

The bakery that feeds Illinois' prisons modernizes to boost output and improve real-world job training for inmates.

BY LAURIE GORTON

rofits earned by the biggest bakery in Canton, Ill., don't generate shareholder dividends; instead, they save money for the state's taxpayers. That's because the Illinois Correctional Industries bakery feeds inmates, residents and staff at more than 40 Illinois Department of Corrections facilities and a few state mental health institutions. Although the bakery is state-owned, it doesn't depend on state funding. Instead, its receipts go into the facility's operating fund, which pays the salaries of its civilian managers and supports

improvements. But the ultimate return-on-investment is measured in lives changed among its prison inmate staff.

Directed by John Dudek, industries

superintendent, the 13,000-sq-ft bakery housed inside the Illinois River Correctional Center at Canton consumes more than 130,000 lb of white and wheat flour per week to bake breads, buns, cakes, sweet goods and cookies.

Products made here include: breads (white, wheat, rye, Vienna), buns (hamburger, hot dog), donuts (plain, powdered sugar, filled, longjohns, bismarks), iced snack cakes (iced and plain), pies, cinnamon rolls, coffee cakes, turnovers,

brownies, pound cakes,
muffins (corn, lemon,
blueberry, chocolate
chip), biscuits, bread
crumbs, bagged
flour, hard rolls
and dinner

rolls, cookies (chocolate chip, peanut butter, oatmeal, sugar, fudge and sandwich styles).

All are kosher-certified OU pareve. "We try to work with special dietary needs upon request and as appropriate," Mr. Dudek said. "Our prison system has a large Muslim population, and for them we make bean pies, a specialty that marks the end of Ramadan. For vegans, we bake biscuits made with soy instead of milk. These rules can be a challenge to any food vendor, but our mission is to serve the customer. It just happens that those customers are inmates."

"This is probably the most diverse product line of any bakery among those in the U.S. prison systems," said Curtis Wilkey, industries supervisor. "Most are strictly bread bakeries."

The bottom line is that the bakery was established to save money for the taxpayers, and it does. But it generates additional benefits in vocational training involving business and bakery skills that reduce recidivism.

RETURN ON INVESTMENT.

Like other states, Illinois' prison population continues to grow,

■ John Dudek [left], industries superintendent, and Curtis Wilkey, industries supervisor, show off a few of the many varieties of baked foods made at the Illinois Correctional Industries bakery inside the Illinois River Correctional Center at Canton, Ill. increasing the demand on capacity at the Illinois River bakery. "We needed to get additional throughput out of this bakery," Mr. Dudek explained about recent upgrades in technology. "Our inmate population in Illinois is about 45,000. We also feed the department of corrections' officers and civilian staff members."

There's no manpower shortage at this bakery. In addition to 16 civilian staff members, it employs 225 inmates of the correctional center, a level 3 ("high-medium" security) men's prison. The bakery jobs are highly desired, and the waiting list numbers more than 300.

Physical expansion of the facility would involve construction, but that's difficult because the bakery is located inside the security perimeter of the prison. So, Mr. Dudek opted to upgrade the bakery's technology. Doing so not only achieved needed improvements in volume and productivity but also brought in equipment and systems typical of those found at commercial wholesale bakeries. This serves Illinois Correctional Industries' vocational mission.

The bakery brings in annual revenues of slightly more than \$4 million. But there's a catch. By department policy, the bakery is required to keep costs low. If an Illinois Correctional Industries unit makes a profit — which the bakery does — it is limited to no more than 10%, according to Mr. Dudek.

"It's important now for the prison systems all over the U.S. to reduce the cost of incarceration," he continued. "Food is a big part of that cost. As a bakery, we contribute cost savings."

CONSTANT CHANGE. Twelve years ago, Illinois Correctional Industries created the Illinois River bakery as an adjunct to the facility's food service operations. It was laid out and equipped like a conventional retail or food service bakery, according to Mr. Dudek. "It was all very manual, no automation," he said. But machines designed for light-duty, 1-shift retail operations were pressed into 24/7 service and wore out rapidly. The



▲ A cross-grain depanner speeds preparation of bread loaves. The inmates operating this line are trained to make sure each dough piece is properly placed in the 5-strap pans.

- ▶ The bakery recently replaced aging bread equipment with an industrial-scale bread divider, rounder and proofer system.
- ▼ Portion-packing of snack cakes assures freshness and proper control over distribution of these popular sweets.

bakery exchanged its original pieces for wholesale-grade systems.

Most recently a Benier bread system, consisting of a divider and proofer, replaced a 2-pocket bread and bun line. A Shaffer mixer, equipped with a screw-lift for troughs and a dough pump, and a Peerless Supergrain moulder are also part of this line, and the bakery is about to install a LeMatic bulk bun packer. Earlier changes brought in Seewer Rondo sheeters for sweet goods makeup, an AMF Bakery Systems Model K bun divider and Pan-O-Mat and an I.J. White spiral system for ambient cooling. An AMF automated depanner now separates loaves of bread from their 5-strap pans.

In off-site storage, the bakery currently has a Reedco 32-ft, single-lap, 18-shelf oven and a Middleby Marshall revolving-tray oven, approved for installation but waiting for the department's go-ahead on installation dates. Also waiting is a bulk ingredient system consisting of two 55,000-lb silos and a walk-in cooler.

