



EDUCATION

Charlotte-Mecklenburg Schools Reduce Maintenance, Improve Lighting with ET90000 Exterior Lighting Controls

Schools in the Charlotte-Mecklenburg, NC district had two exterior lighting issues: either exterior lights were not coming on as scheduled at night, which presented potential safety and security risks, or lights were staying on too long in the daytime, which contributed to costly energy inefficiencies.

Christopher Mueller, Electrical Supervisor for the Charlotte-Mecklenburg schools, was determined to find solutions. "Even one lighting issue can cause problems, so we try to be proactive," he said.

MUELLER ALSO WANTED TO REDUCE THE NUMBER OF MAINTENANCE CALLS HIS STAFF WAS MAKING. HE ESTIMATES HIS CREW OF APPROXIMATELY 20 ELECTRICIANS WAS MAKING 100 SERVICE CALL VISITS ANNUALLY FOR CONTROLS-RELATED ISSUES

A typical school with a mechanical clock in use for controlling exterior lights might require four to six maintenance visits a year, either to update the clock for daylight savings changes or after a power outage.

"Some schools have multiple buildings and could have two or three clocks," Mueller noted. "An electrician could spend up to an hour or two at a school just working on clocks."

Charlotte-Mecklenburg had used Intermatic's mechanical clocks for exterior lighting controls for many years,

so Mueller was well-acquainted with the quality and reliability of the company's products.

"I SELECTED INTERMATIC FOR THEIR REPUTATION," HE SAID. "WE HAVE USED THEIR PRODUCTS OVER THE YEARS AND WHEN I FOUND OUT THAT THEY HAD A NEW ASTRONOMICAL CLOCK THAT WAS SIMPLE TO PROGRAM, IT WAS A NO-BRAINER."

Intermatic's new ET90000 series, which enables independent programming for each day of the year as well as holiday and special events programming, exactly fit his requirements for reliable, easy-to-program controls.

Mueller selected the ET90215C, which has a supercapacitor backup that maintains the scheduling function and information carryover for 100 hours in the event of a power outage. That eliminates maintenance visits to re-program each device in the case of a power outage.

"I wanted a clock that didn't require a battery which has to be maintained," Mueller says. "The supercapacitor will enable the clock to ride through short term power outages."

He was especially pleased that, through its distributor, Intermatic provided on-site training for programming the astronomical clock. Mueller had experience with other astronomical clocks that were just too complicated

to program. With training, Mueller's staff has been able to easily master programming the Intermatic ET90215C. "All of our technicians can make changes and answer calls. That improves our productivity," Mueller notes.

To date, the district has deployed approximately 50 clocks. In the schools where the ET90215C has been deployed, Mueller reports that maintenance calls for timing devices have dropped almost to zero.

If maintenance hours are figured at \$40 an hour, eliminating most of those calls has already resulted in savings of \$4,000. That's a significant savings in maintenance hours and frees maintenance to take on other tasks.

Mueller reports that students, teachers and staff have an increased feeling of safety and security now that the lighting remains constant throughout school campus areas.

WITH MAINTENANCE CALLS DOWN AND LIGHTING CONTROLS RELIABILITY IMPROVED, MUELLER BELIEVES THE INTERMATIC SOLUTION HAS PROVED ITS WORTH. "WE'RE ALWAYS LOOKING FOR A WAY TO SAVE LABOR AND IMPROVE RELIABILITY," HE SAYS. "THE INTERMATIC ET90215C HAS BEEN A BIG WIN FOR US."