

IN THIS ISSUE: IBIE PREVIEW • ANCIENT GRAINS • SIFTING

40
YEARS
1979 - 2019

FEBRUARY 2019

www.bakingandsnack.com

Baking & Snack®

A SOSLAND PUBLICATION

The knowledge authority for development, production, packaging and distribution of grain-based foods.

INTERNATIONAL DELIGHTS THE PURSUIT OF EXCELLENCE

Also inside:

Equipment
Trends Survey



Brothers Nicolas and Spiro Sayegh have relied on a passion for baking and continuous improvement to fuel the growth of International Delights for more than 30 years.
Photos by Donnelly Marks

Delight

IN EVERY BITE

International Delights' perpetual pursuit for excellence provides the platform for taking its bakery to the next level.

by Dan Malovany

For brothers Spiro and Nicolas Sayegh, a little bit of love makes their world go around. After three decades in business, that inspiration for baking allows the two founders and managing directors of International Delights to create a world of difference when producing its top-selling croissants, Danish, muffins, scones, brioche, puff pastry and other fresh and frozen sweet goods.

"We like to say, 'If Spiro and Nick don't love it, we don't make it,'" noted Robyn Spritzer, director of marketing for the Clifton, NJ-based company. "If it's not something we enjoy, we're not going to share it with anyone else."

Because love is subjective and often changes over time, the bakery focuses not only on new products but also on the constant improvement of existing ones. "It's not, 'This is how you make it, this is how it's made, and it's done.' It's, 'How can we make it better; how can we improve the ingredients to make them cleaner in today's transparent environment to consumers?'" Ms. Spritzer explained. "It's all about ingredients everyone recognizes. It's all about taking a good product and making it great and taking a great product and making it excellent."

The company has compiled a team of five food technologists and two chefs to tweak formulas and develop whole grain pastries or non-GMO sweet goods with fresh fruit and ingredients that leverage the latest trends.

"This is not a bakery," Spiro Sayegh explained, walking into the R&D department. "This is a playground. We come here to have fun."

Those fresh products are baked for more than 5,000 premier hotels, chefs, delis, caterers and other customers. Its fleet of step vans blanket New York City while a

direct-store-delivery system of independent distributors services the surrounding tri-state region from Hartford, CT, to Montauk, NY, and throughout New Jersey to Philadelphia. "You would be hard-pressed to walk a block in the New York City without running into our products," Ms. Spritzer said.

In fact, International Delights distributes baked goods 365 days a year. According to Nicolas Sayegh, there was only one time in its 32-year history when the company didn't make shipments, and that was in 2012 when Hurricane Sandy pummeled the area. For him, that commitment to service, coupled with executing product quality and showing loyalty to customers, vendors, employees and distributors, remains the heart of the business.

"One of the keys to success in the industry is having a really well-defined mission and to be able to stay strategically focused on what our vision is and when to compromise or pass on fads," he said.

Fresh takes on baking

Because daily delivery accounts for the bulk of its business, International Delights built its 180,000-sq-ft bakery eight years ago to combine semi-automation with full-throttle production that the company touts on its website as "old world meets new — the art of baking and the science of innovation."

On the artisan side, three Rheon makeup lines rely on short runs and multiple changeovers to feed 16 Revent double rack ovens with a wide assortment of made-from-scratch baked items.

The plant's highly automated section houses a Rheon



line that cranks out 180 croissants a minute. This year, the company plans to foray regionally and nationally with frozen items including dough, fully baked, pre-proofed and individually frozen wrapped items. During *Baking & Snack's* visit, International Delights was also upgrading its Comas line with a new cup denesting system and conveyors that lead into a second tunnel oven to ratchet up its muffin and pound cake production while expanding packaging capacity. Additionally, it recently added a 600-pallet storage freezer that provides the launching pad for the bakery's next strategic plan. "We're getting ready to move big time into frozen dough and frozen baked products," Nicolas Sayegh said.

