

Baking Operations by Edward Lee, editorial
director

How Great Buns turns ordinary into extraordinary

Great Buns' growth matches that of its market, Las Vegas, the nation's fastest-growing city. To keep up, the bakery relies on creative products, high quality standards and alliances with suppliers.

Timing is everything, so the adage goes. If any baker can relate to the saying, Augie Madonia can.

His on-the-mark timing and strategies to capitalize on opportunities pulled Madonia, now 75, from retirement and propelled him into a second career. In 1982, he launched Great Buns Bakery Inc., which has become one of the fastest-growing volume wholesalers in the United States.



IJ WHITE SPIRAL COOLING SYSTEM which feeds two packaging lines, was critical in gaining efficiency and saving valuable space in Great Bun's Bakery's 17,000-sq.-ft. plant.

The bakery's location, Las Vegas, offers an obvious clue to the bakery's growth. As the nation's fastest growing city, Las Vegas has experienced a 55% burst in population since 1990. Driving that explosive growth largely has been the mushroom-like increase in the number of the city's resort hotels. During the 1990s, their presence has created jackpots of opportunities for vendors. Enter Great Buns.

Seven days a week, the bakery supplies about 100 hotels and, restaurants with hearth-baked conventional and artisan breads and rolls, bagels, muffins, croissants and Danish. Consuming nearly 125,000 lbs. flour a week, Great Buns has become the largest independently owned bakery in Nevada and the state's largest supplier of dinner rolls, Madonia says. Annual volume has surged by as much as 50% in recent years, and "there's no end in sight to this growing market," he adds.

Great Buns management has had to be quick on its feet to keep up not only with heady volume gains but also changes in customers' needs. Since the late 1980s, Las Vegas has evolved from a cowboy-like town attracting mostly western U.S. gamblers to become a cosmopolitan city, whose airport daily welcomes thousands of visitors from around the world. Hotel and restaurants' bakery needs have changed accordingly.

Great Buns meets the challenges of Las Vegas' evolving foodservice market by "taking ordinary products and making them extraordinary," Madonia says. The bakery achieves that goal by developing creative products, following high quality standards and applying automation to increase efficiency.

Discovered new market

When opening Great Buns in 1982, Madonia and his wife, Linda, had much experience on which to draw. Since 1947, he had owned and operated Royale Rolls Bakery in Buffalo, N.Y., one of the country's first volume bakeries dedicated to supplying fast food operators, such as McDonald's and Burger King, and steakhouse restaurants in New York State.

The couple sold the business, retired and moved to Las Vegas in 1980. "After moving here, we found that no bakery offered the high quality, European-style bread and rolls we were used to in Buffalo," Madonia recalls. "Later, we realized that a market for high quality product was developing. So, after seven years of retirement, I felt it was time to go back into baking."

The Madonias bought a retail bakery, introduced their crusty bread products and sweet goods, and sold increasing amounts wholesale from the back door. By 1984, Augie had convinced his son, Tony Sr., 54, and daughter in law, Lynn, to join them in the emerging wholesale operation. Tony Sr. had worked with Augie at Royale Rolls.

The family purchased a larger facility, which after expansion, currently covers 17,000 sq. ft. Grandson Tony Jr., 33, came on board in 1990.

Large capital expenditures

Keeping pace with the increasing volume has required large capital investments in equipment and control systems. In late 1998, Great Buns completed a \$3.5 million installation, including a high-speed bun line and other gear, and during the last three years spent another

\$400,000 in improvements. Plowing capital into the business has been key to the bakery's plan to become a "one-stop source for the hotel and restaurants' bakery needs," Augie says.

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Since the bakery opened, the number of different items produced has multiplied ten fold to more than 400 baked and par-baked products. These include hearth baked and artisan breads and rolls; gourmet hamburger buns; hot dog, submarine, Kaiser, steak and dinner rolls; bagels; muffins; croissants, and Danish. The dinner roll line alone has 24 varieties.

