 17

- Flow Measurement by Multi-Path Method -

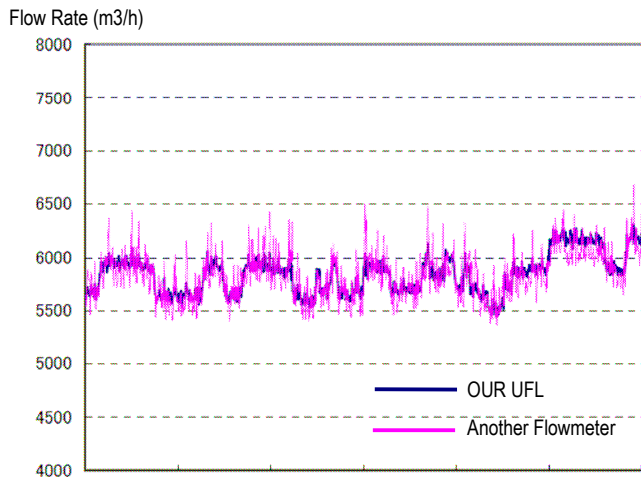


The UFL-20 series stationary, clamp-on ultrasonic flowmeter with multi-path measurement capability incorporating up to 4 pairs of transducers placed on the outside of pipes provides stable instantaneous flow rate measurements.

At this particular site, the UFL-20 series stationary flowmeter with multiple pairs of sensors measures the flow rate through 1500mm diameter pipes, non-intrusively, from the outside with no interference of flow.

Two pairs of sensors are located on the pipe. They provide data on instantaneous flow rate measurement values for each diametrical axis.

The below chart shows the trend of the measurement values for 2 pair of sensors, which were individually switched in sequence and the average of all 2 sensors. These measured values are compared to flow rate readings of another flowmeter, which was installed close by.



Multi-path measurement is a feature of our UFL-20 series stationary clamp-on ultrasonic flowmeter. By employing the UFL-20 series stationary clamp-on ultrasonic flowmeter in combination with the appropriate sensor from the variety available and/or the system's multi-path measurement capability. You may be able to obtain high stable flow measurements of pipes from 25mm up to 6000mm in nominal diameter under less than ideal conditions.

In addition, the all-in-one UFL-20 main unit boasts two independent analog outputs, 4 varieties of contact outputs for totalizing or warnings, and 2 digital communication ports (RS-232C). The Windows-based graphical and user-friendly PC interface is easy to configure and set up.

[Pipe Specification]

Pipe DN : 1500mm
 Pipe material : Steel
 Lining : Epoxy

[Installation Data]

Main Unit : Stationary Ultrasonic Flowmeter UFL-20
 Transducer : SE044040NC
 Installation : V method / 2 path

For more detailed information, please contact your local representative.

Representative in your Area