From an ingredient perspective, the vertically integrated operation makes its fillings, icings and jams from scratch. It even roasts its own nuts. For the retail market, the company recently introduced its Spread Delights line that includes a chocolate hazelnut and an almond spread as well as raspberry jam with 70% fruit content. Ms. Spritzer noted the single-serve, easy-squeeze stick packs allow consumers to transform traditional baked goods and snacks into gourmet treats to their own preferences.

"Spiro tried raspberries from 14 different sources to create the perfect jam," Ms. Spritzer said.

Other points of differentiation include sweet and savory fillings produced in-house for its filled croissants, Danish and puff pastries. A proprietary levain system incorporates up to three tons of sourdough a day into dough-based items to enhance flavor, provide cleaner labels and extend shelf life naturally.

As a part of its mission, International Delights promotes traditional and globally inspired baked goods that contain nutritional benefits and emphasize superior taste. "It's about being innovative all the while respecting tradition and culture and creating comfort food," Spiro Sayegh explained. "We're making foods that people love and that have been established over hundreds of years. If you make them the way they should be done, people will buy more of them. That's our belief."

Overall, its two fresh brands include high-end iDelights pastries — which come in large and medium sizes for hotels and minis for caterers — and Délices (French for delights) premium artisan collection.

Its individually wrapped, 21-day shelf life Oven Delights serve the convenience market. Classic New York-style pastries are also sold under the Voila! Bakery brand acquired by the Sayeghs four years ago. All products contain no artificial colors, high-fructose corn syr-

Top: The stress-free makeup line cranks out dough for soon-to-be freshly baked croissants at rates of 180 per minute.

Bottom: An operator checks dough texture and consistency in one of the spiral mixers prior to fermentation and processing.

INTERNATIONAL DELIGHTS

up or partially hydrogenated oil. “They are individually wrapped because this provides the greatest opportunity for growth and also the potential for wider frozen distribution,” Nicolas Sayegh said.

Fast, flexible and fun

Overall, 260 people from 29 countries work at the SQF Level 2 bakery. During a holiday party, it recognized this diversity by putting up flags for each nationality. “We’re the United Nations of baking,” Spiro Sayegh said. “That’s why we’re called International Delights. Diversity epitomizes what we’re all about.”

Currently, the bakery houses five production and five packaging lines. Outside, the building features a façade of a layered croissant in the front. Inside, the facility contains 100,000 sq ft of processing space; 40,000 sq ft for packaging; 20,000 sq ft of warehousing and 20,000 sq ft of offices and ancillary space. During the morning, the operation

Accurate depositing minimizes labor and streamlines the production of filled New York-style pastries on one of the bakery’s semi-automated lines.



SUBSCRIBE
to the
OPERATIONS
UPDATE
NEWSLETTER



This weekly e-newsletter from *Baking & Snack* provides news and information on engineering, production, packaging, maintenance and sanitation topics.

Sign up at
www.bakingbusiness.com

“We look for products from all around the world. We want to bring the best delights in the world to the country we love.”

Spiro Sayegh, International Delights



primarily produces individually wrapped items before transitioning to production of fresh ones for foodservice and other accounts. Distributors start picking up fresh products at 7 p.m., and the bakery's direct deliveries typically run from 2 to 7 a.m.

An AZO ingredient handling system feeds the lines with high-gluten flour from two 80,000-lb outdoor silos and cake flour from an indoor one. A bag dump and separate tote station feed minor ingredients into an AZO automated dispensing system with silos ranging from 600 to 3,000 lb to eliminate lifting and provide front-end process controls. Totes ranged from 600 to 3,000 lb. An operator scales micro ingredients from bags stored in individually labeled bins.

In one room, the proprietary sourdough system comes with one 600-L operation for the mother sour and two 2,800-L holding tanks for the levain. Spiro Sayegh noted many sours receive 24 to 40 hours of fermentation.

The mixing room is centrally located at the front end of production, so it can serve both the semi- and highly automated operations on each side. This temperature-controlled department relies on four VMI spiral mixers with 250- to 300-lb bowls for dough products as well as a Sancassiano 600-lb paddle mixer, a Diosna paddle mixer and a third older model for batters. “When we select equipment, we try to select the best for what we’re producing today and possibly in the future,” Spiro Sayegh observed.

