

CASE STUDY

ELECTRIC COMMERCIAL OVENS: WOULD YOU LIKE FRIES WITH THAT?

CHALLENGE

Like many young people, students in the Atlanta, Ga., area often choose fries with their meals at school. Local administrators with the Cobb County and Fulton County schools have worked to develop menus that both appeal to students and are healthier in order to meet federal school lunch regulations.

In 2014, school officials reached out to their commercial kitchen equipment sales representative for help. The rep partnered with food vendors and Georgia Power to develop a plan that started with a student taste test. The trial led to a large purchase of electric ovens that have been delivering healthier school lunch options day in, day out.

OLD WAY

For years, commercial cooks in school kitchens have relied on fryers for deep-frying potatoes, chicken tenders, and other foods that typically appeal to young people's tastes. In addition to the health disadvantages of fried foods, these fryers, often heated with gas, generate excess kitchen heat and require ventilation.

NEW WAY

Working with Georgia Power, the commercial food service equipment manufacturers' rep for the Cobb and Fulton County Schools systems organized a three-day taste test and cook-off in the Georgia Power Customer Resource Center commercial kitchen. A bakeable fry made by McCain Foodservice passed the students' taste test; it comes pre-packaged with oil infused into the potato, so it need not be fried. Next, equipment suppliers had to demonstrate that the electric ovens used for baking the fries could handle large quantities in short order, since a typical school lunch time window is about two hours.

A 12kW insulated convection oven, or rethermalizer, made by Cres Cor proved up to the task. The QuikTherm™ operates at 208V, 3-phase, 50 amps. Over the three-day test, a chef from Cres Cor demonstrated the cooking and food-management process, recognizing that a big part of the test also involved convincing school system food service employees that the new



way would meet their needs. Georgia Power stepped in and put the ovens on an electric meter to show exactly what three days of utilization meant in energy costs to the schools.

RESULTS

In terms of speed, the electric oven performed better than conventional gas convection ovens. The Cres Cor rethermalizer came up to temperature quickly and had a quick recovery time. (Recovery time refers to the time needed to return to temperature after being loaded with cold food.) The testers cooked 12 to 15 five-pound bags of fries in the electric oven over the two-hour lunch period. Food held in the electric oven also retained

crispiness even after extended periods of warming. The rethermalizer worked well with ever-popular chicken tenders, too.

An efficient, well-insulated electric rethermalizer does not lose heat as does a gas convection oven through its flue. This performance metric translates to energy savings and greater comfort for workers in the kitchen.

Another important benefit was the elimination of cooking oil, which translated to direct annual savings estimated at \$1,400 per fryer. The schools systems no longer needed the estimated 2,450 pounds of cooking oil used by each fryer, and they saved floor space associated with storing at least a one-month supply of oil. Labor savings accrued, as well; personnel no longer needed to clean the fryers daily, or periodically filter and dispose of the used cooking oil.

BOTTOM LINE

The electric ovens proved they could pass the student taste test, the performance test, the employee-user test, and the energy and cost-savings test. The initial test occurred in spring 2014. Within months, Cobb County had installed three ovens in 16 schools. By the end of the 2014-15 school year, the two school systems had purchased and installed 124 rethermalizers.

FOR MORE INFORMATION

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