

# Too Many People Need Us - It has to be Right

# CHALLENGE -

When 7,200 families a month depend on you, a 40,000 sq.ft. facility that processes 8.6 million pounds of food a year is under your control, and 66 member agencies rely on you, your food storage equipment needs to flaw-lessly protect your most valued property. And, when you're as successful as Westmoreland County Food Bank, growth demands action and new larger freezers. Producers and distributors of food know that bad food storage and handling can wreak havoc on their operation and that loading massive volumes of food into freezers demands a meticulous process. For Westmoreland, facility limitations forced the freezer and evaporator to sit side-by-side which led to excessive humidity in the freezer. The healthy volume of humidity was behind the build-up of ice and frost on the floor outside the freezer doorway – a safety hazard for both forklifts and workers on foot. All together these issues created a complexity that demanded the expertise of the Mars Air Systems engineering team to resolve.

## THE SOLUTION

When it's too important or costly to be anything other than right, Mars is the team you want on your side. Mars has been repeatedly the source for answers when large industrial and foodservice operators need no-fail solutions to vexing humidity, unwanted condensation or accident provoking pools of water. Deploying air baffles to ride shotgun along side the series of air curtains in the food bank gave the Westmoreland associates the means to ward off the risky flowing water that had been a source of slippage, falls and worker injury.



# STUDIES REVEAL A 6%-9% UPSIDE EFFECT ON WORK PERFORMANCE BASED ON IMPROVED AIR QUALITY AND TEMPERATURE. (WYON 2004)



#### PRODUCING NON-TRADITIONAL SOLUTIONS

To make sure frozen food keeps its sensory and nutritional quality, as well as maintain food safety standards, temperature requirements have been set for every stage of the cold storage chain. No less a consideration is the hit to food storage life when products are exposed to temperature fluctuations. In challenging environments, the mere act of moving food from a transport truck to a freezer can raise the temperature of the food significantly and tax a cooling system as it struggles to return to the thermostat set point. The Mena House Hotel in heat-steeped Cairo, Egypt has welcomed dignitaries such as Winston Churchill, Queen Mary and Richard Nixon as well as average summer temperatures of 94°F to 104°F. With a bank of 20 foot by 20 foot freezers that needed repeated stocking to feed hotel guests, a solution of significance was on demand to unburden the freezer compressors, protect the food from heating up and give some relief to rising energy costs. Using a series of 42-inch custom-engineered models, the Mars Air Systems engineering team was able to create a wall of cold air sufficient enough to consistently halt the incursion of heat and dust. The air curtains eliminated temperature fluctuations, cut out the stress on the equipment trying to re-cool and helped reduce burgeoning energy costs.



#### WHEN A SOLUTION WORKS THIS WELL...ADD ANOTHER

Sometimes the challenge is less a problem and more an opportunity to repeat what already works well. When Camp Ronald McDonald for Good Times in Southern California unveils a new dining hall in 2015 that will significantly enhance the camp experience for youth struggling with cancer and their families, two donated Mars Air Systems air curtains will stand guard over their foodservice delivery doors. For the staff, finding a solution meant having to look no further than skyward in the existing dining hall because a circa-1989 Mars air curtain is still hard at work in the retiring dining center. The 26-year old unit continues to create the wall of air needed to dispel dirt, dust and insects and repel exterior air. Happy to be able to keep the still-operating air curtain in place as the outmoded facility transitions to a culinary teaching center, the staff reached out to Mars for two additional workhorses. The Mars contribution joins with built-environment leaders such as HunterDouglas and Dupont™ Corian® to breathe life into the new 14,000 square foot complex so guests can recreate the family dining table while at camp.



#### TOP CHAINS ORDER UP PEAK PERFORMERS

While a Health Department code may prescribe air curtains to create cleaner, pest-free food prep areas, the real mandate comes from patrons. Creating a pest-free space with evenly distributed conditioned air does more than give guests the impression of clean, it's actually a building block to designing a truly hygienic venue. Food poisoning is directly linked to flies who carry pathogenic organisms that cause E. coli, salmonella and shingles and introduce other bacteria. Working hand in hand with the sanitation protocols you already have, Mars Air Systems' air curtains above entry doors, pass through windows and back receiving doors becomes a silent sentry that seizes control to keep the uninvited out. And, we've been doing that for over 50 years for iconic hospitality brands such as Panda Express, In-N-Out Burger, Taco Bell, Subway, Olive Garden and growing up-and-comers like Smashburger and Five Guys Burgers. Whether it's the need for a recessed unit that blends seamlessly in a well-defined décor vision, or defense against brutal weather conditions -- both hot and cold -- or the need for food storage areas to be vigorously defended Mars products have been the solution of choice for the most demanding operators world-wide.



### **PUTTING THE SKIDS ON SLIPPERY**

Campbell Soup Company, one of the largest food companies in the world, operates a sprawling, 2.4 million-sq.-ft. facility on a 949-acre parcel, which includes operating a cooler/freezer storage unit 24 hours/day alongside a 8'x16' heavily trafficked forklift entrance with a fast-acting vertical-lift door. The hot, humid warehouse conditions collide with the cold, dry-storage area air which produces condensation and pools of water at the base of the freezer -- both inside and out. Water also flowed from the freezer opening directly into the walkways that hosted both foot and forklift traffic. The Mars Air Systems Engineering team isolated the precise area that needed an air burst then installed a bundle of door-activated air curtains and air diffusers right at the forklift entrance. The air curtain's forced-air action stabilized cold area temperatures by creating an air seal which effectively evaporated most surface condensation and eliminated pools of water in the walkway.





