

CASE STUDY Europlast



Food processing plant purifies air with Advantix

Europlast's production of sausage casings was hindered by extreme humidity conditions in its manufacturing facility. To improve air quality and control humidity, the company installed a DuCool unit. The system enabled the company to be more efficient and optimize conditions in their production facility.

BACKGROUND

Officially incorporated in 1982, Europlast is a German company specializing in the production of precise and exactly dimensioned edible sausage casings. As a company dedicated to the highest quality product, Europlast ensures that its facility is clean and efficient and meets all requirements of European Union food legislation.

With its customer-driven policy, raw material and extrusion knowledge, and problem-solving attitude, Europlast has grown to be an important player in the European meat industry.

CHALLENGE

Europlast produces its casings in its Kunstdarme plant. Resistant to cooking and sterilizing up to 2192°F, the casings are stuffed either by hand or by an industrial stuffing machine. Regulation of moisture in this type of facility is extremely important to ensuring high quality products. This can be a difficult task, since food processing often produces more moisture than exists naturally in the environment.

During the summer months, the temperature in the Kunstdarme plant was approximately 86°F. Since the casings must be washed in temperatures of roughly 200°F, the humidity level in the production room often reached as high as 85%. When the washing pools were opened this high level of moisture in the air put the facility at a high risk of mold and mildew growth, and so they were often forced to stop production until conditions improved.

Dedicated to proper maintenance and sanitation, the Europlast team knew they needed to find a solution that would keep their facility clean, comfortable, and healthy. They weighed various options for controlling humidity including a solid desiccant wheel. However, the upfront cost and additional maintenance fees associated with wheel replacement proved too high.

Additionally, Europlast found that the desiccant wheel consumed a high amount of energy because of the extra heat it used to dry the air. So instead they turned to Advantix Systems' liquid desiccant technology.



ADVANTIX SOLUTION

Europlast installed a DuCool DT 3400 unit, which allowed them to more precisely control the humidity in the production hall. The unit was placed outdoors and installed to treat the area where the casings were washed and boiled.

The DuCool unit dehumidifies the space, preventing the growth of mold and mildew, and ensures a comfortable environment for the Europlast workers. The unit also allows the facility to maintain the required humidity level of 71°F and 50% R.H. for high performance, meaning that they never again need to halt production because of difficult weather conditions.

The DuCool unit also proves to be more affordable in upfront, maintenance, and energy consumption costs than alternative dehumidification technologies like the desiccant wheel.

Europlast is pleased with the effects of the new system, as it has enabled them to improve their production process and maintain a sanitary facility.

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HOW IT WORKS

Advantix Systems' cooling & dehumidification systems are based on liquid desiccant's natural removal of moisture from air. This non-toxic, brine solution cools, dehumidifies and cleans the air at the same time without ever needing to be replaced and without exiting the system. When heated, the liquid desiccant releases the moisture back outside in the form of warm, vapor air, eliminating condensation from any point in the system. Liquid desiccant is also a natural disinfectant, eliminating bacteria, microorganisms, and odor from the air in just one pass.



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