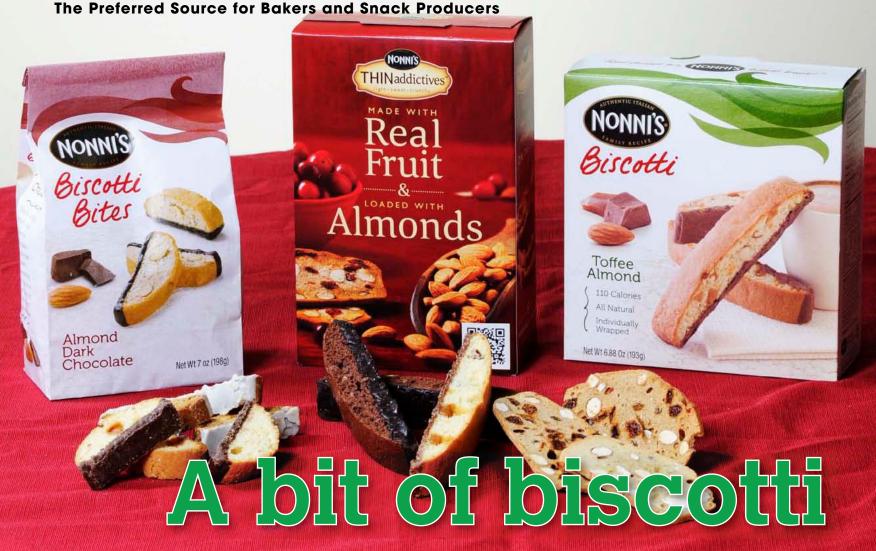
AUGUST 2013 Vol. 102 No. 08

# SNACKANDE PUBLICATION SINCE A SINCE A





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## A bit of biscotti

A leading baker of premium biscotti and almond thins in North America, Nonni's Foods LLC, Oak Brook Terrace, Ill., is growing quickly, expanding its baking capabilities and product mix. The 25-year-old *Nonni's* brand grew out of true Italian family traditions and small entrepreneurs. Today, the company, which cherishes those family traditions, is able to bring them to a new level, producing assorted biscotti flavors and sizes and new biscotti 'thins.' We toured one of Nonni's four production facilities, which expertly manufactures the flavorful, crispy, original biscotti as well as the new mini biscotti version.

Lauren R. Hartman, Editor-in-Chief

very one of the biscotti products baked by Nonni's Foods LLC, Oak Brook Terrace, Ill., brings baking artistry and handmade quality to consumers who want a taste of Old World Italy and the finest ingredients and recipes. The company's 40-plus stock-keeping units (SKUs) of Italian cookies may not sound like very much to some bakeries and snack companies, but we're talking biscotti here. And in the world of biscotti, that's a pretty sizable amount. It's also the only nationally available line of biscotti in the U.S.

"We're not like a lot of other companies that have a lot of SKUs," states Peter Hetrick, executive vice president, sales and marketing. "We're extremely disciplined about maintaining a number of items and eliminating complexity as best we can. When we introduce a new product or SKU, we evaluate the entire group [within that product category] and determine if all of the items in the group are performing as we expect they should; if not, we take items out of action."

The company owns four bakeries as the result of various acquisitions. Majority-owned by the Wind Point Partners private equity firm, Nonni's Foods acquires successful or about-to-be-successful bakeries, which has



allowed it to enjoy significant growth over the last eight years, and will help it realize plans for even more expansion.

The *Nonni's Biscotti* brand has been around for 25 years and was originally started by two college students. The grandmother (*Nonni* means grandmother in Italian) of one of the students made homemade biscotti based on her traditional recipe from the little town of Lucca, Italy. All of the students' friends loved the cookies, so the students thought that maybe they should start a biscotti business, selling the delectable cookies to local coffee shops. One thing led to another, and their tiny biscotti business called *Nonni's* was born in San Francisco, where the students went to college.

"They continued to grow the business from that point forward," recalls David Bere, chairman and CEO. Bere says the students later sold the business to a private equity firm and the rest is biscotti history. "Today they still follow the brand and the bakery

business," he says.

