

Optimize your Ultrasonic Flow Meter for water & Wastewater applications

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FORMAT

6-12 page paper plus 30-minute presentation

KEYWORDS

Ultrasonic flow meters, flow, sizing, specification, troubleshooting

ABSTRACT

Municipalities, water, wastewater facilities are faced with a variety of flow monitoring issues. Flow must be monitored in order to proper facility operation and billing. One of the most flexible and cost effective solutions available are non-contact clamp-on ultrasonic flow meters. Over the years this technology has greatly increased in popularity for flow monitoring, process control and flow surveys. For basic applications the learning curve can be as simple as a quick call to support, reading a two page manual or viewing a short training video. Most of the time this is sufficient for generic textbook applications. However, not all applications are similar to the laboratory environment. Advanced knowledge of theory and operation can optimize the user's performance under difficult applications.

The presentation will go beyond what is normally found in a flow meter instruction manual, and provide guidance on optimizing your ultrasonic flow meter under may different types of conditions. This presentation will focus specifically on the needs and applications of water, wastewater industry. The talk will cover the basic theory and application of Ultrasonic Doppler and Transit Time technology, as well as provide a broad overview of the equipment, installation and common concerns and solutions. Other key topics will also be covered such as energy monitoring, BTU (British Thermal Units), temperature monitoring, data collection, typical equipment expenses and new technologies.

This talk also provides a collection of lessons learned from applying ultrasonic flow meters during the past 35+ year. How to successfully deploy ultrasonic flow meters is both a crucial and popular topic for this industry. When deployed appropriately, this technology can significantly enhance the efficiencies, profit margins, and revenues of water and wastewater systems.

About the Author:



Brent Baird has more than 35 years of experience in Ultrasonic Flow Meter technology, application engineering, product development, business development, distribution, marketing and sales. In 1977 Brent and his father Jim Baird founded Dynasonics, Inc., a manufacturer of Ultrasonic Doppler, Transit Time, and Magnetic Flow Meters. The Baird family sold Dynasonics in 1996 and Brent founded Instruments Direct, a master

distributor, R&D, training and service center, offering a wide variety of technology and brands of Ultrasonic Flow Meters for Rental & Sale nationally. Because of his unique experiences, Instruments Direct also provides R&D services to many of their vendors including beta testing and product reviews. This has resulted in the development of many new value added features, custom designed flow meters, and training procedures to enhance ultrasonic meter usability. In 2008, Brent founded Noncontact Meters, a manufacturer of Ultrasonic Flow Meters and value added ultrasonic features. Although Brent is the CEO of both Instruments Direct and NonContact Meters, you will find him doing what he does best, manning the phones as a senior application engineer, presenting a webinar or touring the country as a speaker and trainer.