Doughs rest in the 60-trough fermentation room at 50°F for 1 to 12 hours, depending on the product. On the high-speed Rheon line, the troughs are automatically elevated to a belt conveyor that continuously feeds the stress-free V4 system in the room set at 65°F for maintaining croissant production.

After heading through the first “stretcher” or cross roller, the dough receives butter from a spreader before entering a sheet folder and roll-in conveyor to seal in the butter. After flour dusting and sliding under another “stretcher” or reduction station, the sheet receives four to six layers of overlap folding. Here, a third stretcher reduces the sheet from 35 mm to 12 mm in thickness.

The sheet rides up a belt conveyor to an overhead retarder where 2,000 lb of dough slowly zigzags down for about 45 minutes at 50°F before exiting the bottom and conveying down to a second laminating station. Spiro Sayegh pointed out the entire lamination process creates between 16 and 32 layers of fat, depending on the croissant's variety.

After passing through other stretchers, a circular cutter slices the sheet into five strips, after which a rotary cutter slices the dough into triangle pieces that enter a

The bakery's minor ingredient handling system provides valuable front-end controls to its five production lines.



Sophisticated robotics delicately pick and place croissants on a single-lane conveyor that feeds a horizontal wrapper.

Good tips for building a better bakery

When automating, it's not always about return on investment for the short term. International Delights focuses on eliminating manual, labor-intensive or even boring jobs and training operators on how to create quality products that provide untold benefits in the long run.

"Lifting or moving things — those are not the jobs we want to create," said Spiro Sayegh, co-managing director. "We believe a lot of work involving repetition or heavy lifting should not be done by people. That's where we have focused our automation."

That has meant installing an ingredient handling system with bag and tote dumping stations that feed its minor systems without lifting. The company also purchased a robotic pick-and-place system to gather and align sweet goods to feed its high-speed form/fill/packaging machines without labor. It installed a rail system to provide ambient cooling for 30 minutes by slowly moving racks from the semi-automated production department to the packaging area.

Moreover, its custom-designed tunnel ovens don't release heat into the building, and this provides better ventilation and more comfortable conditions, especially in the summer.

Still, International Delights needs people to place the personal touches on sweet goods in ways that technology can't. However, the company hasn't stopped searching for ways that offer employees a more delightful experience when they come to work.

"We invest in creative processes and custom-designed equipment not only for optimization and efficiency but also for the quality and consistency of the product and to improve and simplify the jobs and the lives of the operators," noted Nicolas Sayegh, co-managing director.

In the end, investing is redefining ROI when it comes to labor. It's about automating the obvious and enhancing people skills for artfully managing a workforce.

croissant rounder. The pieces are then manually bent and crimped into the classic French croissant shape.

Here, the line lays down a no-stick parchment paper that holds up to 10 pieces that are proofed and baked, proofed and frozen, or bypass the Tecnopool spiral proofer if they are frozen dough items. After receiving an egg wash, the pieces and parchment paper lay atop of a stainless-steel baking tray.

By collaborating with four Italian equipment manufacturers, International Delights designed a proprietary 100-ft oven with systems that capture the oven's heat to keep the bakery cool in summer. The exhaust is redirected and recycled so that the heat isn't felt as the croissants exit the servo-driven oven. The trays then enter and travel for 45 minutes into a vertical step cooler. They are then conveyed into a depanner system that separates the parchment paper from the croissants. The bakery has a Colussi tunnel washer where trays can be automatically directed to before storage.

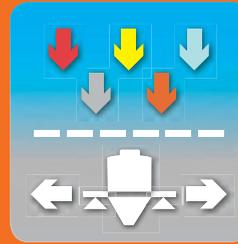
Expansion on the horizon

After cooling, the fresh croissants enter a Schubert robotic system that picks and places them on a single line conveyor. Specifically, the robots are outfitted with end-of-arm tooling that gently picks up the curved, flaky products. A small vacuum apparatus lightly holds the croissants stable as the fingers lift and place them without damage. If the production volume exceeds 180 pieces a minute, the croissants head to an area where they are manually racked for packaging later. A vision system monitors and tracks production flow, guides the robots and rejects wrong-sized or misshapen items.