Nonni's Foods says it's fully dedicated to quality across its total product line and organization. For that reason and more, it won *Snack Food & Wholesale Bakery*'s Best New Products of 2012 online voter's poll, in which we reviewed all of the new products we published in

*Snack Food & Wholesale Bakery* and on www. snackandbakery.com in 2012.

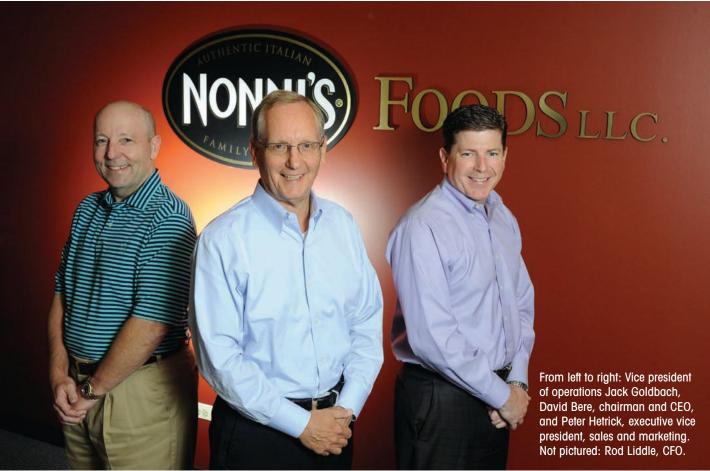
"We're very pleased that we won the poll," says Bere. "We're a relatively small company, but we're really interested in moving forward, and there's excitement around that. We have to innovate because innovation is a big part of our success. The drive the people here have is another part of our success."

#### **New formats**

All of Nonni's Foods' products are made using premium ingredients, including whole almonds and pistachios, real fruits and select chocolates. Sold nationally through grocery, clubstore, mass merchandise and drugstore channels, the line includes the original longstick *Nonni's Biscotti*, based on the original recipe brought from Italy by the grandmother of the company's founder. Available in clean white cartons printed with the black *Nonni's* logo and featuring photo vignettes of the



Photos by Vito Palmisano



product and color-coded graphic elements, these full-sized biscotti come in eight flavors, including Salted Caramel, Toffee Almond, Decadence, Limone and Turtle Pecan. Specialty flavors such as Chocolate Peppermint Crunch and Gingerbread are available for a limited time during the holidays in cartons displaying deep jewel-toned graphics. "The whole graphic scheme changes for the holidays and is more luxurious," Bere explains.

As the original products became successful, Nonni's Foods was able to expand in 2011 and introduced *Biscotti Bites*. The "bites" are mini versions of the original long-stick biscotti and come in three flavors, packed in convenient standup bags for an on-the-go snack anytime. Another smaller treat is the Mini Biscotti, which is distributed through clubstores in a handy canister that provides plenty of sharing opportunities.



"We had such a great expectation of growth, in fact, that we went well beyond one production facility and grew to have four facilities scattered across North America," Hetrick says. "So we're in very good shape."

After purchasing the *THINaddictives* brand of thin premium biscotti almond thins in January 2012, Nonni's Foods began shipping the line that summer. Established in Canada by V.I.S. Inc., the *THINaddictives* brand is

currently available in the U.S. in Cranberry Almond, Pistachio Almond and Chocolate Almond flavors. The purchase also included the V.I.S. state-of-the-art baking facility in Montreal.

"The *THINaddictives* brand is a strong strategic fit with Nonni's, which complements our successful biscotti business and allows us to expand into the fast-growing thin cookie segment, giving us two growth brands within the premium cookie category," says Bere.

Like the other products in Nonni's lineup, *THINaddictives* grew out of true Italian family traditions. Made from a family recipe, the thinly sliced *THINaddictives* Almond Thins have a light, sweet taste and better-for-you nutrition. To ensure freshness, the slim almond thins are wrapped three to a pack in printed clear film for portion-control, and packed six wraps to a carton. Looking and

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feeling handmade, the thins are also light on calories—each cookie is has a mere 30 or so calories, yet is satisfying enough to get consumers through a morning. Additional flavors of Banana Dark Chocolate and Blueberry Oat began shipping in May, and more are in the pipeline.

"We're considered in the high-quality, premium cookie category," Bere explains. "Nonni's Foods is a leader in product innovation, and consumer interest and demand for great-tasting, healthier treats and snacks is giving us significant opportunities for growth with *THINaddictives*."

