

Ultrasonic Flowmeter Application Report 12

- Chiller Efficiency Measurement-



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 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 150 mm diameter pipe, non-intrusively, from the outside with no interference of flow.



In this application, the client needed to know how much chiller was passing through the pipe to chill the tank. Based on separate temperature information, the client could determine the ideal chiller volume for their factory process which is indicated by the red line in the above trend graph. Actual flow measurements with the UFP-10 however indicated flow volumes to be nearly twice that required. This information enabled the client to adjust his chiller volume to levels sufficient for the task but which minimized his energy consumption at great savings.

This example highlights the capabilities of our handheld UFP-10 clamp-on ultrasonic flowmeter.

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 Specific Pipe DN	:	150mm
Pipe material	:	Steel
Lining	:	None
[Installation D Main Unit Transducer Installation	:	Portable Ultrasonic Flowmeter UFP-10 Standard sensor V method

For more detailed information, please contact your local representative.

Representative in your Area