

Snow and ice belong outside— not in a bakery

▶ **Improper airflows and the buildup of snow and ice on freezer coils, walls and floors waste energy and create extra work.**

The Orlando Baking Company, Cleveland, OH, is a leading producer of quality bakery goods. Founded in 1872, the company today has a state-of-the-art 200,000-sq.-ft. facility and uses the most modern equipment available to produce products with old world taste and consistency. With more than nine dedicated production lines designed for fresh-baked and frozen dough, Orlando Baking Company is able to provide a wide range of innovative products using the latest technology.

But the bakery was experiencing serious problems with warm, moist air entering its blast freezing systems. The moist air was entering the spiral freezer openings, and the moisture was freezing on the refrigeration coils, creating frost and ice. Within a few hours of starting production, the blast freezer had difficulty maintaining freezing temperatures.

In addition, snow was accumulating on the freezer floor and around the openings, which needed to be cleaned on a regular basis. Also, ice and snow were building up on the outside of the openings of the blast freezing rooms. When the openings were exposed to

warm plant temperatures, the buildup was causing a continual sanitation problem. Plus, production workers could not work efficiently or comfortably near these lower conveyor openings because the freezing air was spilling out onto the production floor.

“After hearing about the benefits of the Auto Pressurization System, we contacted IJ White,” says John Anthony Orlando, vice president of operations. “We had tried multiple approaches to solve these problems, from hanging strip curtains, to forced-air curtains, to building isolation vestibules, but nothing seemed to work. We were having trouble maintaining low freezing temperatures throughout the day’s production. The freezing coils would become clogged with ice and snow. This meant we needed to frequently stop production and defrost the freezer coils. During the hot and humid summer months, the problem was worse, to the point where our production throughput was being adversely impacted,” adds Orlando.

IJ White sent its design engineers to review the situation and found the problem was even more difficult because there were two independent spiral freezers in one room, which meant there were four openings that needed to be controlled. IJ White’s engineering group was able to apply its pressurization technology, dramatically minimizing the amount of warm, moist air that enters the blast freezer. In addition, the amount of freezing-cold air exiting the lower conveyor openings was also reduced.

The Auto Pressurization System was installed over a weekend, which had no impact on the week’s production. “By that Monday, we saw a noticeable improvement,” explains Orlando. “The amount of frosted, cold air leaving the openings was solved. And it was not until we started monitoring the freezer’s air temperature throughout the day that we realized what an improvement the APS system was.” ❖

For more information:

Peter White, 631-293-2211 ext. 102, pwhite@ijwhite.com



▶ (Left): At Orlando Baking Company, ice and snow built up on freezer coils, the opening to the freezer, the floor and the equipment. (Right): After installing IJ White’s Auto Pressurization System and establishing proper airflow, the ice and snow problems vanished from equipment and the freezer space. Source: IJ White.