Adds Hetrick, "We're trying to expand biscotti consumption through new flavors, through the new formats, such as the *Biscotti Bites* and Minis in the clubstores, and through the *THINaddictives* from Montreal. *THINaddictives* were only in a few Costco clubstores earlier, so our mission is to grow what is really on-trend, from a consumer perspective."

#### **Even more expansion**

In January, Nonni's Foods added another piece to its burgeoning business with the purchase of the *La Dolce Vita* in-store bakery line from Villa Veneto Corp., Glendale, Ariz. The artisan line of biscotti, macaroons, cantucci and other specialty cookies is packaged in transparent



## AT A GLANCE

Company: Nonni's Foods LLC

Headquarters: Oakbrook Terrace, III.

Website address: www.nonnisfoods.com

Plant Size:

Nonni's (Tulsa, OK): 40,000 sq. ft. Nonni's (Ferndale, NY): 45,000 sq. ft. Nonni's (Montreal): 16,000 sq. ft. La Dolce Vita (Glendale, AZ): 42,000 sq. ft.

Number of Employees: 450

Years in Business: 25+ years

Product list: Biscotti, Biscotti Bites,

Almond Thins

**Brands:** Nonni's, La Dolce Vita

#### **KEY PERSONNEL:**

President/CEO: Dave Bere
CFO: Rod Liddle
VP., Mktg and Sales: Peter Hetrick
VP., Operations: Jack Goldbach
Plant Manager (Ferndale, N.Y.): Ed
McDermott



clamshells featuring luxurious, ornate label graphics. Two key components of Nonni's Foods' value creation plan are to expand distribution and to acquire complementary product lines. According to Bere, *La Dolce Vita* positions Nonni's Foods to expand into other areas of the grocery store and into special retail channels.

"We also want to take the *La Dolce Vita* instore bakery line up to another level, so there are several strategies right now," Hetrick says.

#### Thinking biscotti

Today, Nonni's Foods has 450 employees and production facilities in Tulsa, Okla.; Montreal; Glendale; and Ferndale, N.Y. Each plant averages about 40,000-plus sq. ft. and is dedicated to certain products: Tulsa and Ferndale (Ferndale is the largest of the four with the most sophisticated equipment) pro-

duce the long-stick biscotti products, *Biscotti Bites* and Mini Biscotti; Glendale produces the *La Dolce Vita* products; and Montreal produces *THINaddictives*.

The company's overall distribution is in retail supermarkets, clubstores and in-store bakeries. "Grocery/retail and clubstores are the predominant part of our business, probably 85% or more," Hetrick points out. "The *La Dolce Vita* line is just getting started, because it's still a new initiative for us. We don't produce private-label products; we supply only one restaurant customer—let's say it's a major coffeehouse chain. But we have so many large opportunities in the world that we're going to optimize those first and see where we're at."

Hetrick says that while there are a number of local and regional biscotti bakers, Nonni's Foods has no direct national competitors.



"We interact with all of the premium cookies you would expect we would on the shelf," he explains. "But our products are distributed in almost 80% of the country, so we have great opportunities. The products use the best in-



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gredients in the entire cookie aisle—we know everyone probably says that, but if you go to our ingredient decks, they will indicate, for example, real butter, real eggs, real nuts, real gourmet dark chocolate (that we temper) and real caramel—to provide a great, distinctive taste. And the product is generally healthier than many other sweet or decadent treats. So as a result, consumers often say

ours is the best 100 calories they've ever had."

The goal now is to get more consumers to think biscotti. "We're focused on just trying to expand trial and penetration," Hetrick continues. "We want to get more people into the franchise because they really like our products once they buy into them. The trend of wanting

great-tasting, healthy products is big, and we deliver on that."

#### Strong flavor loyalty

So what are the top sellers among the array of biscotti flavors? It depends on peoples' tastes, Hetrick points out. "I think Salted Caramel has been a terrific hit," he observes. "It com-

bines the sweet and salty and is very

popular both in the grocery and clubstore channels. But people are also gravitating to some of our more decadent flavors, though the traditional almond/anise biscotti cookies always perform very well and people know what to expect from them."

