

Ishida X-ray technology delivers enhanced quality control for poultry line



Case Study / Nikas

The installation of the latest Ishida X-ray Inspection System at Greek cold-cut meats specialist Nikas has enabled the company to further enhance its stringent quality control procedures.

Facts and figures



An IX-PD-36 Top-of-the-range X-ray system has been installed to inspect bulk fresh chicken



The IX-PD is able to accurately detect small bones in fillets and other foreign bodies



The new X-ray system recognises with high accuracy the difference between chicken meat and foreign bodies thus reducing the rate of false detections



The new X-ray system has helped reduce complaints and taken Nikas' quality standards to an even higher level



The X-ray system is in operation for up to 16 hours, seven days a week, inspecting approximately 80 chicken pieces per minute



The new Ishida IX-PD-36A2 has been installed at Nikas's factory in Attica to inspect fresh chicken, supplied both in bulk and packed product to the foodservice and retail sectors. The system has helped to reduce customer and consumer complaints and, importantly, identify the cause of any quality issues. This enables the company to feedback information to its technical team and outside suppliers in order for any problems to be quickly addressed and rectified.

"The Ishida IX-PD is a valuable addition to our packing line, which has taken our quality standards to an even higher level," said Konstantinos Laitsas, Plant Director of Nikas. "The system operates accurately at high speeds while also ensuring a low rate of false detections, and it is able to quickly learn how to identify different contaminants."

The Ishida IX-PD features new sensor and image processing technology that delivers the highest level of detection sensitivity, with an ultra-high resolution and clearer image than conventional X-ray systems. In addition, Ishida's proven Genetic Algorithm (GA) technology enables the machine to be tailored to individual product requirements, analysing image data over a number of generations in order to be optimised to look for specific foreign bodies.

As a result, the IX-PD can detect both low-density and very small size contaminants with excellent accuracy. In particular, the system's ability to recognise the difference between food and foreign bodies with high accuracy reduces the rate of detection errors, enabling manufacturers to maintain high productivity rates. It is also capable of reliably detecting contaminants in applications where products are overlapping or standing up in a pack, which makes fine items difficult to detect.

These benefits are ideal for Nikas, where the IX-PD is able to accurately detect small bones in the fillets and other foreign bodies. In addition, the machine can identify mis-formed and missing product.

"We previously used a metal detector for our quality control, but the IX-PD offers much wider inspection capabilities, notably addressing challenges that are especially important for poultry packaging," said Konstantinos Laitsas.

At Nikas, the IX-PD is operating for 16 hours each day, handling around 80 pieces per minute. Changeovers – which range from five to eight each shift – can be carried out in less than 10 minutes, thanks to the user-friendly, intuitive menu on the machine's touchscreen. The open construction enables Nikas to carry out fast and easy daily and weekly cleaning regimes, and the company also reports that the machine is working extremely reliably.

"We are delighted with the performance of our IX-PD," concluded Mr. Laitsas. "As an existing supplier, we were confident of the quality of both the equipment and service we would receive from Ishida and its partner Europack. We are already planning the purchase of three more X-ray systems in the next two years."



The customer

Founded in 1966, Nikas is renowned for the production of a range of high-quality premium local cold cuts created and perfected by generations of devoted butchers and meat specialist. Today, the company's cured meats are an all-day staple of the Greek family table. Based in Attica, the Nikas employs 400 staff and sells its products throughout Greece and exports it to five countries including Jordan, UK, Cyprus, Bulgaria and Albania.



The overview



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The systems high accuracy reduces the rate of detection errors, enabling manufacturers to maintain high productivity rates



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In addition, the machine can identify mis-formed and missing product



The IX-PD offers much wider inspection capabilities, notably addressing challenges that are especially important for poultry packaging



Changeovers which range from five to eight each shift, can be carried out in less than 10 minutes using the intuitive menu on the machine's touchscreen



The open construction enables Nikas to carry out fast and easy daily and weekly cleaning regimes



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Speak to an Ishida expert

Every business has its own challenges; ours is to help you overcome yours. Working smarter, faster, together, we can help you achieve higher standards and get your products retail ready quicker.

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