

# From Pizza to Desserts to Protein, the New Digital Freezer Lets Food Processors be in Control



*The Messer Digital Freezer optimizes the freezing process and boosts the bottom line by significantly cutting nitrogen cryogen costs.*

Increasing demand for frozen food combined with industry-wide labor shortages are presenting new challenges to food manufacturers. In response, many processors are digitizing their operations to improve efficiency, boost productivity and ensure consistent product quality.

Messer has developed the Digital Freezer monitoring technology, an advanced data acquisition system and powerful machine learning analytics platform for improved process control. The Digital Freezer system displays freezer performance metrics on user-friendly remote dashboards, so food processors can make data driven business decisions.

Since its inception, Messer has provided this technology with proven results to three early adopters who

represent different sectors of the food industry. Nation Pizza & Foods, Teeny Foods and Brakebush Brothers Food each have experienced a step change in quality, traceability, and productivity.

## **Nation Pizza & Foods**

Messer has been a gas and technology provider to Nation Pizza & Foods in Schaumburg, IL for decades. As one of the largest private label frozen food manufacturers in the U.S., Nation Pizza did not hesitate in becoming the first company to adopt the Digital Freezer. Their target was to improve its overall processing line efficiency while maintaining their customers' strict product specifications. The baking and prepared foods company retrofitted the new platform on one of its nitrogen spiral freezers.

After using the Digital Freezer's comprehensive monitoring technology to baseline Nation Pizza's process, Messer was able to determine the cost per pound of pizza on the SKU level in real time. The continuous data collection and Messer's support allowed Nation Pizza to improve its process control, reduce their cryogen consumption per pound of product produced, and improve uptime. If temperature or performance deviations happen, the system sends local alerts so operators can quickly

take action and maintain an on-target operation.

**"We achieved 15-17 % cost savings initially with the Messer Digital Freezer," says Vince Nasti, vice president of operations. "Then we maintained the cost savings over the next year by monitoring, troubleshooting and optimizing the process. We were able maintain our competitive advantage in the market that has ultimately helped us grow the business."**

## **Teeny Foods**

Teeny Foods of Portland, OR produces high-value individually frozen sweet and savory bakery snacks and handheld meals. Since bringing pita bread to the US commercial bakery market, the developer and contract manufacturer continues to grow by implementing the latest innovations to ensure product quality for its branded food customers.

**"After installing the Digital Freezer, we gained new insight into our freezing process which allowed us to grow our business while maintaining the flexibility and quality our customers expect," says Michel Layoun, VP of Operations, Teeny Foods. "The variations among our product mix made the individual breakdowns by SKU**

essential to reducing our operating costs so we could reinvest in increasing our production capabilities.”

### **Brakebush Brothers Food**

The value-added poultry processor, Brakebush Brothers Food (Westfield, WI), is an industry leader in continuous improvement programs to safely provide the highest-quality chicken products to its customers. The Brakebush process improvement team wanted to leverage data analytics generated by the Digital Freezer system to optimize production variables that impact line efficiency, production volume, quality, and labor.

**“We have over 100 individual sku’s with a variety of production specifications,” says Chris Sawyer, Director of Continuous Improvement at Brakebush Brothers. “Product can vary from supplier to supplier, from different regions, or even different seasons, that could have different attributes**

having an impact to performance downstream. The Messer Digital Freezer helps us identify performance differences so we can adjust settings to improve product quality, throughput, and cost-to-freeze.”

“The digital freezer allows the Brakebush team to measure nearly every aspect of their chilling and freezing operation,” continues Chris Sawyer, “helping to optimize production and maintain our position as an industry leader.”

### **You Can’t Improve What You Don’t Measure**

From pizza to protein, each Digital Freezer installation resulted in improved throughput and reduced cost-to-freeze. This real time traceability platform has proven to be an effective technology to promote process repeatability, freeing food processors to focus on getting more quality product safely out the door.



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