As Nonni's Foods continues to add more varieties and fla-

vors, has it experienced any cannibalization? "We thought that might happen, but there really isn't a great deal of interaction among the flavors," Hetrick says. "People want their Limone or their Salted Caramel or their Cioccolati. They don't switch to other flavors, which is a really positive thing for the brand."

People like innovation in different forms and flavors, Bere adds. "It's a constant expansion, which is what we're all about here," he says. "We're always expanding the product line with innovative new items. Savory flavors could be the next step. You're going to see some really fun flavors coming out."

The company is already working on breakfast flavors in the *THINaddictives* line. "We're hitting several different points with this product," Bere says. "We took the biscotti shape, cut it, thinned it and reinvented it. We think *THINaddictives* is where biscotti is going."





The American Dietary Guidelines 2010 state "Choose foods that provide more potassium, **dietary fiber**, calcium, and vitamin D, which are nutrients of concern in American diets." And since 75 percent of U.S. adults do not meet the Daily Reference Value for dietary fiber, the demand for baking and snack products that are an "excellent source of fiber" will continue to increase.



Clean labels are also very important. "With the THINaddictives idea, it's simple," Hetrick continues. "The product contains few ingredients and lists cranberries and almonds. When you open the package, that's what you see and taste, so it makes complete sense. Consumers expect things of us, so we make sure we deliver what they want. They have high expectations about taste and expectations about ingredients and processing. They believe we have an understanding of how to do things and that we are willing to do things others may not be to meet their requirements. It'd be easier for us to do things at a lower cost or provide lower quality, but we'd never do that."

At Nonni's Foods, portion control is also an important factor in its packaging. "We're very much into the portion-control concept," Bere affirms. "Biscotti is rather small to begin with, but we've added the Minis and *Bites* for sharing around the home and *THINaddicitves* three-packs, so they all give everyone more choices. But each one bows to a different eating occasion."

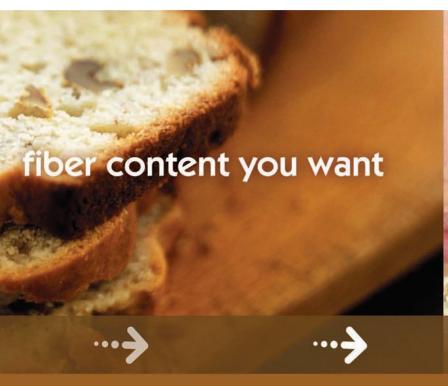
Eating the original, long-stick biscotti is usually for a different occasion than



THINaddictives or the Biscotti Bites, for example. "At 10 a.m., when it's time to give something to the kids, have something with coffee or when they're on the go, many people reach for THINaddictives or Biscotti Bites," Hetrick adds. "When it's time to relax at the end of the day, enjoy a reward, have dessert after dinner, the original biscotti is nice. That's why some of these businesses have been incremental, because we're dealing with very different occasions."

#### Becoming 'addictive'

While it's a challenge to come up with a healthy low-fat, low-sodium, low-calorie baked snack that tastes good, *THINaddictives* is receiving a warm welcome here in the U.S. "It's selling like crazy, even to the point where retailers can't keep them in stores," says Hetrick. "It's not designed to be healthy and tasty,



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it just is that way, because of what it's made of and how it's made."

Bere says that in the 30-plus years that he's been in the food business, introducing many products, he's most excited about *THINad-dictives*, the *Biscotti Bites* and the clubstore Mini Biscotti. "Consumers and retailers are really interested in all of them, which is helping to bring growth back to the premium cookie market."

#### **Proactive on quality**

Some of the things Bere says that he loves about the company are the dedication, expertise, passion and innovation of the staff. "There's an ethos throughout the whole company of striving for consistency, quality and improvement, with the product, the packaging, the production, everything," he says. "It's a challenge to achieve all of this,

but it starts with the people. The people at the plants and at headquarters are all very passionate about what they do. All of our factories have creative, involved people who care. They're really hands-on. And we're very fortunate to have an owner that allows us to invest in our operations and in consumer marketing—it's all about growth and continuous improvement."

