

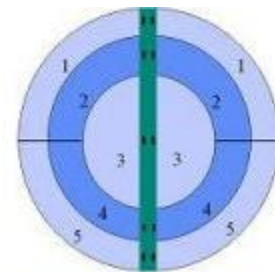
## Lexington, North Carolina's Davidson Water Chooses Marsh-McBirney Multi-Mag Flowmeter



Formed by the consolidation of five local water systems in the early 1970's, Davidson Water (Lexington, North Carolina), services 53,000 accounts in four counties including Davidson, Randolph, Forsythe and Gilford counties. Davidson's water distribution system consists of over 1,650 miles of water mains and 250 miles of service lines reaching customers in urban, suburban and rural areas of the west central region of the state.

In 2003, when the accuracy of a Venturi meter installed on a 24" high service line at the Davidson Water Plant came into question, personnel were on the look out for an insertion type flowmeter that would be used for flow data comparison purposes. Robert Walters, Assistant Manager at Davidson Water states, "We began keeping our ear to the track for an accurate insertion type flowmeter. We just weren't positive we were getting the accuracies at low flows with the Venturi meter and we wanted to be able to track our flows accurately." Inconsistencies in flow readings during low flow conditions is a known disadvantage of Venturi type meters that compare line pressure at the throat of the meter and at a point upstream. In addition, Venturi meters require anywhere from 5 to 20 pipe diameters upstream for installation. Walters states, "We had tried a number of different styles of insertion meters and just had not had any luck until we spoke with the Marsh-McBirney people." Sue McHugh, Regional Sales Manager for Marsh-McBirney, was familiar with the flow applications at Davidson Water. McHugh had spoken with Walters at a recent local trade show regarding Marsh-McBirney's insertable flowmeters. Walters recalls saying, "Tell me more about that meter." The Multi-Mag Magmeter is an insertable electromagnetic magmeter that utilizes multiples electrodes that constantly profile the flow for unsurpassed accuracy. The meter is ideal for the simplest to the most difficult flow applications including the low flow conditions seen in the Davidson Water application. Additionally, the insertable sensor can accurately monitor flow near bends and elbows and does not require plant shutdown for installation. With thousands of installations worldwide, the Multi-Mag has been the ideal flow measurement solution for small and large water systems alike as well as many industrial firms.

Upon viewing the sales literature for the Multi-Mag flowmeter, Walters recalls, "The literature talked about



Each Multi-Mag sensor is custom-built to the exact specifications supplied by the customer. Building sensors to exact inside pipe diameter ensures the highest possible accuracy.

flow data from the National Institute of Standards and Technology (NIST) and how the accuracy held with a comparison of their tank. That pretty much sold me on it! Testimonials mean a lot to me.” In addition, Walters was also guaranteed that if the meter did not operate as stated, that Marsh-McBirney would buy it back. Walter further states, “With that guarantee, I was really sold! A guarantee is what I am looking for and I think most water systems are too. Everybody has a better mousetrap but will they take it back if it won’t work? I don’t bite too hard on something that is brand new but if it has been out there for a while and has some history and you get a testimonial from someone like NIST it goes a long way for me.” McHugh along with the local Marsh-McBirney sales rep, Pete Pillar of Herdco, had further meetings with Walters to discuss the application at hand and other water systems where the Multi-Mag had been installed. Walters comments, “At that time we got deep into the specs of the unit and I saw lots of opportunities for the Multi-Mag meter. We were in a quandary here at Davidson as we wanted to figure out what was our first need.” It was ultimately decided that the highest priority for the use of the Multi-Mag was the 24” high service line that included the Venturi meter in question.

In January 2004, a 24” Multi-Mag was ordered by Davidson Water and installed 25 feet on the distribution side of the Venturi tube. Walters states, “The meter is very reliable day in and day out with its accuracy and we have been able to build a baseline from the flow data. We found out that the Venturi meter was off but not as badly as first thought but that’s OK because we were trying to confirm what we had.” In closing, Walters comments that the return on investment of the trade show where he was introduced to the Multi-Mag was good and mutually beneficial for both Davidson Water and Marsh-McBirney.

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