"Seventeen years ago, the big rage among the hotels was who could serve the cheapest buffet in town, and price was the driving force when buying bakery products," Tony Sr. explains. "Since then, Las Vegas with its mega resorts has assembled some of the finest chefs from around the world. Their battle tactic is who can serve the finest buffet and provide the highest quality in their fine restaurants."

Las Vegas chefs no longer settle for only "supermarket bread and fast food buns," he adds. "They want products they can be proud of—sourdough rolls, European-style breads and so on. Our approach always has been to provide quality and service at reasonable prices, which will win out in the end."

Great Buns can accommodate the many required varieties largely because of the plant's automated production and computerized ordering system.

Roll line leads charge

The heart of production beats along Great Buns' high-speed roll line, which includes a 75- by 12-ft. direct-fired tunnel oven. Most of the bakery's 24 roll varieties are hearth baked. "It's part of our goal to make ordinary products

Upon entering the proofer, the buns come under control of a computer that coordinates proofer temperatures and humidity level, a scoring machine's cut patterns, and temperatures and steam injection level in the three-zone oven. The computer contains about 50 product-specific programs.

Buns travel through the proofer about one hour at 115°F dry bulb/85°F wet bulb and 80% humidity. Proofed buns are dispersed onto a 12-ft.-wide conveyor and fed into the scoring machine, which cuts the pieces twice at right angles.

Tapped supplier's expertise

The machine is another example of Great Buns' goal to offer distinctive products. "We wanted to go beyond making traditional soft, plain dinner rolls and produce European-style product," Tony Jr. says. Bakers for several years scored product by hand, but as volume grew, "we reached our limits in what we could handle by hand."

Great Buns worked with the manufacturer of an automatic scoring system to replicate the appearance of European product and eliminate labor-intensive hand scoring. The firm, Tony Sr. notes, not only custom-engineered the unit to fill Great Buns' needs but also ensured that the computer coordinated its production rates with those of the proofer and oven. "The manufacturer was really challenged to make the system connect with the proofer and oven, but the company stayed with it until everything was on target," he says.

The machine features two scoring units, which can make from one to four uniform

appear extra ordinary," Augle explains. One example is the bakery's signature gourmet hamburger buns, available in plain, sesame, onion and whole wheat.

Production begins with drawing 12.5% protein bread flour from a 75,000-lb. capacity silo, which has three scaling hoppers. Flour, combined with water, salt, yeast and other small ingredients are mixed into a straight dough in one of two 500-lb. dough horizontal mixers. Both units have direct expansion refrigeration to help handle Las Vegas' searing summer heat.

The dough mixes for about 13 minutes and receives 10 to 12 minutes' floor time. A trough hoist dumps the dough into a six-pocket divider at a high-speed makeup line, which can process as many as 1,500 dozen pieces per hour.

The divider scales the dough into 2- to 4.5-oz. pieces, which travel eight to ten minutes through an intermediate proofer. After being sheeted, they enter a panless proofer. Seeded varieties first pass under an adjustable seeding unit, developed by Tony Sr. The seeder densely coats the tops as if they were hand dipped. It features a relay control, which automatically adjusts conveyor speed to provide desired seed coverage.

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The machine features two scoring units, which can make from one to four uniform cuts. The first unit makes 90' cross cuts; the second can be adjusted to cut from 180' to 45' for different designs. During each 50-second dwell period, the machine can score 17 1/2 dozen pieces. "How many bakeries can produce dinner rolls with four cuts in high volume?" Tony Jr. asks. "This gives us a distinctive advantage over our competitors."

Scored buns move through the tunnel oven, where they are steamed in the first chamber and receive a total 12- to 15-minute bake. Upon exiting the oven, product travels on a linear conveyor about five minutes.

