

# Case Study

## Palermo's Pizza



### High Performance Tops Off Quality and Sustainability for Leading Pizza Maker

#### Doors Offer High Speed, Reliability to Keep up with Growth at Palermo's Pizza

This country loves pizza. In 2012 Americans went to their local store and bought \$4.9 billion worth of pizzas, which works out to each family having a pizza at least every other week. Out of the many brands on the store freezer shelf, Palermo's has become one of the country's favorites.

Palermo's is able to get its great pizza to market with the help of Rytec High Performance Doors, which offer the speed this company needs to keep pace with its sustained growth, while also making it possible to fulfill its mission of sustainability.



#### Tradition Baked into the Pie

Great flavor made savory with old world spices, quality Wisconsin cheese and a crispy crust certainly has appeal. On top of that, Palermo's has a not-so-secret ingredient and that's tradition. In 1954 the founders of Palermo's Pizza, Gaspare Fallucca and his wife Zina, said goodbye to their native Sicily and came to America with their traditional Italian recipes and a drive to work hard.

Once Gaspare and Zina settled into Milwaukee's sizable Italian community they started a tight knit family and not too long after set up several businesses. The saga of the Falluccas included the opening of a small bakery and then a restaurant – Palermo Villa. Everyone pitched in, including the kids, to create and serve traditional Italian dishes that included pizza.

They eventually focused their considerable energies on producing the frozen versions of their popular pizzas for retail, launching Palermo's Pizza in a small plant on Milwaukee's south side. Gaspare, aka "Papa Palermo," appeared in their local commercials.

Sons Giacomo and Angelo, along with Giacomo's wife Laurie, now carry on the family tradition. Zina is still involved with the company as well.

# RYTEC

HIGH PERFORMANCE DOORS

### Key Facts

#### Organization

Palermo's Pizza

#### Location

Milwaukee, WI

#### Challenges

- Maintain product quality
- Improve energy conservation
- Increase safety around doorways

#### Solution

Rytec® Turbo-Seal® Insulated  
Rytec PredaDoor® NXT®

#### Results

- Increased speed, efficiency, productivity and work flow
- Improved energy conservation and climate control
- Increased safety and awareness around door openings
- Reduced maintenance

*“Our guys are going back and forth through that freezer constantly all day long, taking raw materials to the line. If we can't keep that flow going, we're shut down.”*

- Steve Daniels  
Facilities Engineer  
Palermo's Pizza

## Palermo's Pizza Goes Nationwide

Their sales growth in 2006 prompted the Falluccas to move the business to Milwaukee's historic Menomonee River Valley in the shadow of Miller Park, building a 135,000 sq ft plant employing 200 people. On the strength of double-digit growth, despite the recession at the time, they added another 64,000 sq ft. Today Palermo's employs 650 people.

Why have they been so successful? According to Palermo's facilities engineer Steve Daniels, "Our mission statement is to provide a great pizza experience and I think we do a very good job of it. Our brand is selling well."

Palermo's has become one of the country's top five brands. They continually develop new crusts and unique approaches to toppings for the Palermo brands, which are carried in supermarkets and big box stores nationwide. Consumers are also enjoying a comparable number of pizzas Palermo's makes for a number of private label accounts.

Daniels points out that, "Palermo's has always been trying to be a step ahead. We use innovation, (and) we use new techniques whenever we can."

Palermo's has a passion for pizza and through the years Palermo's has introduced rising crust pizzas, Primo Thin pizza, pizza-style crust, bread pizzas and, for those of us who cannot get enough, breakfast pizza.

## Doors Keep the Product Flowing

To keep up with this growing appetite for their product, Palermo's relies on Rytec Turbo-Seal® Insulated doors to get ingredients and finished product in and out of their 35,000 sq ft freezer. Elsewhere in the plant Rytec PredaDoor® NXT® doors maintain room environments. The reliability of these fast-moving fabric panel doors is crucial to this operation.

"If we're not making pizzas, we're not doing what we're supposed to do," notes Daniels. "I've been very, very happy with Rytec Doors."

## Well-Maintained Frozen Air Ensures Quality

Product quality is a leading concern here as with any major food operation. Daniels explains that "just the fact that we are a food manufacturing plant requires us to keep everything clean and good-looking."

"We sometimes go to extremes. Before we open a box of raw materials, we'll vacuum the top of the boxes to make sure that the product inside isn't exposed to dirt or contaminants."

