



## A WEALTH OF KNOWLEDGE

ICS automatic-cleaning unit from Hydro Systems not only cleans, it aids the educational process at Forest Hills School District's Wilson Elementary

*By Chris Torry*

Survey a classroom full of first-graders and the odds are that they'll say the time they spend in school is way too long, what with all of that learning eating up precious hours that would be better spent playing with friends or watching favorite cartoons. Then tell them that the six hours or so that they are in school every day is just a small portion of the time that the building is in use and the reaction might be: "Who would want to stay in school longer than they have to?"

But it's true. Long before any student arrives in anticipation of the first bell, any school building is a hive of activity with teachers gearing up for the day's lessons and cafeteria staff beginning preparations for the lunchtime rush. The action doesn't stop when the final bell rings, either. Between PTA meetings, chess club, band concerts, sporting events and any other on a long list of extracurricular activities, many school buildings don't see the last visitor leave the premises until 10:30 or 11 p.m. on some nights, leaving precious little time for the daily cleaning that needs to be completed before the next onslaught of humanity hits in the morning.

Forest Hills School District, located in the southeastern suburbs of Cincinnati and serving the communities of Anderson Township and the Village of Newtown, is typical of this daily cycle. A comprehensive preschool through 12th-grade school district, Forest Hills serves 7,750 students through six elementary schools—Ayer, Maddux,

Mercer, Sherwood, Summit and Wilson—Nagel Middle School, and Anderson and Turpin high schools. Forest Hills is consistently ranked among the State of Ohio's highest-performing districts, receiving a ranking of "Excellent" for seven consecutive years, one of only 46 of the state's public school districts (out of more than 600) to have achieved that distinction.

### The Standard Bearer

Of the district's nine facilities, the flagship building is Wilson Elementary, located on Little Dry Run Road, which opened for business in time for the 1959-60 school year. By 1963, an addition was added to the original school building, along with a separate gymnasium. A second addition was added to Wilson in 1971, including the present-day library. Over the years, several annex classrooms have been added to the site as the student population has continued to grow and, in fact, voters in 2009 will decide whether or not to approve a referendum that could lead to the replacement of Wilson in favor of a larger, more-modern facility.

"Even with all of the additions, Wilson is still the smallest elementary school in the district at about 58,000 square feet and it's the oldest building in the district," said Kevin Reid, Assistant Head of Maintenance and District Supervisor of the Custodial Staff for Forest Hills School District. "It's up for a vote to be replaced because they're just out of space there."

Until, or if, the time comes that Wilson will close its doors for good, Reid employs a custodial staff at the school, including a head custodian, who have the task of getting the facility all spiffed up for the next day's events. The job entails the typical daily custodial work—sweeping and mopping hallways, straightening up classrooms, tidying up the cafeteria, as well as cleaning and disinfecting the restrooms.

When it comes to restrooms, according to Reid, Wilson has three sets of main boys/girls restrooms, including one set that does not have any sinks inside the actual restrooms themselves, but is



served by a communal “Bradley sink” just outside the entrance where students can wash their hands. There is also a set of small restrooms located near the cafeteria, one each for boys and girls.

While Reid said that the cleaning of the restrooms is “pretty easy to manage” by themselves, the cleaning crunch comes when school activities run late into the night.

“We have a ton of activities at that school so I have the third-shift people usually come in at 10:30 or 11 p.m. to get started on the cleaning,” he explained.

Until recently, that meant the implementation of conventional cleaning techniques: bowl mops for use expressly on the commodes and urinals, mop and bucket for the floors, a cleaning cart and a disinfectant spray that would have to be applied

and wiped up by hand, a cleaning system that can often be back-breaking and unpleasant, which can lead to ineffective cleaning practices, body-



taxing bending, stooping and scrubbing, lowered employee morale, increased employee

turnover and associated training costs.

### Into the Future

So when Cincinnati-based Hydro Systems, the leading independent manufacturer of proportioning, dosing and dispensing systems for concentrated chemicals, and an industry leader in automatic/touch-free cleaning systems for daily cleaning applications, was looking to gather some field data on its revolutionary, new ICS (for Integrated Cleaning System) automatic-cleaning units in March of 2007, Reid jumped at the chance to have Wilson Elementary be a test site.

The ICS is an affordable, self-contained portable-cleaning system that uses correctly dosed cleaning chemicals that are applied by spray nozzle using low-flow/low-pressure technology. Its unique low-flow design uses only half-a-gallon of cleaning solution per minute, eliminating the need for wet/dry-vac recovery and the handling of contaminated water, while at the same time reducing the slip-and-fall risk.

With the ICS, the chemicals do the cleaning, not high pressure. Utilizing Hydro Systems' proven select valve technology, cleaning and sanitizing chemicals are correctly dosed every time, effectively and consistently killing germs and toxins, particularly in hard-to-reach and often-overlooked areas. The ICS generates less than 100 psi, which protects fixtures and grout from water damage, reduces the risk of the user inhaling atomized bacteria, and eliminates the spray-back of bacteria-

contaminated water. All of which may occur with high-pressure (500+ psi) cleaning systems. The ICS unit is also kind to the environment, with 50% less water and chemicals used when compared with many other automated cleaning systems. Operation is as simple as filling the unit's 12-gallon water tank, using the selector valve to choose any of up to four different chemicals to be dispensed, and applying the cleaning solution with



the low-flow/low-pressure spray nozzle. After cleaning, the solution is rinsed away with water from the spray nozzle. Any remaining liquid can be maneuvered into a floor drain with a squeegee or mopped dry. An optional

foaming nozzle is available to clean vertical surfaces where chemicals need longer dwell time to deliver maximum cleaning effectiveness. This is ideal for shower and locker-room applications.

And, maybe best of all for a facility like Wilson Elementary, the compact design and simple operation of the ICS eliminates complicated and time-consuming setup and breakdown, while the amount of time needed for the actual cleaning process is also greatly reduced. In fact, ISSA 447 Cleaning Times show that the use of touchless-cleaning technology can reduce fixture-cleaning time by as much as 67%, a fact that Reid can attest to as cleaning times were reduced dramatically from the time that staff began field-testing the ICS unit.

“The guys at Wilson love it. It really helps them a lot,” said Reid. In fact, he and the Wilson staff were so pleased with the ICS’ performance that the

unit remains an integral part of the facility’s daily cleaning regimen, while Reid also acknowledged that Forest Hills was considering the purchase of additional ICS units for use in the district’s other buildings.

The Wilson staff has also grown to appreciate the versatility of the ICS unit as, in addition to restroom cleaning, the cleaning personnel has also taken to using the ICS to clean the brick-and-grout floor in the school’s kitchen. It has been employed for seasonal-cleaning projects, such as removing the screens from windows and giving them a complete spray down, or cleaning the windows themselves.

So, in taking the cutting-edge technology offered by the ICS and deploying it in a setting like the nearly 50-year-old Wilson Elementary building, it seems that a proverbial old dog can still benefit from some new tricks. And with the education of its students the utmost priority at Wilson, don’t underestimate the powerful role that a clean facility can play in that educational process.

“It’s kind of neat that this is an older building, but it has a professional, friendly and caring staff that provides the students a clean, nice environment that helps them produce good test scores,” Reid concluded. “That is the case at all of our schools, and we take a lot of pride in that.”

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