Those working at Nonni's Foods know that food safety has been extremely important to the company and take it quite seriously, says Hetrick. "We have to be very efficient regarding food safety; we follow strict standards. We're quite fastidious about it. So with the Food Safety Modernization Act



(FSMA) regulations and pending changes, we have no problem dealing with them. The updates haven't affected us all that much. The biggest reason is, this organization has always been proactive about food safety in its manufacturing processes, operational procedures and the documentation."

Currently, the Tulsa and Ferndale biscotti

plants are certified in the Safe Quality Food (SQF) program at Level 3 and Level 2, respectively, and are audited regularly by Silliker, Hetrick says. Ferndale is presently working toward a Level 3 certification. "We were proactive in initiating those certifica-

Advarticamai

#### Premium Cassava Flour Gains Acceptance in Gluten-free Market



ver two years since its introduction at the 2010 IBIE, a growing number of gluten-free businesses has incorporated premium cassava flour into their gluten-free mixes and finished products. It is now in commercial formulations for gluten-free all-purpose flour, mixes for cookies, tortillas and wraps, crepes, pancakes and breads. The flour, exclusively manufactured for and distributed by American

Key Food Products, was developed by the company, with a patent pending, for gluten-free baking.

While many in the industry equate tapioca flour or starch to cassava flour, they actually differ.

Premium cassava flour contains 7% dietary fiber and its starch content differs from that in native tapioca starch because of the unique processing technique designed for the flour. This production technique is the basis for one of the patents. And unlike other cassava flours produced in cassava-growing countries, the flour is specifically designed for gluten-free baking.

This robust flour has also shown good synergy with rice flours and potato starch in the more challenging bread-type applications. Premium cassava flour helps provide excellent crumb structure and crusting with a close-to-neutral flavor profile. It also works well in gravies,



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sauces and coating batters. This flour can also be used in extruded products, exhibiting remarkable binding, crispiness and expansion properties.

Premium cassava flour compliments AKFP's line of other choice gluten-free, GMO-free and natural ingredients that include native potato, tapioca, pea and rice starches. The company also carries rice, arrowroot, sago and coconut flours.

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tions and audits, though they were costly and time-consuming, and there's a lot required of a company willing to make that commitment," he explains. "But we did it as soon as we could. The other two, newer plants are on the journey toward SQF certification, and it's definitely a journey, as it takes about a year to complete, rather than a few months."

Hetrick points out that Nonni's Foods took a proactive stance on the FSMA requirements because the company must operate at high standards every step of the way, from a manufacturing perspective. "We also provide beautiful packaging, and strive for top quality from a graphic perspective, even though most folks don't expect a product that looks this great from what is really a smaller cookie company," he says.

In fact, high standards are buzzwords running throughout the company's operations, and that includes finding many ways to reduce its carbon footprint. "Sustainability is important to consumers, customers and us, and it's just part of our ongoing commitment to improvement," Bere adds.

Nonni's Foods continuously strives to improve its environmental friendliness, from optimizing pallet counts and increasing the quantity of product on a pallet load to reducing the thickness of its plastic canisters to using recyclable packaging. Nesting biscotti canisters save on transport and shipping space.

"We just never want to lose our drive to achieve," he notes. "We talk a lot about what's next for our products and what the next new product will be. In order to remain the leading biscotti baker in the country, we have to constantly innovate, so shame on us if someone else out-innovates us! We don't think much about the slumping economy because we can't control that. What we can control is making sure we have the right price-value relationship and the best quality."

#### **Everyone still wants a treat**

Nonni's Foods considers what it does as providing consumers with a welcome, affordable luxury, especially in tough economic times," Hetrick sums up. "We always considered *Nonni*'s to be an affordable luxury. You can

have this cookie with real, high-quality chocolate for \$3 to \$4 a carton."

And who knows? "The next time we treat ourselves to a *Nonni's* Biscotti, there might be a new line extension of it on the store shelf," Bere

says, smiling. We see several opportunities there and, in years to come, you'll see *THINaddictives* as a national brand and the next time you look, there will be more of our products available." **SF&WB** 

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## **Baking biscotti**

We toured Nonni's Foods 45,000-sq.-ft. biscotti production facility in Ferndale, N.Y., one of the company's four bakeries across North America. Outfitted with one large processing line and multiple packaging lines downstream, the plant expertly manufactures Nonni's original long-stick biscotti at rates of 1,600-1,700 lb. an hour.

