QUALITY WITHOUT COMPROMISE. X-RAY TECHNOLOGY REPLACES METAL DETECTION

To achieve complete food safety, food manufacturers need to check every single product. Checking all products coming from the production line can be made by using changes in a magnetic field with metal detectors, or in density with X-ray. A choice between both technologies has so far been a question of cost and space availability as X-ray detectors usually are sizable and expensive. There is a new concept that now allows for an easy introduction to quality control without compromise. The concept is called MEKI by Mekitec.

Mekitec’s MEKI X-ray inspection system marks a change in X-ray detection technology, as it is comparably small and approximately fifty percent less costly than common X-ray detectors used in the food industry. Its sensitivity and performance is among the most efficient in the market. “Our mission is to offer food producers, for instance dairies, the price and compactness of a metal detector but the performance of an excellent X-ray detector,” says Lars Oehlandt, sales director.

X-Ray Detectors in German Dairy Companies

German food manufacturers are familiar with X-ray technology. They understand the advantages and disadvantages of the technology but are aware of stringent quality requirements by customers. Although milk rarely contains foreign bodies and is filtered, machines and people pose a danger to exposed semi-finished products. Glass splinters may simply not be detected before products reach the breakfast table.
The ROI of quality control measures are not defined easily. This and the relatively large cost difference until now between both technologies explain why metal detectors are still more frequently in use in dairy plants. Mr. Oehlandt, “As we are moving closer to the prices of metal detectors, the decision becomes much easier. With a tunnel size of 250 x 110mm, we can install our technology in most cheese and yogurt production lines. This raises the question whether investment in old metal detection technology can still be justified.” This question was easy for Bavarian Käserei Champignon and Valio in Finland.

Case Käserei Champignon
Käserei Champignon (Hofmeister Group) is a long-standing pioneer in quality control. All six packaging lines of the Heising cheese plant are equipped with X-ray detectors. Every single cheese package leaves production checked. “X-ray technology is most useful for checking soft cheese with added ingredients. There could always be a stone contained in spices,” explains Plant Manager August Etzlinger.

Champignon is the first German milk processor to use MEKI since September 2011. “The main reasons for the investment were,” according to Mr. Etzlinger, “a favorable price-cost ratio, ease of use and the compact dimensions of the scanner. Detection performance and maintenance requirements meet Champignon’s provisions. We are content with the after-sales service and would always recommend Mekitec,” summarizes Mr. Etzlinger and his experience from the first seven months of use of X-ray detectors.

Case Valio
Quality is one of the highest priorities within Valio, a Finnish food producer. The plant in Vantaa uses MEKI for checking sliced cheese. Another field of use is Oltermanni branded cheese in the Haapavesi plant.

An Easy Introduction
Introduction to X-ray detection starts with testing of products by using different foreign bodies. Once all production lines have been analyzed and the required configuration of scanners has been determined, installation and commissioning follow. After that, operators are trained for using the scanner and for safety of operation. Then, a production free of foreign objects can begin.
INFO: MEKI

Detection range, 150g cheese
Stainless steel 0.6mm, Glass 1.5mm, Stone 1.5mm

MEKI combines the benefits of metal detector pricing with the X-ray inspection performance for products up to 250mm width and 110mm height.

Example industries: bakery, dairy, meat & seafood, snack, fruits & vegetables, ready to eat food, frozen, confectionary, cereals & bulk.

About Mekitec

Mekitec has a combined experience of several decades in the development, industrialization and manufacturing of X-ray imaging systems, applied in medical, security and safety areas. This unique combination of in-depth knowledge of various industries has enabled the management to invest in long-term research and development especially for the food industry. The results of this focus and dedication are the state-of-the-art X-ray food safety systems that Mekitec supplies to its customers globally.

The product range is a high-performance, user-friendly and very space and cost competitive X-ray technology system called MEKI. It is revolutionary as it provides 100% food quality control with high precision X-ray inspection that is designed to replace the simple metal detector with a similar investment. What's more, MEKI with its small and compact footprint, easily fits in every production line, thereby saving useful space in the factory.

With the MEKI range, food producers finally have the choice: To enjoy a fully automated, high precision and small yet cost-effective X-ray food inspection system. The ground-breaking MEKI systems provide food quality control without compromise!

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