

Calculating the ROI of Foreign Material Detection

Implementing an automated foreign material detection solution can offer major bottom-line benefits.

Hyperspectral imaging is a highly effective detection approach if low-density foreign materials, like plastic, wood and cardboard, are causing problems in your plant. Many meat processing plants relying on PPO's Smart Imaging System have paid for their system within the first year of operation — or less.



4 measurable impacts of PPO's Smart Imaging System

Make Better Use of Human Resources
PPO's system is always on and will find even
hard-to-spot foreign materials that many human
inspectors struggle to catch.

PPO's Smart Imaging System frees your inspectors to perform higher-value work elsewhere. Cross-skill your staff to perform multiple functions so you can deploy talent in real-time to meet the changing demands of your operation.

Reduce Condemned Product

PPO's system inspects every piece of product on the belt. When it finds a contaminant or unknown object, it rejects a very small amount of product off the line for further inspection.

Catching foreign materials early means huge savings in further processing. Customers who have implemented the Smart Imaging System reduced condemned product by up to 80%, with typical savings of between \$500K and \$1M per year.

Prevent Chargebacks

PPO customers have substantially reduced client chargebacks by improving product quality and reducing foreign materials findings.

One of PPO's clients **reduced their chargebacks by** % simply by eliminating an upstream maintenance issue identified through PPO Insights.

Retain Customers and Avoid Costly Recalls

The average impact of a recall for food companies is estimated to be \$10 million in direct costs.

Even one recall is enough to impact your brand, harm customer relationships and erode consumer trust. PPO's customers have avoided multiple costly recalls since installing our Smart Imaging System.

Real ROI wins from the front lines of food processing

A SECONDARY PORK PROCESSOR HAS IMPRESSIVE FOREIGN MATERIAL FINDINGS FROM DAY 1 OVERVIEW During the first 3 weeks of operation this processor scanned 3.7 M pounds of product using PPO's Smart Imaging System. RESULTS - 48 foreign materials removed - 98.38% up time - 0.39% false rejection - Average foreign material detection performance OVER 95% @ 3.5mm (~½")

\$8M

POULTRY PROCESSOR

PREVENTS MASSIVE RECALL

WITH PPO

\$550K

PROCESSOR SAVES \$550K IN 12 MONTHS WITH PPO

6 MONTHS

POULTRY PROCESSOR ENJOYS FAST PAYBACK DUE TO REDUCED CONDEMNS 10:1

PLANT WITH PPO LINE OUTPERFORMS ALL ITS PEERS IN AVERAGE INCIDENTS

	PREVENTED: 40,000 LBS OF CONDEMNED PRODUCT	"THE FM'S BEING FOUND TODAY HAVE PROBABLY ALWAYS BEEN IN THIS
OVERVIEW	A top-10 meat processor implemented PPO's Smart Imaging System on a pork line. When PPO rejected zip-ties, the operations tagged combos and ran them back through the system at end of shift. Two more instances were found.	PRODUCT, BUT WE DIDN'T HAVE ANY WAY OF FINDING THEM BEFORE THE PPO."
RESULTS	 ~40,000 lbs of product saved from waste Preserved efficiency on the production lines Since installation, 0 downstream foreign material findings in product scanned by the Smart Imaging System 	

Calculate basic ROI by examining the past

- How many foreign material incidents have we had?
- · How much has a previous recall cost us?
- How much product is lost/condemned due to foreign materials?
- How much do foreign materials cost us in downtime?
- How many credits have been issued due to foreign materials?
- How much labour do we use for inspection?



Explore how PPO can help find more low-density foreign materials in your operations. sales@ppo.ca | 1-800-706-3811

