A Quick Start to Cryogenic Freezing for J&G Foods

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Joe Piperato, President, J&G Foods
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J&G uses the Freshline QS tunnel freezer to process a variety of meats, including steaks, hamburger and veal patties, Salisbury steaks, and pork specialty items. Everything J&G sells is ready-to-cook, both marinated and plain cuts of meat. Finished goods, chilled or frozen, are shipped according to customers’ specific requirements.

The simplicity of the new freezer is a key feature for J&G. “The Freshline QS freezer’s automated control system and prerecorded recipes make the freezer simple to start up and easy to operate for both our maintenance and production teams,” says Wayne Morin, maintenance manager at J&G Foods. “This simplicity makes it feasible to train more operators to run the system.”

The innovative design, with open and easy access to the freezer’s internal parts such as the plastic belt, is also very appealing to Morin. “Hygiene and safety are paramount at J&G,” says Morin. “Cleaning is quick and easy, which reduces our downtime during product changeovers.” He also points out that the simpler design with fewer moving parts means fewer maintenance issues. “And, from a safety perspective,” adds Morin, “the oxygen sensor is a huge plus and something we didn’t have before. This is critical to working safely with nitrogen.”

Matt Pollard, production manager at J&G, likes the freezer’s small footprint because it frees up valuable floor space. “The production floor is very expensive real estate,” explains Pollard. “With this new freezer, we can get the same amount of product through in half the space, so we have extra floor space that can be used to make something new or different.”
Opportunity Based on Collaboration

When J&G first contacted Air Products, they were primarily interested in lowering their nitrogen costs. But being a solutions-minded company, Air Products asked a lot of questions to gain a deeper understanding of J&G’s business.

"Instead of just responding with price quotes, Duane Gleason [Air Products] first came in and observed what we were doing with nitrogen freezing," explains Piperato. "He took notes and made it a point to understand what we needed to get done, what was missing and what our goals were."

With nearly 50 years of experience in the food industry, Air Products’ food freezing experts were able to identify ways to help J&G optimize their operation.

"They are the whole package, and it comes through in many ways," says Piperato. "It’s not just pull up the truck, drop off the gas and leave. We know that we can pick up the phone and call, ask for advice, have technicians here without much delay. They are a complete service company." Piperato also values the fact that Air Products designs its own equipment, which helps the company specify real solutions that meet its customers’ needs.

Adds Morin, "Right from the beginning, they paid a lot of attention to what we needed, and they were here at all our crucial times, working around our schedule. They made sure our start-ups went smoothly and helped us understand the equipment and how to operate it."

J&G’s pioneering spirit, along with Air Products’ innovative technology and support, has allowed the meat processor to remain successful and continue to grow and change with the market. And Air Products is committed to helping them every step of the way.

Proven Benefits with Cryogenic Freezing

In business since 1999, J&G has been using cryogenic freezing from the beginning. "We believe in cryogenic freezing because of the advantages of product quality. Cryogenic freezing is top-notch, and the benefits are long proven," says Piperato. "With ultra-fast liquid nitrogen freezing, we get a higher yield and the customer gets less shrinkage when the product is prepared. It’s a mutually beneficial freezing option."

According to Duane Gleason, an Air Products food technology specialist who has spent the last 25 years helping food processors like J&G with their freezing applications, cryogenic freezing with liquid nitrogen has many advantages over mechanical systems like blast freezing. "Due to the extremely cold temperature of liquid nitrogen, food is frozen within minutes. This quick freeze not only contributes to a higher yield, but also enhances product quality," explains Gleason. He further describes how a faster freeze results in the formation of smaller ice crystals, which causes less damage to a product’s cellular structure. This enables food products to maintain moisture, which not only improves texture, color and flavor, but also translates into smaller weight losses from dehydration."
tell me more

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