This very busy facility does two shifts for 20 hours of daily production time. At the end of the production day they go into a sanitation cycle where they take apart equipment, clean it, and sanitize it. The USDA comes in and does an inspection before they start up the next day, making sure everything is properly sanitized and clean.



To maintain product quality, Palermo's can only allow the product on the production line for a limited time before it has to go into the freezer. In this high volume operation it is essential that the doors stay functional.

### Controlling Costs

The Rytec doors have a big role to play in keeping as much of the cold air in freezer storage as possible. Daniels feels one of his biggest challenges is the cost of refrigeration.

"Our freezer is maintained at minus 15 degrees. Any time you open the door, you get some infiltration of heat.

"Needless to say," adds Daniels, "with open doors I'm losing refrigerated cold air to my production space.

"That does two things. My production people are miserable working with minus 15-degree air blowing on them. And of course I'm working harder to keep the space cold when I shouldn't have to do that."

### Rytec Doors Contain the Cold

Daniels estimates that with their old style doors, "we'd lose at least seven to eight tons of refrigeration a year just by opening the door."

"With the newer Rytec doors, with their rapid-roll design, it's up, down very quickly – no more than ten seconds open time. It's plenty of time for our operators to get in and out and we don't lose nearly as much refrigeration."

The 10' x 18' Rytec doors on the freezer doorways accommodate the high-mast forklifts that work the upper shelves. The Rytec doors' high speed contributes to containing cold air in the freezer by opening at more than 101 inches per second, providing a fully accessible doorway in two seconds. Though solid-panel doors could provide more of a barrier to heat transmission, the Rytec doors' high speed means that the door is open minimally to effectively block air infiltration.

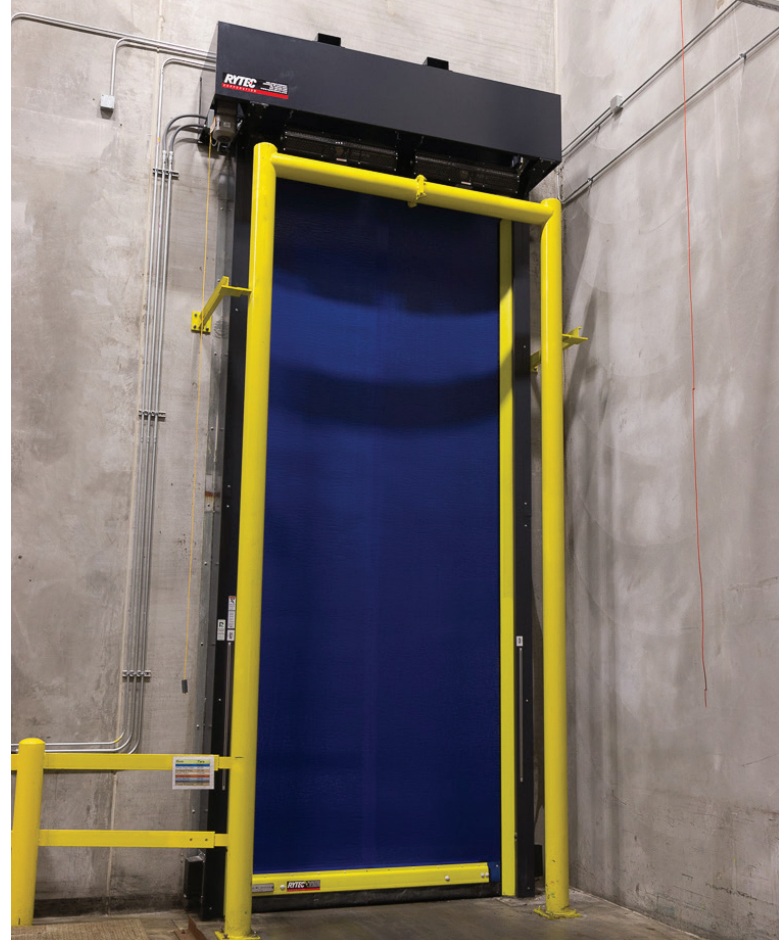
For those rare moments when the doors are closed, the Turbo-Seal Insulated doors' one-inch Rilon thermal closed cell insulated panel provides an additional measure of protection against heat transmission. Nevertheless, panel flexibility allows high-speed operation.

In addition, Rytec has set the Turbo-Seal Insulated doors to accommodate both high-mast and standard forklifts. The door opens just enough for standard forklifts, further diminishing cold air infiltration.

In regards to the Rytec doors, "they're fantastic," says Daniels.