ADDED BENEFITS. The baked foods made at Canton look and taste the same as good-quality commercially baked products. Any differences are subtle but significant. Take portion control, for example. "Everything now goes out in a package, including





the 2-slice bread packs used during lockdowns," Mr. Wilkey said.

Snack cakes, sweet rolls and pastries are individually portioned and wrapped. This package style preserves freshness and wholesome condition, as it would if sold off a supermarket shelf. In the prison food service system, however, individual packing is a visual guarantee to inmates of standard portions and equal treatment.

"Our dietitians and food service managers loved it when we put in the AmeriPak wrappers," Mr. Dudek said. "This package style, its exact portion control, stopped a lot of fighting over who got the biggest piece. That improvement in discipline was a big selling point to the department committee that approves our bakery budgets."

Only a few state prison systems operate their own bakeries, something that Mr. Dudek would like to see increase. "There is a need for systems like ours that provide training programs, that are capable of taking these inmates into new lifestyles.

MANAGING BY EXAMPLE. Because storage space at the bakery is limited, it employs the just-in-time (JIT) approach for raw materials. On a weekly basis, the bakery receives and uses 86,400 lb of white flour, 42,500 lb of wheat flour and some rye flour. It produces an average of 300 pallets (delivery trays) on each of two shifts. Sweet goods are especially popular offerings, and the bakery makes 600 to 800 pallets of cookies a week.

The bakery's vocational role enters nearly all aspects of the work, although training must be budgeted according to the availability of time and staff. Mr. Dudek said instruction is based on industry standards, as established by the American Institute of Baking. Every "new hire" gets intensive instruction about equipment safety, sanitation and work rules. They are tested, too.

Sometimes the best vocational aspect of a civilian staff member's work is the example provided. "We

> often act as much as role models as instructors and supervisors," Mr. Wilkey observed.

The bakery also makes good use of as much training time as its equipment and ingredient vendors are willing to contribute.

For example, Ted Skwarczek, the Chicago-based national accounts manager for Best Brands, St. Paul, Minn., usually plans a day or two of working side-by-side on the lines with bakery staff whenever he visits the facility. This not only reinforces proper use of his company's ingredients but also gives the inmates insight into work skills and team dynamics necessary to success on the outside.

Dunbar Systems, Inc., Lemont, Ill., handled several of the upgrades at the bakery. "We assign one of our five project managers to allow 24/7 service for this account," said Mark Dunbar of Dunbar Systems.

"It was a whole new thing for the state of Illinois to do a bakery like this," Mr. Dudek said. "Vendors like Dunbar, Best Brands and Horizon Equipment have been especially supportive. They are all 'just up the road' in Chicago, just three hours away."

All procurement is handled on bid by the state's Central Management Services. Mr. Dudek said that a big part of establishing the bakery was helping buyers develop proper specifications. "For example, to bid for our business,



▲ Supplies of baked foods are staged and loaded into delivery trucks according to destination.

ingredient vendors must demonstrate that they have an on-site quality assurance lab, kosher certification and other such qualifications."

When selecting equipment, the bakery relies on the standards written by the Baking Industry Sanitation Standards Committee. "BISSC standards make our operation work better," Mr. Dudek said. "We learned that and, in turn, have educated our buyers to BISSC. If a machine is not BISCC certified, the bid is not approved."

Mr. Dudek followed recommendations from the American Institute of Baking when establishing the bakery's quality control system. "I supplement this with what I learn from industry meetings and publications," he said.

DOING THE WORK. The bakery relies on its staff of 225 inmates and 16 civilian employees to meet its

nois Department of Corrections

ambitious production schedules. With Mr. Dudek in overall charge, Mr. Wilkey supervises processing operations with a staff of five correctional vocational instructors, a job that encompasses all the usual responsibilities of a bakery supervisor, plus the oversight of inmate workers and the skills of a teacher. Day shifts call for roughly 90 inmates, while evening operations employ 50 to 60.

Ingredients for each batch are preweighed. The bakery relies heavily on mixes, which simplify the scaling operation and standardize the results. Three horizontal mixers — two Shaffer 800-lb capacity mixers and one smaller Champion mixer — produce doughs.

Production flow is designed to move product around the perimeter of the room. "This reduces the need for personnel crosstraffic," Mr. Wilkey said. This avoids potential conflicts between inmates.

Dough pieces for bread now move along conveyors from the Benier system, through the moulder and into a waiting pan strap after each pan has been sprayed with release coating by a Burford Hydraplate oiler. The bakery sends its pans out for reglazing every 90 days.

A separate crew mans the facility's two donut fryers, producing yeast-raised and cake donuts. "By organizing workers into crews, we can rotate the groups through various operations," Mr. Wilkey said.

Baked products cool on the spiral and are moved along to slicing and packaging operations. Hot dog buns are packed by the dozen and sealed with an imprinted Kwik Lok closure. Placed in delivery baskets (pallets) and stacked, the bakery's products move to the delivery dock. "We also put a wrap over the top of the basket for security during distribution," Mr. Wilkey pointed out.

Returned delivery pallets are sanitized. They run through a Kuhl basket washer before being filled again with fresh product.

"We address all the issues regular bakeries do in productivity, sanitation and quality, but the No. 1 focus is security," Mr. Dudek said. "Everything comes after that."

This is not your ordinary wholesale bakery.

"What we're doing here at the Illinois Correctional Industries bakery," said Mr. Dudek, "is a good program for the state and for the inmates."