

Kunzler bolsters food safety with new metal detectors

FOR MORE THAN 100 YEARS, the one thing that has never changed at Kunzler & Co., a family owned processor of specialty meats, is its absolute dedication to producing the finest quality products. Kunzler produces more than 500 quality meat products, including hams, franks, bacon, luncheon meats and specialty items found across a multitude of retail, c-store and foodservice channels throughout the U.S.

Because of the wide range of products of varying sizes, densities, moisture and salt content, metal detection can be a challenge for the company.

"We considered metal detectors from two vendors and brought trial equipment from both into the plant for a side-by-side comparison," said Rodney Shultz, facilities manager at Kunzler's Tyrone, Pa., manufacturing plant. "Focused on food safety, we looked at detection sensitivity over our wide product range."

In the end, Kunzler installed three new PowerPhasePRO metal detectors from Mettler-Toledo Safeline. This installation was an extension of a relationship that began with Kunzler's first detector purchased from the company in 2009.

"Our sales rep ... visited our plant and saw our production lines," said Shultz. "He identified our challenges and anticipated our needs. He helped customize our first metal detector with a variable-speed drive that allows us to control the spacing and orientation of product running through the metal detector. The more consistently we feed the metal detector, the better the performance."

This custom detector, with an aperture 8 inches high and 17 inches wide, was installed on a line that packages 25 different products that range in size from 12 ounces to 11 pounds. The line speed varies from 20 to 70 feet per



minute, depending on the product being packaged.

"It takes only 30 seconds [for detection changeovers]," explained Craig Dutrow, operations manager at the Tyrone facility. "We can either pull down a pre-programmed product recipe or we can auto-learn each product."

Detection sensitivity is increased (and false rejects are minimized) by an advanced coil and "Faraday Screen" design that filters out unwanted frequencies. Triple frequency operation allows Kunzler to achieve high sensitivity across its wide range of products, and the "product clustering" feature allows a family of products to be run with no operator intervention during

changeovers. Lastly, an IP36K-rated control panel allows the detector to exceed NEMA 4X specifications.

In the Kunzler facility, the environment varies dramatically — from 36°F to 38°F during production shifts to soaring temperatures and high humidity during sanitation shifts — which the new equipment is designed to handle.

"At Kunzler, our highest priority is assuring a wholesome, safe product for our customers," added Dave Grazier, vice president and general manager. "The Safeline metal detectors have helped us achieve just that with perfectly reliable sensitivity and zero downtime. We're very impressed."