

# Case Study

smiths detection  
bringing technology to life

## Eagle Tall

KEN'S FOODS

### Introduction

Ken's Foods is a family owned and operated business with retail grocery products and food service divisions that produce and package over 400 varieties of dressings and sauces.

### Business Challenge

Ken's Foods originally investigated X-ray technology after the 9/11 attacks at approximately the same time the FDA started pushing manufacturers to use tamper resistant seals on food products. Ken's Foods took a proactive stance on food safety by implementing the tamper resistant seals before they were mandated. Tamper resistant seals are foil lined and therefore did not work with legacy metal detection equipment.

In addition to the proactive food safety approach, Senior Management at Ken's Foods saw benefit in investigating a foreign body detection system that not only worked with the tamper resistant seals but also one that reduced product loss.

Prior to installing X-ray online, Ken's Foods used pipeline metal detectors for dressing inspection. Pipeline systems analyze pre-packaged liquid or slurry products for contamination. The pipeline metal detectors did not serve as an optimum solution for inspection due to product loss during system verification and rejection. In addition to product loss, pipeline systems are pressurized, making it difficult to add test contaminants to the mixture. Test contaminants are used for system verification as a part of a HACCP program. When pipeline systems reject for system verification or product contamination,

a reject valve opens removing the contaminant along with a significant amount of product from the production flow into a reject collection bin thus resulting in product loss. In addition the pipeline metal detectors – being used before filling and sealing cannot truly guarantee contaminant free product.

### Smiths Detection Solution

After evaluating multiple X-ray vendors, Ken's Foods selected Smiths Detection, industry leader in X-ray technology, as product inspection supplier of choice. Smiths Detection was chosen based on the high quality product analysis as well as the after sale service and support offered by the Smiths Detection Service Department. To date, Ken's Foods has purchased twelve X-ray inspection systems consisting of nine Eagle Tall units and three Eagle Pack 720 units. The Eagle Tall units examine gallon size plastic jugs of salad dressing for potential foreign body contamination. These systems are set-up with a push-arm reject. When contaminated products are detected, the push-arm reject pushes the product from the production line into a rejection bin where products can be evaluated for rework or disposal.

**"X-ray has not only eliminated product waste that we experienced with the pipeline metal detector but we have also gained increased contaminant detection capabilities expanding outside just metal contaminants. In addition to product savings and increased detection capabilities, the Quality Control Department uses the X-ray systems as a critical control point in our HACCP program."** Mark Shaye, Senior Project Engineer

The Eagle Pack 720 evaluates cases of salad dressing packaged in foil pouches and cases of salad dressing single serve cups with foil lids. X-ray



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inspection equipment has a distinct advantage over legacy metal detection equipment, as foil packaging does not affect detection capabilities. X-ray technology is able to visually

look through a packaging material to the product contained within to detect foreign body contamination and can simultaneously evaluate compartment and or total container weight.

**“In addition to product savings and increased detection capabilities, the Quality Control Department uses the X-ray systems as a critical control point in our HACCP program.”**  
**Mark Shaye, Senior Project Engineer**

## Business Value

Since X-ray inspection has been installed, Ken's Foods has reported increased line efficiency, a reduction in wasted product from previous inspection methods

and confidence that they are delivering the highest quality products to the market. **“As an added benefit, when we host customer audits at our facilities, our customers are impressed with the top-of-line equipment we use to ensure that they receive the highest in product quality.”** Merrily Blasi, Quality Assurance Manager

X-ray is the only inspection system Ken's Foods has installed online equipped with remote diagnostics. The Smiths Detection Service Department is able to dial into the X-ray system via modem access to work through trouble shooting, saving Ken's Foods downtime on the line and the expense of an onsite service visit.

Smiths Detection X-ray inspection equipment has become the standardized inspection equipment company wide. **“Going forward, any new inspection systems or upgrades to current inspection technologies will be X-ray inspection systems, they are extremely reliable, easy to operate and easy to maintain.”** Merrily Blasi, Quality Assurance Manager

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