



## J.A. King Creates Custom Test Software for a Utility Provider in Tennessee

### When a utility provider in Tennessee needed software for their flow measurement bench, they came to J.A. King for help.

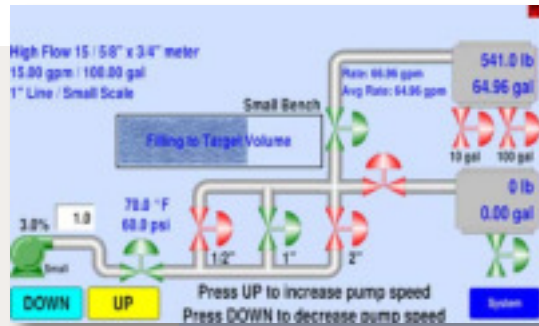
They had purchased their benches only a year before but quickly realized that the costs to keep them operational using the manufacturer's software would be significant. J.A. King was already providing regular calibration services for this utility so they were intrigued when they discovered that J.A. King's Engineering team specializes in custom measurement software.

This utility provider tests approximately 6,000 residential meters and 350 various other sizes of water meters every year. Needless to say, their team stays busy. With the manufacturer's software that they were using, an operator needed to be present for

the entire testing process to make adjustments. This meant that each bench required an operator and their full attention was devoted to the test in progress. In addition, they couldn't make any changes to the software itself and were required to pay ongoing licensing fees in order to keep their benches operational.

Even though the bench was only a year old, initial updates needed to be made to the hardware. The test benches had obsolete controllers. The J.A. King team updated the controllers and added temperature and pressure sensors in order to improve the accuracy of test data. These upgrades allowed the team to then develop a better software solution for the application.

Sub Test #	Flow Rate	Line	Temp	Volume	Low Tot	High Tot	Phase #	Flow Off
High Flow 15	15.00	1"	100	100	1.00	1.00	1	Step Flow #
Mid Flow 2	2.00	1"	100	10	1.00	1.00	1	Step Flow #
Low Flow 3	0.50	1"	10	10	1.00	1.00	1	Step Flow #



« Controller touch screen displays real-time test process data.

« The web-based interface allows tests to be controlled from a tablet or PC.



J.A. King's technical sales specialist and engineering team worked with the utility provider to find out exactly what they needed from their testing software. Because J.A. King has years of experience in measurement and testing, their engineering team was able to ask the right questions to develop a highly capable software solution to meet the customer's unique needs. The new software is not only able to run and make adjustments without the operator's supervision, but also tracks additional data including line pressure, water temperature, and motor run time. This additional information helps the utility provider to better understand what is happening with their meters as well as plan for future preventative maintenance on the test bench. This data is also helpful in dealing with warranty issues with the water meter manufacturer, as they have documentation that the meter is tested at the proper operating temperature of 71°-73° F.

Additionally, the J.A. King engineering team has worked hand in hand with the customer to continue to tweak the software so that perfect and to ensure it is up and running properly. The Lead Meter Technician said, "when you call J.A. King they can make changes and additions to the software without a crazy price tag." He went on to say that he "can text [our contact] and usually within one minute he has responded. If we are stopped, he can get us back up and running quickly."

The customer was able to increase their efficiency, by operating two test benches with one technician as opposed to needing an operator to sit with each bench and make adjustments. In addition, they were able to save a significant amount of money by switching their software to J.A. King. With their original software, they had to pay tens of

thousands of dollars each year in licensing fees to keep their system running. Now with their custom solution, they paid for the software once and now own it along with the source code. They are saving so much on the software that they could buy another new test bench within four years using the money saved. These efficiencies and cost savings are significant for the utility provider and show the value of developing a custom software solution with J.A. King instead of using the manufacturer provided software.

Of the experience of working with the J.A. King team, the customer said, "we were nervous doing something we had never done before, but J.A. King made it easy. After the first day, we were very comfortable with it." He went on to say that "everyone with your company has been extremely nice and easy to work with. They are professional and have a friendly smile."

If you are interested in saving money and improving efficiency while also adding capability, contact us today about our custom software solutions. Our team is here to work with you to develop the perfect software solution for your unique application.

J.A. King, a Cross Company Group, has more than 80 years of experience in precision measurement. J.A. King provides quality measurement equipment, backed by the highest standards of service and calibration in the industry. The J.A. King Engineering Solutions team specializes in creating custom measurement solutions for their customer's complex measurement and testing challenges. For more information, please visit [www.jaking.com](http://www.jaking.com).