



FOOD INDUSTRY LEADER TAKES BITE OUT OF TRADITION

PRODUCT

Product: Farr Gold Series® dust collector
Size: GS16 and GS24
Application: Dried Food Ingredients
Customer: Nestlé Prepared Foods Company – Jonesboro, AR
Installation date: 2003

CHALLENGE

Nestlé USA is part of Nestlé S.A. in Vevey, Switzerland, which is the world's largest food company with a focus on nutrition, health and wellness. The Nestlé Prepared Foods Company located in Jonesboro, Arkansas produces the Lean Cuisine and Stouffer's line of frozen foods.

During the construction of the Nestlé Prepared Foods facility in 2002, many challenges were faced. The containment of airborne spices and other food ingredients were a top concern. The specific measurement, sorting and mixing of ingredients would need to be done for product production.

Catering to a very large consumer market, certain safety precautions would need to be addressed. Some food ingredients are listed as allergens and could pose a safety risk for certain individuals.

Traditionally, a typical layout would be a single dust collector placed in a room collecting ambient airborne ingredients as they were floating in the work area. Unfortunately, with this arrangement most dust would settle in the work area before reaching the dust collector.



► Farr Gold Series® GS24 dust collector at Nestlé Prepared Foods Company located in Jonesboro, Arkansas.



► Fine food ingredient particles are captured at the source and proceed to the Farr Gold Series® GS24 dust collector.

SOLUTION

Lee Morgan, then president of Camfil APC locally located in Jonesboro, Arkansas, made a visit to meet with Nestlé production maintenance team leader Rob Froman and others to discuss the requirements, specs, and application challenges for both the allergens and dried ingredient rooms.

Going against the traditional specifications design, Lee Morgan, and Camfil APC senior engineer Mike Walters designed the system to capture food dust at the source using stainless steel pickup hoods at each mixing station. The design featured larger dust collectors with explosion preventing options to address the combustible dust.

Containing the food dust at the source was accomplished by each mixing station having its own stainless steel pickup hood to pull the air-born particulates away from the employees into ducting that leads to the Farr Gold Series® dust collectors located at the rear of each room.

With certain food ingredients being identified as combustible dust, the added safety and location of the optional explosion venting was included in the design. With both rooms being located in the center of the plant, the GS16 and GS24 were designed with vertical explosion venting that leads upward and out to the rooftop. This was accomplished by each collector having a module cell that would not contain filters, thus allowing an unabstucted area for the inlet and explosion venting.

The collectors are in service 20 hours a day. Standard paper filter media would usually last 3-4 months. With this application, Camfil APC Gold Cone DuraPleat® filters were recommended. The spun bond media is very durable with an added bonus of being washable and reusable. This would extend the life of the filters as well as reduce filter replacement costs. Both Farr Gold Series collectors are still operating with Durapleat filters replaced in early 2006. Exceeding expectations, the continuing 7 years of filter life meet and contribute to the Nestlé high commitment to sustainability, protecting the environment and employees.

“THE FARR GOLD SERIES® IS SO MAINTENANCE FREE.”

**ROB FROMAN,
MAINTENANCE PRODUCTION TEAM LEADER,
NESTLÉ PREPARED FOODS COMPANY**



► Explosion venting for both the GS16 and GS24 dust collectors were designed to be located side by side on the roof top and are in great condition since being installed in 2003.



► The Farr Gold Series® GS16 dust collector with optional silencer and explosion venting uniquely routed through the ceiling, away from employees.