



Paxton Blower Gives Dairy Mix Company A Sweet ROI

A small food manufacturing company gets it just desserts of \$30,000/year annual savings after upgrading to Paxton Products to dry their crates.

■ THE CLIENT

Meadowvale, Inc. provides premium frozen dairy mixes to more than 500 frozen custard and ice cream retailers. The employee-owned company has been in business for over fifty years. In 2017, Meadowvale moved its 30 workers and its manufacturing plant from Yorkville, IL to Sandwich, IL. Meadowvale's exclusive focus on premium dairy mixes means a high emphasis on product quality.



■ THE CHALLENGE

Meadowvale's plant in Sandwich, IL previously used compressed air to remove water from crates after washing. The compressed air was inefficient, leaving water spots on the conveyor and on the floor. As a result, employees had to halt production on a regular basis in order to clean conveyors and floors. Meadowvale wanted to eliminate this unnecessary work stoppage and increase production speed.

Meadowvale's Maintenance Manager heard from colleagues in the food industry about Paxton Products superior drying and blow off. The Maintenance Manager contacted a Paxton representative and asked if Paxton Products could help Meadowvale improve their drying capabilities.

One of Paxton's air products experts visited the Meadowvale facility where he took photos of the old equipment and noted the measurements of the assembly line. The Paxton representative then met with Paxton's engineers to discuss a custom solution designed to address Meadowvale's unique needs.

One of the drying challenges the Paxton representative noted was the uneven spacing of the crates during the drying process. At the beginning of the conveyor line, crates were pushed together, leaving one side undried. As the crates began to go upwards on the conveyor belt, they spread out again. Because of this spacing issue, multiple air-drying solutions would be required at different points along the line to achieve complete dryness on the sides of the crates.



PAXTON PRODUCTS, AN ITW COMPANY

10125 CARVER ROAD, CINCINNATI, OH 45242
1-800-441-7475

SALES@PAXTONPRODUCTS.COM
WWW.PAXTONPRODUCTS.COM

THE SOLUTION

The Paxton team determined that Meadowvale's wet crate problem could be eliminated using a combination of Paxton's innovative air products. The Paxton experts used two 24-inch-long aluminum air knives for drying the sides and one cone nozzle manifold with 5 nozzles for drying the tops of the crates.

Paxton's 10 hp PX-1000 Ultra High Efficiency blower, providing 750 cfm of air flow at a pressure of 60 inches of water column, powered the three air delivery devices, to do the majority of the drying at the front of the conveyor line.

Further down the conveyor, where the distance between the crates on the conveyor widens, an additional small drying system was needed for these newly-exposed wet surfaces. A PowerDry system was installed here to complete the drying process for the sides of the crates.



THE BENEFITS

Meadowvale's Plant Manager expressed immediate satisfaction with the efficiency of the new drying solution from Paxton. He was pleased by the energy-savings benefits provided by Paxton's air-drying solution: Paxton blowers use less than one-fifth the energy of a compressed-air-based drying system.

Additionally, by employing the Paxton PX-1000 ultra-high efficiency blower instead of a conventional centrifugal blower, a ten (10) hp motor was needed rather than a 15 hp motor. The 10 hp PX-100 blower system achieves the same air power as a conventional 15 hp blower system – resulting in further energy savings!

A return on investment (ROI) analysis on Meadowvale's conversion from an air compressor-based drying system to Paxton's blower-powered system confirmed the value of the Paxton system. By switching to a Paxton drying system, Meadowvale achieved an energy savings of \$4.24/per hour. Based on the plant's 120-hour work week, the company will attain a total annual savings of over \$29,500. Meadowvale reached full ROI for the Paxton system within 7 months, based on energy savings alone. Additional production capacity adds the cherry on top!

THE CLIENT'S RATING

"We don't have to stop production any more to clean up water plus we're saving energy. The ROI figures prove that Paxton's air systems paid for themselves in a little more than half a year. I couldn't be happier that we made the choice to go with Paxton. I'll be recommending them to other folks I know in this industry."

—Rich, Meadowvale Maintenance Manager

For more information on the ultra-high efficiency PX-series centrifugal blowers, [click here](#) or scan this QR code with your smart phone.

