

5 TIPS

to Ensure Consistent Detection from Your X-ray Equipment

With the enactment of the US Food Safety Modernization Act (FSMA) and continuing recalls for various physical risks facing consumers, the food production industry regards x-ray inspection equipment as vital to its business and bottom line. However, many factors can impact the overall performance of that equipment. Follow these five simple principles of test, protect, adjust, educate and maintain to get the most value out of your X-ray inspection systems. This will assure the highest level of food safety and the lowest downtime, false rejects, scrap and rework costs.

Stones

Glass

Metals

Test

1

Use a sample of 5-10 packages, not just one, to determine sensitivity.

Move the contaminants around inside the package to ensure reliable detection.

Ask for a guaranteed detection level and the probability of finding smaller objects.

Use test spheres and real world contaminants.

Protect

2

Enable security systems to avoid desensitization by operators.

Utilize reject confirmation and bin full sensors to verify rejects are removed.

Lock the reject bin and install covers on the conveyor so only good products pass through.

Make sure the production line can't be run until the x-ray system is on.

Check

3

Check set-ups at regular intervals to make sure they are optimized.

Review false reject images and make changes to eliminate them.

Always retest with audit samples after any change.

Review any new types of contaminant risks and see if the system can detect them.

Educate

4

Set realistic expectations about what can and cannot be detected.

Share with workers a report showing actual contaminants being detected.

Train operators on how to use and audit the system correctly.

Eliminate contaminant sources if possible and switch to detectable plastic materials when you can.

Maintain

5

Check the detector for degradation. Recalibrate or replace as needed.

Plan for replacement of the x-ray source based on hours used.

Clean or replace filters to avoid overheating the system.

Inspect gaskets, glands and covers for water leaks in washdown environments.