The large croissants then enter horizontal form/fill/seal wrappers by Formost Fuji, Bosch Doboy, Ulma or Ilapak. Spiro Sayegh noted the Fuji wrapper relies on sensors and a variable-speed belt to exactly align the croissants with the wrapper's film.

Fresh items are shipped out of a warehouse managed by a ToolBox system. The department's four larger docks serve bigger route trucks and common carriers while eight docks load smaller step vans for local deliveries.

With the startup of the updated Comas muffin and cake line, International Delights added a second 100-ft tunnel oven that has been placed above the existing one. Spiro Sayegh noted this industrial feat saves valuable floorspace — a precious commodity in the New York metropolitan area — for future expansion. Muffins, cakes, croissants or pastries will be conveyed from a high-speed production line to maximize efficiency. Additionally, the bakery will add dual packaging equipment to handle the extra volume, improve packaging quality and provide redundancy to the operation's existing packaging systems to increase uptime and yield. Moreover, a second vacuum cooking system will be installed to add half-ton batches of fillings to meet capacity.



Automatic
batch
preparation

AZO Solutions Automated Batching

- efficient
- accurate
- traceable



AZO.
www.azo.com

INTERNATIONAL DELIGHTS

“It’s all about new capabilities,” Ms. Spritzer explained. “It’s not all about doing an analysis on ROI and how much money can we make, but, rather, what can we do for consumers? How can we bring a product that is unique to the marketplace? There’s a passion here; we’re not just looking for an ROI. It’s the right thing to do in the long term and brings something unique and different to the market.”

As an industrial engineer, Spiro Sayegh suggested the bakery’s next phase is part of a continuous process that involves further research through ongoing travel to baking and equipment trade shows. By the time the International Baking Industry Expo, also known as Baking Expo, comes to Las Vegas from Sept. 7 to 11, he expects several new projects — big and small — to be in the works. As he noted, “Bakeries get old very quickly.” They need constant upkeep and investment. “I want to keep this bakery look-

A high-speed horizontal wrapper individually wraps large croissants for retail and convenience market customers.

ing like it was built just two years ago,” he added.

Investing is just part of its mission, according to Nicolas Sayegh. “We wanted to build a bakery that becomes a good, permanent model for the industry,” he said. “It’s about creating the best products in the world and combining the science and art of baking. It’s amazing and inspiring that our mission from 30 years ago is still a driving force here.”

For Spiro Sayegh, that means traveling internationally and identifying products that will resonate with US consumers. On the flipside, he’s seen how croissants and brioche that are fundamentally French and muffins that are quintessentially North American can now be found across the globe.

“We look for products from all around the world,” he said. “We want to bring the best delights in the world to the country we love.” ●



Loyalty requires a two-way street

International Delights began in 1986 as a 2,000-sq-ft Greenwich Village pastry shop with only two ovens, operated by a pair of brothers with a passion for pastry and serving a clientele that included some of the top foodservice establishments in New York City.

After relocating twice, in 1990 and 1997, the burgeoning business needed a much larger facility to accompany its expanding wholesale baking business and made the move to its current 180,000-sq-ft facility in Clifton, NJ, in 2011. That’s when its owners, Spiro and Nicolas Sayegh, learned some lessons they’ll never forget. To keep the company’s skilled workforce, the founding brothers had to go the extra mile.

“When we relocated, we ran six shuttle buses each day to bring our people from New York to New Jersey, and believe it or not, after eight years, we’re still running one shuttle bus back-and-forth every day,” Nicolas Sayegh pointed out.

Long-term success, he added, involves fostering relationships. “We have dozens of customers since the late 1980s, more than 50 employees that have worked here for more than 20 years, and equipment and ingredient suppliers since the 1990s,” he noted. “It’s about commitment and loyalty all around.”