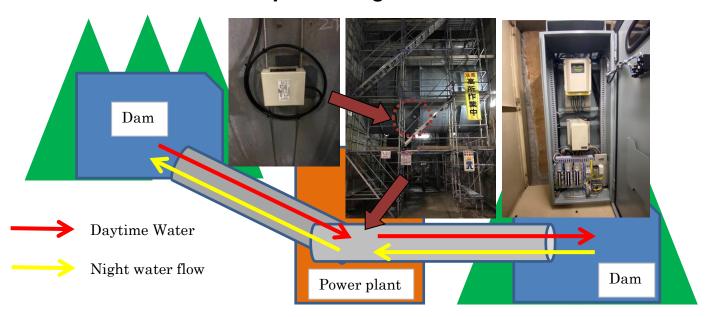


## **Ultrasonic Flowmeter Application Report 58**

## - Pumped Storage Power Plant -



The UFL-30 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-30 series stationary flowmeter with multiple pairs of sensors measures the flow rate through a 4000mm diameter pipe, non-intrusively, from the outside with no interference of flow.

The sensors are clamped on to the large size penstock and fixed in place by wires.

Penstock applications normally involve rotational flows and high-speed velocities which present measurement challenges especially when straight pipe runs are insufficient such as in this application and multi-path measurement is required to insure stable measurements

Multi-path measurement is a feature of our UFL-30 series stationary clamp-on ultrasonic flowmeter. By employing the UFL-30 series stationary clamp-on ultrasonic flowmeter in combination with the appropriate sensor from the variety available and/or with the system's multi-path measurement capability you may be able to obtain high accuracy flow measurements of pipes from 25mm up to 6000mm in nominal diameter with a ±30m/s velocity range coverage under less than ideal conditions.

In addition, the all-in-one UFL-30 main unit boasts

2 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 : 4000mm (t15mm)
Pipe material : Carbon Steel
Lining : Epoxy(t1mm)

[Installation Data]

Main Unit : Stationary Ultrasonic Flowmeter UFL-30

Transducer : SE044040NC Installation : Z method / 2 path

For more detailed information, please contact your local representative.

Representative in your Area