



P&P Optica

INDUSTRY BRIEF

How PPO Protects Beef Processors

When you're inspecting a mix of incoming raw materials and in-process products you need a solution that delivers results and peace of mind. PPO's Smart Imaging System is proven to help beef processors keep low-density foreign materials out of product streams so you can deliver safe, high-quality products every day.

You can also make frequent off-line spot testing a thing of the past. PPO uses chemistry to accurately measure lean point in-line, on every pound of product you process.

Hard-to-find foreign materials are no match for PPO

PPO's Smart Imaging System is a proven automated solution for detecting low-density contaminants that evade other inspection methods, like x-ray and metal detectors. Inspect your fresh or frozen size-reduced trims and grinds whether they just arrived in the plant or are further in your process. Operate with confidence that you're prioritizing food safety and quality while preventing recalls and preserving customer relationships.



Hyperspectral imaging finds the highest variety of low-density foreign materials.

This is thanks to the technology's ability to see chemical structures instead of just colors.

- **See more.** Hyperspectral imaging assesses the chemistry of products as they pass by at line speed. It isn't reliant on density, color contrast or size to find foreign materials.
- **Analyze more.** Machine learning algorithms and AI analyze vast amounts of chemistry data and make instantaneous decisions to reject contaminated or low-quality products without affecting system performance.
- **Evaluate more.** Analyzing chemistry lets you assess food quality, including lean point and freshness. You can also automatically measure fat and lean.
- **Learn more.** The system continually learns and optimizes performance. Bonus: PPO Insights keeps track of incidents to provide a detailed view of what's happening with your products over time.

Ditch approximations. Chemistry lets you measure with certainty.

Our unique approach provides non-destructive, pixel-by-pixel, chemical analysis to measure both fat and lean on your homogeneous, small grind products.

- Achieve the same accuracy as your current sampling methods, for every pound of product.
- No more manual calculations. Trust PPO's detectors to directly measure both fat AND protein content of your product.
- Measure quality simultaneously with foreign material detection - without compromising either process.

**Choose the configuration that works best for your operation**

PPO offers multiple system configurations to optimize foreign material detection in beef processing plants. Every PPO Smart Imaging System is built to withstand the unique conditions of the plant.

- Inspect different proteins and formats, including fresh or frozen size-reduced beef trims and grinds
- Find foreign contaminants in incoming raw materials and in-process product, after grinding but before mixing
- Count on built-in mechanisms to reject contaminated or undesirable product
- Get instant confirmation of findings with high-capacity/speed onboard computers
- Measure lean point on a batch of raw material or a blend for correction
- Perform quality in-line grading for size and shape
- Enjoy high reliability, proven ease of use and maximum up-time



**PPO'S Z- CONFIGURATION
TIS IDEAL FOR INSPECTING TRIMS**



**PPO'S WATERFALL CONFIGURATION IS IDEAL
FOR GROUND PRODUCT. WATERFALL ELITE IS ALSO
AVAILABLE FOR OPERATIONS THAT NEED
A SMALLER FOOTPRINT.**

ALL SOLUTIONS ARE NOT CREATED EQUAL

Other inspection solutions may claim to use spectroscopy or assess chemistry. Only PPO's patented Smart Imaging System includes true hyperspectral imaging in line.

