

Ultrasonic Flowmeter Application Report 14

- Design Efficiency Check in Ships-



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.

A large volume of water/seawater is used for cooling engines and other equipment in the engine room of ships. In this application, the shipyard design engineer needed to confirm sufficient flow of coolant water/seawater to the engine room. Flow volumes also needed to be checked for maintenance

purposes to insure that they are at proper levels. The advantages and capabilities of our handheld UFP-10 clamp-on ultrasonic flowmeter are highlighted in this example.

As demonstrated here, 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 : 15mm ~ 650mm
Pipe material : Steel or Stainless Steel

Lining : None

[Installation Data]

Main Unit : Portable Ultrasonic Flowmeter UFP-10 Transducer : Small sensor or Standard sensor

Installation : W method or V method

For more detailed information, please contact your local representative.

Representative in your Area