

Ultrasonic Flowmeter Application Report 1

- Hydraulic Power Plant -

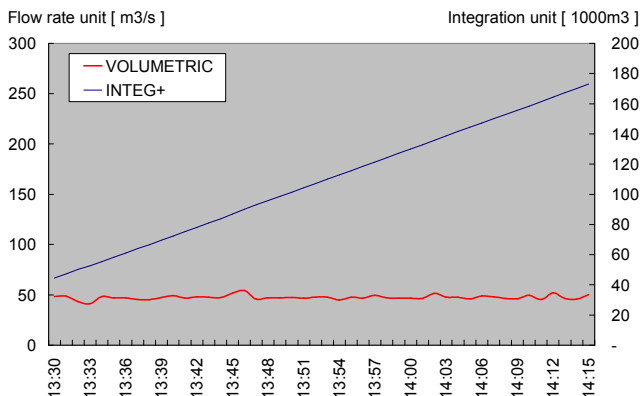


The UFP-10 portable, clamp-on ultrasonic flowmeter provides instantaneous flow rate measurements with 1 pair of transducers placed on the outside of pipes.

The measurement unit, transducers, fixtures and accessories fit into a small carrying case, which is easily transportable to work sites. Set up and installation is quick and easy even on large diameter hydraulic power plant pipe installations such as shown in the photos above.

At this particular site, the UFP-10 portable flowmeter with 1 pair of sensors measured the flow rate through a 5000 mm diameter pipe, non-intrusively, from the outside with no interference of flow. As confirmed by the satisfied customer, the accuracy achieved by the UFP-10 flowmeter compared favorably to measurements made by an intrusive (wet), multi-path (4 path) fixed installation ultrasonic flowmeter system.

A trend graph of logged flow rates and integral values are shown in the graph below. The stability of measurements attained by the UFP-10 is apparent.



This example highlights the capabilities of our handheld

UFP-10 clamp-on ultrasonic flowmeter. Even greater stability in measurement can be achieved with Tokyo Keiki's stationary type, clamp-on ultrasonic flowmeters for 2 or 4 path measurement.

As demonstrated in applications such as this, the portable UFP-10 flowmeter used in combination with a variety of sensors can successfully measure pipes with nominal diameters from 13mm - 5000mm. The main unit's inner memory can provide long term storage (logging) of instantaneous flow rates and integral data - digital data which can then be transferred to PC's and modified for statistical analysis and other purposes.

[Pipe Specification]

Pipe DN : 5000mm (t:18mm)
 Pipe material : Steel
 Lining : Epoxy Painting (t:1.5mm)

[Installation Data]

Main Unit : Portable Ultrasonic Flowmeter UFP-10
 Transducer : Large sensor
 Installation : Z method

For more detailed information, please contact your local representative.

Representative in your Area