Lauren R. Hartman, Editor-in-Chief

n the day Snack Food & Wholesale Bakery visited Nonni's Foods LLC's biscotti production facility in Ferndale, N.Y., we were welcomed by the warm, buttery aroma of anise, almonds and white chocolate. Nestled in a hilly area south of New York's Catskill Mountains, the spanking clean facility produces the company's long-stick Original Biscotti in all eight flavors—Limone, Salted Caramel Biscotti, Toffee Almond, Triple Milk Chocolate, Decadence, Turtle Pecan, Originali and Cioccolati—as well as Mini Biscotti for clubstore sales in 2.2-lb. clear plastic canisters.



Ed McDermott, plant manager, recalls the background of the Ferndale, N.Y. plant, and its objectives to meet Nonni's Foods' stringent specifications.

Sitting on 75 areas, the 45,000-sq.-ft. plant was originally owned by a beer distributorship, recalls plant manager Ed McDermott, who worked with a biscotti maker at the plant prior to the plant's acquisition by Nonni's Foods. "The layout was perfect for our needs because it was a really long, narrow building, so we could easily fit our 110-ft.-long tunnel oven in there," he explains. "Beer companies have long rooms where tractor trailers come in on the side and get washed. The warehouse was already air-conditioned (for the beer), so that worked well for us,

considering that we work with chocolate. It also had a refrigerator room, which is perfect for storing our butter, eggs, flavorings and nuts."

Says Nonni's Foods chairman and CEO David Bere, "We've had such great growth over the years that we went well beyond one facility and grew to have four scattered across [North America]. Two of our facilities make the original *Nonni's* long-stick biscotti: Ferndale, N.Y.; and Tulsa, Okla."

Ferndale is the largest of the four plants, with the most sophisticated equipment. The company began operating there in late 2005. Says Peter Hetrick, executive vice president, sales and marketing, "Ferndale is a state-of-the-art facility. The plant provides great consistency and control and has a lot of automation. Ferndale was our second production facility after we got the one in Tulsa. A year and a half ago, we got the *THINaddictives* plant in Montreal and in January of this year came the *La Dolce Vita* business and plant in Glendale, Ariz. The Ferndale plant has only one processing line, but it's a big one."

#### Large-volume output

The complex biscotti line requires 28 people per shift to operate all of its stations. "In total, there are about 90 employees at this plant, including the front office, quality control, shipping, sanitation and maintenance," McDermott explains. "We have a lot of volume, so we usually run one SKU all day and all night, which saves on changeovers. We can change over perhaps twice a day, depending the product, the schedule and how busy we are, but try to keep it down to once at the very most. Anything more requires a thorough, 30-minute cleanup, adjustments of the speed of the extruder and the cutter and a few other equipment adjustments."

Several pieces of new production equipment have been installed over the years as needed, including a recently purchased, proprietary extruder and ultrasonic cutting system, McDermott says. "I've seen a lot of things updated," he adds. "When Nonni's first started up here, we began working with real chocolate and



Photos by Vito Palmisano



Above, an indoor flour silo with a maximum capacity of 100,000 lb. was recently added to the plant. Right, line operators empty the biscotti dough from a spiral mixer to a trough.

Below left: The massive, 110-ft.-long, first-bake tunnel oven really 'cooks' during the company's super-busy fall season, when the plant runs 24 hours a day and sometimes six days a week. Right, almond biscotti dough is topped with ground almonds and sprayed with an egg wash before it's baked the first time. The dough bakes twice hence the 'biscotti' name.



had to install a tempering unit, so we got one. We also added new cartoners and four additional biscotti wrappers (we started with one) and are looking at other new things like robotic loaders. There's a lot of potential at this plant. Nonni's strives for quality and consistency—we have a passion for what we do, so it's nice that we can make these equipment investments."

Producing biscotti at rates of an amazing 1,600-1,700 lb. an hour in two daily eighthour shifts, five days a week most of the year, the plant has many similarities to the facility in Tulsa, and much of the same kind of equipment, McDermott says. "Nonni's Foods was growing, and more and more product

was being shipped into supermarkets, so we had to have more capacity," he explains. "Acquiring this plant really worked out well. Today, depending on the season, we can generate anywhere from 150,000-250,000 lb. a week."

