

Metal Detectors Meet the Need for Speed



When it comes to converting cheese in large volume, the need for speed exists for every piece of machinery in the plant. When Peter Marsing of Sartori Foods was sourcing metal detectors for his cheese converting line, he had many critical requirements for the company that he was going to team up with. The first was the ability of the metal detector to find the smallest piece of metal without the compromising effects of false positives common in most metal detectors. His second requirement was the capability of the company to customize the metal detector system and reject device to accommodate the high-speed throughput of his converting line.

Custom-Designed Systems

Since its founding over 70 years ago, Sartori Foods has prided itself with bringing “tradition and value” to the marketplace. During the years, its traditional cheesemaking skills have earned the company numerous awards. Innovation and creative thinking are key to the company's success, a fact that is evident in all its cheese products. Marsing approached Advanced Detection Systems with the application and soon the two companies were working together to find the optimal design that met Sartori’s stringent requirements.

The crucial concern for Sartori was the assurance that Advanced Detection Systems would be able to custom design the conveyor and reject system to meet the food processor’s sensitivity specifications and facilitate the speed and spacing of its products.

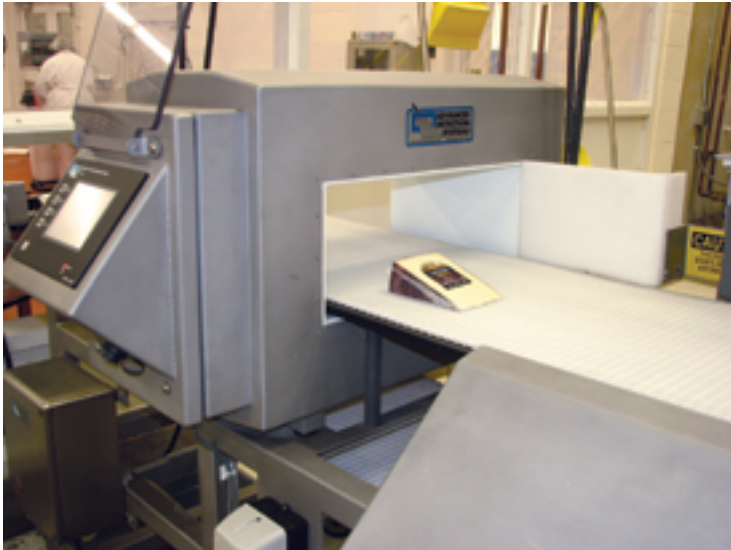
Accomplishing this task involves the use of highly sophisticated electronics that involve precise accuracy in the internal software of the metal detector. The powerful software program serves two purposes, finding the smallest contaminant in a highly conductive product and then rejecting only that contaminated product.

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Soon it became apparent to Marsing that Advanced Detection Systems was going to provide the right solution for his company's needs. "They first listened to our needs, gathered the important details of our production line and then designed the machine that exceeded our needs," Marsing said.

Guaranteed Results



One critical aspect of Sartori's production is the capability to produce an assorted range of cheese types and sizes produced at the company's Plymouth, WI facility. Production changeover had to be quick, easy and problem free. Having flexibility built into its converting allows Sartori Foods to take its production and quality control efforts to new heights. For Advanced Detection Systems that meant designing a machine that was capable of inspecting products from 1lb to 25lbs in various packaging sizes, while achieving the result of maximum sensitivity and pinpoint rejection.

During the design phase, Advanced Detection Systems configures the internal software for optimum detection based on the exact product effect signature as determined during product testing. It is during this phase of development that Advanced Detection Systems makes a quantum step toward achieving the best sensitivity. As in the case with cheese, most conductive products have a unique product signature that is equal to the non-ferrous and stainless steel metal signal. The ProScan's software is capable of precisely "reading" the product signature, in this case the cheese, and automatically adjusting the software so the detection envelope is precisely aligned over the product signature. With the product signature inside the detection envelope, the cheese is considered "product compensated" allowing no residual product signal to affect the metal detector performance. The result is maximum sensitivity and problem-free production as only a metal signal is "seen" during the course of production.

The guaranteed sensitivity, custom engineered machines and the fact that all the systems are made in the USA made all the difference to Sartori. "If I need support on this project or future projects, I know I can count on a local company to come to me with results," Marsing said. "Advanced Detection Systems proved themselves and that is all the evidence I need to make a decision."

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For more information about Sartori Foods, please visit www.sartorifoods.com [1].

For more information about Advanced Detection Systems, please visit www.adsdetection.com [2].

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