



INDUSTRIAL PROCESS

# Case Study: Claxton Poultry Controls Condensation with Dehumidification



Property Damage Restoration



Temporary Humidity Control



Property Performance Services



## The Problem

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 resulted in a warning letter from the USDA in the fall of 2003. Per USDA FSIS directives condensation is not allowed to form either in product or non-product areas, where the potential for dripping can occur; causing contamination of product. For many years the problem had been addressed by using 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 does not control condensation to meet with USDA compliance. Claxton contacted Polygon for a dependable, cost-effective solution.



Polygon desiccant dehumidification equipment deployed to control condensation formation in processing.

## The Solution

A quick response was required to prevent any production downtime due to condensation. Polygon provided a temporary Condensation Control System (CCS) to solve Claxton's condensation related problems. The CCS works by supplying dehumidified air that absorbs moisture and controls the formation of condensation. The CCS consisted of desiccant dehumidifiers, cooling modules and chillers.

The condensation began to disappear within hours of the equipment installation. "The Polygon equipment has 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).

Claxton has seen other benefits of using dehumidification. A significant number of workers were dedicated to wiping away condensation and installing plastic sheeting. These workers are now able to perform other functions within the facility reducing labor costs. Sanitation has been improved within the plant because with dehumidification operating Claxton has been able to run sanitation right up to shift start. This allowed "on time" shift starts which have improved production management. Defrost cycles on existing cooling equipment have been reduced from four to once per day because desiccant dehumidification delivers air at lower dewpoint temperatures.

Claxton Poultry is successfully using Polygon Condensation Control Systems in the eviscerating and further processing areas to prevent condensation and is evaluating other areas within the plant.



## The Benefits

- USDA Compliance
- Reduced Manual Labor
- Reduced Pulldown Time/Increased Production
- Reduced Microbial Count
- Reduced Defrost Cycles
- Improved Temperature Control/Reduced Refrigeration Load

### Polygon US Corporation

15 Sharpner's Pond Road, Building F, North Andover, MA 01845  
Tel: 1-800-422-6379 | Fax: 1-978-655-8511 | us\_info@polygongroup.com | www.polygongroup.us

Polygon US Polygon US @polygongroupus WorldofPolygon