During the fall, however, McDermott says,



production accelerates to 24 hours a day five days a week, and in certain situations, six days. "So we keep pretty busy during the months leading up to the holidays," he says. "At that time, we'll go to three shifts

and when we really get busy, we can produce 800,000 lb. of product a week. The busy season really starts in August."

On the day of *Snack Food & Wholesale Bakery's* visit, the line was making Original,



Crispy and golden-brown, the baked biscotti can be drizzled with a coating of dark, milk or white chocolate or left plain, as in this case.

a blend of almonds, walnuts and a hint of anise. The smell of anise wafted through the whole plant and parking lot. Processing is in-line with packaging, though not all in the same room. Production begins with "only the finest ingredients" o provide a great, distinctive taste, McDermott says. Being twice-baked, hence the name (the word *biscotti* in Italian means twice-baked), the cookies have a shelf life of from six to nine months, depending on the variety.

#### Mixing, extruding, baking

The flour is automatically scaled and pumped to a spiral batch mixer via forced air from a recently purchased, indoor flour silo that holds a maximum of 100,000 lb. Operators add other raw ingredients, such as sugar, baking powder, nuts and spices, from bulk 55-lb. bags. Eggs are contained in 2,000-lb. intermediate bulk containers. Each batch of biscotti dough is about 1,200 lb. and takes about 30 minutes to complete.

"We have two mixers and use them one at a time," McDermott says. "The smaller mixer, which is our original machine, produces 600lb. batches. If we have a small production run or a low-volume item, we use that





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Clockwise from above, left: The biscotti cools on a wide conveyor belt and the moisture in it decreases, which helps to extend its shelf life. Top right, canisters of Mini Biscotti for clubstore sales enter a wipe-on pressuresensitive labeler. Middle: Then the canisters convey to an accumulating table. Bottom: Operators next load the finished canisters onto pallets.

system. We try to make at least one major improvement to the plant each year, and the recent addition of the indoor flour silo was a great investment. It improves efficiencies by saving 2.5 cents per lb. on flour. That means, through the year, we'll save in excess

of \$100,000."

When the batch is ready, operators use a forklift to remove the bowl from the mixer and load the large bowl of dough into a trough. The trough is forklifted over to an extruder and raised over its empty hopper to release the dough into the extruder, which rolls and thins out the dough as it emerges in continuous rows on 10 lanes of a conveyor. A topping applicator deposits sliced and ground almonds on the top surface of the rows, followed by an egg wash that keeps the nuts intact and also provides a nice golden-brown color and sheen.

Next, the lanes of dough convey to a

110-ft.-long multizone tunnel oven, where the biscotti is baked for the first time at temperatures of approximately 400 deg. F (depending on the product) for 17 minutes (again depending on the product). Baking reduces the moisture in the dough from 22% to about 12%. After baking, the golden rows of biscotti slowly make their way down to a specialty ultrasonic cutting system, which cuts them into thin individual pieces. Each regular-size biscotti measures 5¼ in. long and is just less than 1 in. wide. The *Mini Biscotti* are approximately half that size.

The cut cookies then cool on their conveyor ride, and make a sharp, 90-degree turn be-



fore being baked again in another multizone tunnel oven that decreases the moisture level to about 3-4%. "It's important that we watch the moisture in the biscotti because it directly affects the product's shelf life," McDermott points out.

Then, the cut pieces bake in a second tunnel oven for about 12 min. at temperatures "in the low 300s," to get the moisture down to about 2%. With an exposed cut, both sides of the biscotti are exposed, so the moisture is reduced more rapidly. The biscotti exit on a wide belt and continue to cool before entering one of two cooling tunnels that bring them to a temperature of 85 deg. F before they convey out of the room and into the packaging area.

If the cookies require a bottom dip of chocolate (white, milk or dark), they would head over to the chocolate area and into an enrober before being cooled and wrapped. "Tempered chocolate is very sensitive," McDermott explains. "So the temperature range of the product has to be 89-93 deg. F before we can add chocolate. Tempering chocolate can only be done within a 4-degree temperate range, so the biscotti has to cool down quite a bit before we can add the chocolate. If it's too hot, the chocolate will just melt right off and bloom. Too cool, and it won't work. So we must cool the product down before it goes through the tempered chocolate enrober."

