



Condensation control through dehumidification

Claxton Poultry, USA



Claxton Poultry had issues with condensation in its production facility, and needed to look for a reliable, efficient solution. Munters proposed a desiccant dehumidification system which proved to be the answer to all the climate problems.

Sanitary challenges

Large amounts of water are used by poultry processors to maintain a sanitary work environment. This water evaporates and condenses on ceilings, walls and equipment within processing areas. The presence of condensation in Claxton Poultry's facility resulted in a warning letter from the USDA in the fall of 2003. According to directives, condensation is not allowed to form either in product or non-product areas, where the potential for dripping can contaminate products.

For many years, the problem had been addressed by using a combination of plastic sheeting hung from the ceiling and personnel that are dedicated to wiping away condensation as it formed. This proved to be a time-consuming and costly solution that did not control condensation to meet USDA compliance. Claxton contacted Munters for a dependable, cost-effective solution.

Case study:

- Claxton Poultry and Munters solve condensation problems

Advantages:

- USDA compliance
- Reduced manual labor
- Reduced defrost cycles
- Increased production time
- Improved temperature control



Solving the condensation problem

A quick response was required to prevent any production downtime due to condensation. Munters provided a temporary desiccant dehumidification system to solve Claxton's condensation related problems. These systems are typically provided in 24 to 48 hours to assist customers with immediate dehumidification needs.

The system consisted of desiccant dehumidifiers, cooling modules and chillers. The condensation began to disappear within hours of the equipment installation.

"The Munters equipment allowed Claxton Poultry to operate without condensation-related NRs," said John Seibel, complex manager at Claxton. "The USDA warning letter was lifted after 90 days of operation without receiving an NR (Non-Compliance Record)."



Controlled condensation improves cleanliness and efficiency

Claxton has seen other benefits of using dehumidification. A significant number of workers were dedicated to wiping away condensation and installing plastic sheeting, and now these workers are able to perform other functions within the facility, reducing overall labor costs.

Sanitation has been improved within the plant because with dehumidification in operation, Claxton has been able to run sanitation right up to shift start. This allowed "on time" shift starts which has improved production management. Defrost cycles on existing cooling equipment have been reduced from four times per day to once per day because desiccant dehumidification delivers air at lower dew point temperatures. Claxton Poultry installed permanent Munters equipment in more processing areas to prevent condensation and is evaluating other areas within the plant.

Would you like to find out if Munters has a solution for your company too? If so, please visit our website, www.munters.com/food

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