



APPLICATION BRIEF

UNIVERSITY SAVES SIGNIFICANT IRRIGATION COST WITH QS200

October 18, 2022

PROJECT OVERVIEW

The University of Tennessee is one of the largest turf research schools in the US. Its Landscape Services department is responsible for the landscape maintenance and upkeep of 780 acres on the university's main and agricultural campuses, as well as an addition 200 acres at its Cherokee Farms site.

The university uses both drip irrigation and standard spray lines; however, seeping valves were creating mud holes throughout the campus, causing damage to landscaping and potential hazards for students and faculty. The leaks were also causing water to run over pavement and into parking lots.

The 1 inch impeller flow meters on the drip irrigation lines were showing no readings which made it challenging to pinpoint the leaking valves. It was also suspected that flow readings on the standard spray lines were being missed, and the university had to replace units as they seized up.

Mechanical impeller flow meters must see a minimum flow rate such that the impeller will overcome friction and start moving to sense any flow. They are often unable to read the low flows typical of many commercial irrigation applications which limits their ability to find leaking valves or other irrigation system leaks.

PRODUCT SOLUTION

As FLOMEC®'s **QS200 Ultrasonic Flow Sensor** has no moving parts, there is no mechanical friction, which allows it to measure much lower flow rates than mechanical impeller flow meters.

The QS200 solution has helped the University of Tennessee prevent problems with seepage and runoff, resulting in lower costs in repairing these areas. The flow meters notify the university if too much water is flowing.

The university now uses the QS200 on 50% of its drip irrigation lines and 50% of its standard spray lines, with plans to retrofit more in the future.



QS200 is designed to support commercial irrigation applications and measures flow rates five times lower than current flow sensors on the market, as low as 0.22 gallons per minute. It provides extended leak detection down to 0.1 feet per second.

- Flow sensors for or with PVC tees: 1 inch through 4 inch
- Saddle series: 6, 8, 10, and 12 inch