

APPLICATION NOTE



Thames Power

MINISONIC CLAMP ON ULTRASONIC FLOWMETERS - FROM ULTRAFLUX

BACKGROUND:

THAMES POWER have a large Combined Cycle Gas Turbine CCGT power plant in the East end of London. The cooling water is abstracted from the Thames and is monitored by the EA. Currently there are two large Pitots used to check the water being used, however these have problems with blocking, so they can only be used for short periods during inspection. Thames Power currently have an agreement with the EA to check the calculated usage with the measured flow obtained from the Pitots.

THE PROBLEM:

Thames Power and the EA wanted to use an online metering solution that gives constant flow data. The main issue is that the best place for installation is probably the worst place for flow measurement. All the pipework is buried 1600 mm diameter pipes, the flow profile downstream of a 90degree bend on this size pipe is not going to help. Coupled to that, is the fact that the 20 mm GRP pipe has a 30 mm concrete liner.

FLOWLINE'S METERING SOLUTION:

Flowline's' solution was to offer our clamp on meter from ULTRAFLUX.

The MINISONIC range of flowmeters were selected for their range-ability and ease of installation. The MINISONIC 2000 can be supplied as a 2 chord instrument that offers better averaging for poor flow profiles. The meter was checked during the trial against both the calculated expected flow and the measured flow from the Pitot and found to match.

The benefit if using the MINISONIC 2000 from ULTRAFLUX is the instrumentation has two major advancements in technology. The first is the sensors now offer a greater signal emission for the same shape, size and frequency sensor. This allows a greater sound signal to be emitted in to the fluid. The second is the new ESC function, which focuses on the flow signal and rejects the inherent noise within the pipework.



Further Information



For Further information on the MINISONIC range of Clamp on Ultrasonic Flowmeters contact Flowline on 020 8207 6565

www.flowline.co.uk
sales@flowline.co.uk

EQUIPMENT DESCRIPTION:

EQUIPMENT SPECIFICATION:

MINISONIC 600 pipe i. d. up to 600mm,
MINISONIC 2000 pipe i. d. up to 3300 mm.
Single/Dual Channel/Chord Options.
Probe Types, Clamp On and Wetted.
Outputs
2x 4-20mA,
2 relays for
alarm, flow direction, flow threshold,
Totaliser, fault, RS232 and 485,
JBUS-MODBUS Protocol.
Power Supply 10-30 VDC, 9-18 VAC,
Consumption < 5W Typical Accuracy
+/- 1% of reading, repeatability +/-
0.05%

Now available with ESC (Echo Shape Control), and the new high technology probes for difficult applications.
These meters now have an integral keypad, display and an incredible autofocus/noise rejection capability.
Full user lists and references are available.

flowline
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