#### Wrapping, cartoning

The Original biscotti that we viewed bypasses the enrober and conveys into the packaging room. Inside, there are five flowrapping lines that each run about 150 individually wrapped packs/min. The *Mini Biscotti* are diverted to a proprietary canister-loading/lidding station where the 2.2-lb. containers receive a protective shrink band and are put through a shrink tunnel to secure the seal.

Meanwhile, the Original long-stick biscotti travel down a straightline conveyor that has a sensor to direct the product to a 90-deg. turn and into the proper branch-off lane leading to the five flowrappers. The flowrappers envelop the product in clear, two-color-printed

film and cut the wraps before the treats move through a checkweigher and the first of two metal detectors. "The metal detectors are the main Hazard Analysis and Critical Control Point (HACCP) on the line," says McDermott. "We are very concerned with food safety."

A packaging operator then loads the wrapped biscotti into clear plastic trays in counts of eight, and the trays are automatically cartoned. The packages then enter the







second metal detector to ensure that no contaminants go into the clear plastic trays or the cartons. Case-packing is next. A late-model, servo-controlled case packer with a built-in elevator collates six cartons at a time and layers them into corrugated shipping cases, later sealing the cases with hot-melt adhesive. As the cases eject from the system, they pass an ink-jet coder that prints their sides with a production code. Next, the cases are palletized by hand, and the finished loads are automatically stretch-wrapped and forklifted to the warehouse.

#### Universal procedures, standards

"We are very concerned with food safety," McDermott reiterates. "We became certified in the Safe Quality Food (SQF) program as soon as we could, and right now, this plant is moving up to Level 3. SQF was a long process but it's well worth the work."

Also playing an important part in food safety is the Quality Control room, where Quality Assurance technicians frequently test product coming off the line and track each batch of product from the point where the dough is mixed, straight through to packaging. "Our QA techs record all of the lot numbers, keep track of the weights, check every ingredient coming into the facility and record everything, so that all of our procedures are documented," McDermott says. There are also QA stations on the line that compare the product to prescribed weights, moisture, heights, widths and lengths as it makes its way from one station to another.

For every batch, various QC procedures are performed and all shipping labels, code dates and product weights are checked. "Each product has its own standard, so if something's off a bit, the QC department determines that we need to adjust the weight by resetting some of the equipment," the plant manager says. "So the QA techs follow each batch as it's made and record all of its statistics for SQE. It's a great program. It's a lot of training, it's time-consuming and costly, but we participated early on in the game."

How do McDermott and the plant person-

nel manage to balance Nonni's Foods' highvolume production with speedy scheduling, food safety and the bottom line? "Demand is really growing, so communication is important," he says. "That's the good thing about our company. We currently have two plants doing the basically same thing, and all of our functions are documented and uniform plant-to-plant, so that everyone's on the same page. We also have really talented Information Technology (IT) and customer service departments, and our scheduler is very flexible. A lot of our customers have a long track record with us, and the scheduler really helps us coordinate production and inventory efficiently, which alleviates backups. Plus, we don't have to run six different items in one day."

Oddly enough, unlike many other bakeries, the plant produces as little biscotti on a just-in-time basis as possible. "We try to ask for a two-week leadtime from the time orders are placed," McDermott says.

#### People with a passion

In all of Nonni's Foods' factories, the lead people are quite passionate about what they do, Hetrick points out. "They're really hands on and involved in how they bake product," he says. "They don't sit in an office; they get in there with the cookies and fine-tune everything."

McDermott agrees: "I was always involved with hands-on, small companies. That's the nice thing about Nonni's. We get more input on how things are going on the line, the equipment and the product, and I've always enjoyed that. Nonni's allows us to try things and experiment. If we try to do something new that works and makes sense, we do it. If we prove that it'll save money, it's fast-tracked. We are nimble and can turn things around quickly."

That's what Bere also says he loves about Nonni's Foods. "The people are very passionate about what they do," he explains. "There's so much passion and expertise and they bring that to everything. Ferndale is a really see a good example of that." **SF&WB**