### Sealing up the Doorway

"We like the solid seal when the door comes down," says Daniels. "The Rytec doors have built-in heaters to keep frost from building up on the side of the door and freezing in place."



The older roll up doors at Palermo's have solid bottom bars. The soft bottom bar on the Rytec Turbo-Seal doors conforms to the contours of the plant floor, providing a much more effective energy-loss barrier.

The bottom bar teams up with the other door components to provide a full perimeter doorway seal. Essentially, cold air in the freezer has no way to escape. Quad Seals™ in the side columns provide double seals on the front and back of each panel. Double brush seals, combined with the idler barrel, seal at the top of the door.

Palermo's is using less energy to refrigerate the freezer room than they had before. "I don't have a quantitative figure on that," says Daniels, "but I can see the change in my compressor usage."

*"If we're not making pizzas, we're not doing what we're supposed to do. I've been very, very happy with Rytec Doors."*

- Steve Daniels  
Facilities Engineer  
Palermo's Pizza



“The biggest problems we’ve had were maintenance and good sealing capabilities. With the older roller-style doors on the freezer and throughout the plant, we were constantly, constantly calling in maintenance.”

### **The Doors Have to Work, and They Do**

To further minimize energy loss, there are only five doors on the freezer, two of which are the Rytec Turbo-Seal Insulated doors. In this busy facility door failure is not an option, because that causes the whole operation to come to a stop. Daniels reports that with the Rytec doors they’ve had absolutely no door failures.

“Our guys are going back and forth through that freezer constantly all day long, taking raw materials to the line. If we can’t keep that flow going, we’re shut down.”

The Rytec Turbo-Seal Insulated door’s fast operating speed means a forklift hitting the door panel is rare. When it happens, the Quick-Set™ Break-Away™ tabs allow the bottom bar to separate from the side columns undamaged. The door can be reset without tools in just seconds, virtually eliminating door downtime.

When it comes to routine door maintenance, the Rytec doors’ advanced design System 4® controller enables adjustments to door operation to be made at floor level, a real benefit when doors are 18 feet tall. The man-lift stays parked.

This ingenious system offers total digital control and self-diagnostics to minimize maintenance surprises. The AC drive

enables soft starts and stops, while providing smooth motion at the door’s high speeds for longer component life.

The Rytec Ry-Wi™ system further reduces maintenance by eliminating the coil cords usually attached to the bottom bar and communicates continually with the System 4 controller – wherever the controller is mounted – to continually track door operation and provide greater safety.

### **Safer Doorway Access**

The Fallucca family recognizes that their employees, or pizarolos as they are affectionately known, play a major role in their success, and their safety is number one to the company. To avoid accidental contact with the speeding Rytec door panels, the PathWatch™ LED safety light system (in amber and red) along the door columns warns employees when the door is about to close and when it is actually closing. Two thru-beam photo eyes, a dual pneumatic reversing edge, and threshold warning lights protect and alert by reversing the descending door panel if an employee is in the doorway.

Palermo’s employees are not surprised by a closing door. “This feature,” says Daniels, “is fantastic.”

“It’s also safer for pedestrians walking by. They can see what’s going on. They can see if the door is going to open or close.”

Even though Palermo’s employees wear special shoes to prevent slipping on the plant floors, they are still concerned about preventing the build-up of ice around the door threshold. The tight Turbo-Seal Insulated door seal that keeps cold air in the freezer also prevents formation of ice on the floor from moisture.

### **Partnering for Better Pizza**

Palermo’s has a number of missions as a member of the community. Prime among them are sustainability and striving to maintain a green operation. The Rytec doors play a big role in fulfilling this mission.

Palermo’s views Rytec as one of their partners in getting pizza out the door to its hungry market. “From what I’ve seen so far with the new doors,” says Daniels, “I’m already planning to replace the other two doors next year.”

“Rytec itself has been very good to work with. As we grow – thanks to the Rytec doors – we’re going to continue to move forward as a company.”

## **About Rytec High Performance Doors**

Rytec is North America’s leading independent manufacturer of high-speed, high-performance doors for industrial, commercial, and cold-storage environments. From security doors to traffic doors, every door addresses a specific operational and environmental challenge, and is engineered for maximum safety, productivity, and efficiency. Corporate offices and manufacturing operations are headquartered in Jackson, Wisconsin. Customer support is provided through national and regional offices and a network of local dealers and installers throughout North America. [www.rytecdors.com](http://www.rytecdors.com)

