

TWO NEW SCANNERS

ADVANCED INSPECTION SERVICES (AIS) WAS ESTABLISHED IN 1998 AND PROVIDES A PRODUCT RECALL PREVENTION SERVICE TO FOOD PROCESSORS AND MANUFACTURERS.

The company specialises in advanced contaminant detection prior to product release and post recall to ensure quality assurance and safeguard brand reputations.

Recent Product Innovations:

AIS X-Ray Micron Scan: an ultra high-resolution sensor x-ray inspection equipment.

The system is designed to operate offline to detect foreign bodies, such as metal as low as 0.2mm and glass at 1.0mm.

This level of detection is achieved by either outsourcing product batches to companies such as AIS X-Ray.

AIS X-Ray Ultra Scan: this is an advanced contaminant detection technology installed in a manufacturing facility. The Ultra Scan is a slightly lower resolution than the Micron Scan.

As all ultra-high resolution sensor x-ray equipment currently cannot match the high speeds used on some production lines this equipment is often deployed at near-line or offline locations. Once the point of weakness has been identified, it is then rectified.

Both systems detect a large range of non-metallic foreign bodies, such as glass; stone, calcified bone fragments and specific rubbers and plastics, such as PTFE.

All systems consist of a conveyor cabinet, x-ray generator, x-ray detection and image processing pc and software. The main differentiator to inspecting minute foreign bodies is the resolution

that is achieved with the use of advanced linear sensors.

If a manufacturer inspects a 15 x 15cm product with a standard food detection system, it would typically record 140,000 data points i.e. the number of individual measurements. This means instead of having say 375 pixels on a detector over a 150mm sample, a food manufacturer or processor would have 3,000 pixels.

When inspecting with the AIS X-Ray Micron Scan system, manufacturers will achieve a resolution of 9,000,000 data points. This additional resolution provides detection of much smaller contaminants and is much less sensitive

to the orientation and location of the foreign body within the product.

By comparison the AIS X-Ray Ultra Scan offers an improvement on the same sample of 15x15cm moving from the 140,000 data point to 600,000 data points.

To take full advantage of this additional data it is also necessary that the image processing hardware and software can handle the data rate that the detectors produce. The hardware and software within the Micron and Ultra Scan systems are optimised to handle these high data rates.

www.aisxray.co.uk

