

Challenge

A sodium silicate plant in Augusta, Georgia, needed to automate production of several grades of specialty product. The plant's customers often request different levels of dilution or concentration, which are all accompanied by specific quality requirements, so the plant needs to precisely control product mixing. In order to achieve this goal, the plant has to be able to remotely monitor and control 4 storage tank valves from the control room.

Solution

The customer contacted Control Southern to provide a solution. After careful evaluation of the customer's needs, it was determined that the best choice for this application would be TopWorx® wireless valve controllers along with their existing wireless gateway. A wireless solution was appealing to the customer once they realized that Ethernet control was not an option. In addition, a smaller financial investment was required for wireless versus hardwiring the equipment. Instead of having to install 3 separate wires and conduit per valve and using up spare I/O space, the customer was able to communicate through the wireless gateway to individually monitor and control the valves.

Results

By implementing this technology package, the customer believes that they saved over **\$20,000** by not having to take up spare I/O space or deal with extra wiring for each of the 4 valves.

\$18,000 (cost of running wiring and conduit on 4 valves) + \$2,000 (cost of I/O card) = **\$20,000**



Smart wireless gateway prevents the customer from having to use up spare I/O space or deal with extra wiring to monitor and control each valve



TopWorx 4310 valve controllers allow the customer to individually monitor and control storage tank valves