The linear conveyor originally was designed to run a straight course back past the oven, scoring station and proofer and connect with a spiral cooler. However, a miscalculation in locating the proofer created an awkward angle to overcome. Tony Sr. notes that the conveyor company worked with Great Buns to make the bend as smooth as possible, thus reducing potential mechanical problems.

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Buns cool another 45 minutes in the spiral cooler, then pass through a band slicer and to a paddle bagger and tab closure unit. Employees bag 12 or 24 buns in each poly bag and place the bags in baskets for shipment.

Great Buns currently is seeking to increase packaging productivity to match that of the highspeed line. The company plans to adapt an automated bulk packaging line, currently used in Europe to pack vegetables, to handle the bakery's rolls, Tony Sr. says.

An incline conveyor will feed the rolls into lanes, each of which will lead to a hopper, which will weigh and count the rolls, he explains. The hopper will discharge the rolls into poly bags, which will be lock tabbed and placed in baskets, all automatically.

"The system will pack as many as 18,000 rolls an hour, or about 15 bags a minute," Tony Sr. says. "It should reduce our labor on the line from five to two people." He currently is consulting with two manufacturers, who, he adds, are identifying ways to adapt their systems to the bakery's needs.

During the last three years, the bakery developed and refined a system to record sales orders and communicate the information to the production department. Tony Sr. says the company worked with a software development firm, which studied the bakery's needs and created a system to fit Great Buns' communications goals.

In the latest stage, the bakery recently introduced a cellular telephone-based ordering system for its independent route distributors. Each is equipped with a

More equipment planned

While employing high speed equipment to produce high volume rolls, Great Buns has had to remain flexible to provide accounts with 100% of their needs, Tony Sr. says. For example, it uses two one-person bread and roll lines to make up bagels and handle short runs of other bread items.

These products also receive distinctive extra touches. For example, 24-oz. whole wheat pan loaves are rolled in bran, seven grain loaves in oats, and rye loaves in cornmeal and caraway seeds, before being panned. To increase pan bread production, the bakery plans to install a moulder/panner.

Further, Great Buns bakers produce sweet goods and artisan breads at workbenches. But, because of

increasing demand for both categories, the bakery plans to purchase within six months an automated makeup line that will handle both types of products, Tony Sr. says. The equipment also will enable Great Buns to add frozen dough Danish, French pastries and croissants, he adds.

Seeking committed manufacturers

As with acquiring other automated machinery, the Madonias will be seeking manufacturers committed to adapting their equipment to mesh with Great Buns' specific requirements.

Pursuing such a strategy has paid off dividends. "Besides improving efficiency with automation, we've improved quality" Tony Jr. says. "We're hearth baking products that had been baked on pans. Products are scored to improve their

notebook computer and cellular telephone.

When making a delivery, a driver keystrokes the account's product quantity on hand, then prepares to enter its next order. The computer, via cellular telephone connection, provides the account's specific product list and prices. Also, it can display a three-week running purchase history and generate a suggested amount to order. Further, the computer will alert the distributor if the account may not have sufficient product available before the next delivery.

The cellular telephone relays the order to Great Buns main computer. That unit, in turn, generates the order's production sheets, invoices, shipping reports and distributor commissions.

Tony Sr. says the system has become crucial to serving foodservice customers, especially hotels, whose demands can vary greatly day to day. Further, the bakery receives the orders immediately, rather than having to wait three to four hours for distributors to telephone orders. "That wasted time and created opportunities for errors," he adds.

appearance. And, seed coverage has improved."

Adds Augie, "These are the extra steps we can take to ensure that we remain the number one foodservice supplier in our market and can maintain reasonable prices for our customers."

With the continued growth that Las Vegas is expected to experience, Great Buns will identify plenty of opportunities to adapt production to changing customer needs. Count on the Madonias to respond as they have the last 17 years-quickly.

As Augie observes, "When we see something we like, we jump on the opportunity. We don't need six months to make a decision.