Panametrics
a Baker Hughes business

Improve your energy efficiency with ultrasonic flow metering

"If you cannot measure it, you cannot improve it."

Lord Kelvin

At Baker Hughes, we understand the need to accurately monitor, measure and analyze your energy efficiency to combat rising energy prices and reduce waste.

From large industrial facilities, military bases and university campuses to high-rises, ships, hospitals, museums and more, we can help you meet your energy monitoring needs.

Institutions worldwide use our flow meters for their operations, helping them achieve efficiency goals. We can work with you to achieve yours.

- Accurate measurement
- Improved performance
- Maintenance and operation costs
- No interruption in service

Why choose an ultrasonic meter?

Ultrasonic flow metering has become one of the fastest growing technologies for district energy applications. Unlike older mechanical technologies such as turbine and positive displacement that are subject to mechanical issues, ultrasonic advantages include:

Advantage	Benefit
No drifting, no periodic calibration	No loss of process control, optimization of assets and efficiency, no downtime or expense from calibration
No pressure drop	No wasted energy from running a pump, no need to purchase a larger size pump
No restriction in the pipe	Contamination will not affect meter's measurement (drifting) or cause any damage to meter
No filters or strainers	No maintenance cost
Bi-directional measurement	No additional meters required
No moving parts	No loss of process control, optimization of assets and efficiency, no downtime or expense from calibration
Advanced diagnostics	Better data for decision making
No required maintenance	Low cost of ownership

Ultrasonic clamp-on flow meters share all the advantages of ultrasonic flow metering, and are installed on the outside of the pipe without cutting into the pipe or shutting down the process. Used for fixed installations and as portables to measure flow at multiple locations, clamp-ons offer:

Advantage	Benefit
Installation on new or existing pipes	Save time and money not cutting into pipe, install in different locations, install anytime
Installation on outside pipe	Save time and money not cutting into pipe, no process shutdown, no process contamination
No welding, no extra parts	Save installation labor and cost
No leakage	No contamination
No required maintenance	Low cost of ownership

Big government, small energy consumption.

A U.S. federal agency chose Baker Hughes's DigitalFlow DF868 flow meters to measure numerous points on its mechanical chillers, enabling the agency to monitor energy usage, conserve resources and reduce maintenance costs at many of its facilities in Washington D.C.

Business challenge

Reduce energy consumption in U.S. government buildings.

Baker Hughes solution

- DigitalFlow DF868 clamp-on meters

Customer benefits

- Increased measurement range
- Reduced overall maintenance costs
- Eliminated pressure drop

Prescription for cost savings.

After a major Canadian medical company acquired a large campus, it selected Baker Hughes's DigitalFlow DF868 and AquaTrans AT868 clamp-on meters to track energy costs. Since installing the ultrasonic flow meters to measure chilled water and condensate, the company realized energy cost savings and expects to achieve more in years to come.

Business challenge

Obtain and track data on energy costs.

Baker Hughes solution

- DigitalFlow DF868 clamp-on meter
- AquaTrans AT868 clamp-on meter

Customer benefits

- Accurately recorded data to make energy management decisions

Being cool and smart at the same time.

A large mid-western U.S. university selected Baker Hughes's AquaTrans AT868 liquid ultrasonic flow meters to help diagnose a cooling problem with its 15,000 ton central chiller plant that could not consistently cool 65 buildings on a hot day. The meters identified inconsistences to help engineers make improvements to the cooling system.

Business challenge

Reliable cooling of buildings.

Baker Hughes solution

- AquaTrans AT868 clamp-on meter

Customer benefits

- Improved system for more efficient and consistent building cooling

Improve your bottom line
with flow solutions from Baker Hughes.

From determining which flow meter helps solve your particular energy challenge to installation, data analysis and service support, the Baker Hughes global team brings you some of the industry's strongest flow metering experience.

Liquid flow measurement

- Ultrasonic portable or fixed clamp-ons for ease of use and simple installation on outside of the pipe

Steam and natural gas flow measurement

- Ultrasonic steam and gas flow meters with wide range, high resolution and zero pressure drop or energy loss
- Vortex flow meters for cost-effective and reliable mass flow measurement

Energy flow measurement

- Wetted transducer installations with high accuracy and no pressure drop
- Portable meters to spot check existing pipes for system efficiency and to troubleshoot other flow meters and valves

Flow surveys

Baker Hughes field technicians can help you understand your process better. They will tailor a survey to your needs, perform the survey on site using the latest flow measurement technology, and deliver results and recommendations in a formal report. If any follow-up is required, BHGE will work with you to propose solutions to any process issues that are uncovered during the survey.

Supporting service agreements

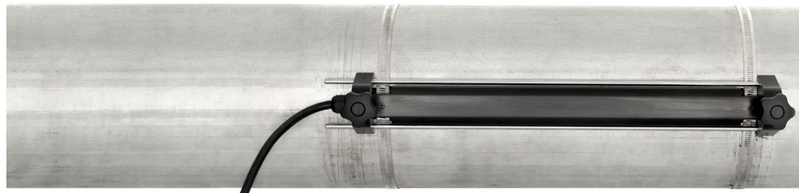
Service agreements can help control equipment costs, reduce operational risks and ensure top performance of your production assets. These agreements feature fixed, long term service costs that are below standard ad hoc service rates.

Powered by smart device technology, the TransPort PT900 portable flow meter for liquids makes your job easier. It combines the best in clamp-on performance with a great user experience so that you can do a flow measurement in just minutes.

MV80 and MV82 multivariable vortex meters measure the mass flow rate of steam, gases and liquids.

Ultrasonic DigitalFlow DF868 liquid and GS868/XGS868i steam flow meters deliver cost effective and accurate energy measurement.

The AquaTrans AT600 clamp-on for liquids is designed to be accurate, durable and cost-effective. Installed in just four steps, the AT600 can be quickly up and running.



GEA33452 (12/2019)

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