In this era of heightened quality awareness, it is imperative that all flow measurements throughout today’s aging municipal systems are accurate and reliable. A proven way to provide this high level of reliability is through a certified flow calibration program traceable to NIST standards.

Prior to shipment, every Eastech Cartridge Meter is individually flow tested, calibrated and certified at our in-house Flow Metrology Laboratory. All flowmeter calibrations are directly traceable to standards established by the National Institute of Standards and Technology (NIST).

PRESENTATION OF FLOW TEST DATA

Testing is accomplished through a fully automated computer controlled system capable of capturing data in real time or through short video clips that can be accessed via the internet by interested third parties. A complete set of test data for each individual Cartridge Meter is included with every shipment. If specifically requested, the final test data can be recorded and stored for future reference by the customer.

Through the utilization of our in-house NIST certified Flow Metrology Laboratory, Eastech Flow Controls can now consistently provide accurate and reliable flowmeters for a wide variety of open channel applications.

FLOW METROLOGY LABORATORY

The Eastech open channel Flow Metrology Laboratory operates by using gravimetric principles. This system is considered to be the “Gold Standard” for calibration of ultrasonic flowmeters. Located in our 30,000 sq. ft. facility in Tulsa, Ok., all Laboratory measurements are independently referenced to standards directly traceable to the NIST. To ensure an effective calibration, the following guidelines are strictly adhered to:

- Each flow test is performed under a definite documented procedure.
- Each flow test is performed by a competent and qualified employee.
- Each flow test is conducted under controlled conditions.
- Each flow test is conducted in a repeatable manner.
- All parameters are measured by equipment traceable to NIST certification.

The Flow Metrology Laboratory has the capability of measuring flow in open ended conduits having inside diameters from 4” to 24”. A 40,000 lb. weigh tank assures that test run times of sufficient duration are consistently achievable. NIST certified load cells are rated at accuracies of ±2lbs. with recalibration taking place every six months. The temperature measurement system is NIST certified to 0.05 degrees Celcius and the frequency standard utilized for the flow collection time base is also NIST certified to an accuracy of 0.000010 Hz.