

Ultrasonic Flowmeter Application Report 83

- Installation at main stream in the Hydraulic power plant -



The UFL-30 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.

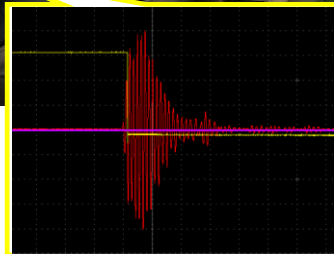
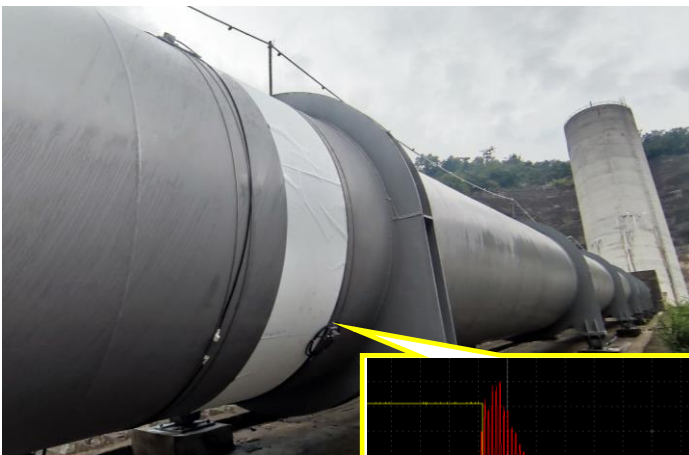
At this particular site, the UFL-30 stationary flowmeter with multiple pairs of sensors can be installed onto the DN3000mm diameter pipe. This is main stream pipe line for hydraulic power generator. Hence non-intrusively, non-stop process for installation and no-pressure loss has been required.

UFL can provide data of instantaneous flow rate which averaged by each diametrical axis.

Also, UFL transducers have higher gain to achieve stable measurement even for old pipe or huge pipe applications. 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 the system's multi-path measurement capability. You may be able to obtain high stable flow measurements of pipes from 25mm up to 6000mm in nominal diameter 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 : DN3000mm (t:14mm)
 Pipe material : Carbon Steel
 Lining : Epoxy (t:0.4mm)
 Location : Lai Chau, Vietnam

[Installation Data]

Main Unit : Stationary Ultrasonic Flowmeter UFL-30
 Transducer : SE044040NC
 Installation : Z method / 2 path (2Z)

The clamp-on type ultrasonic is the best solution to be installed without stopping water or cutting pipe. Only approx. half size of pipe diameter will be required to install transducers.

Especially in the hydropower plant application with steep slope for high velocity, the swirling flow is easy to observed. To avoid and cancelled such affection from swirling flow, 2- path system installed as 2Z way at the above the site.

For more detailed information, please contact your local representative.

Representative in your Area