# smiths

# Rigid Container **Inspection**



# SMITHS DETECTION

for a safer world

# X-Ray Inspection of Rigid Containers

As the world's leading manufacturer of X-ray inspection equipment, with over 40 years of continuous X-ray specialist development, Smiths Detection understands the importance of product quality. The Eagle line of X-ray product inspection systems were designed with reliability, versatility and ease of use firmly in mind; ensuring that you receive the highest quality, totally dependable inspection equipment you deserve and your customers demand. With over 35,000 X-ray systems installed globally, no competitor can even come close to our experience in automatic X-ray inspection.

### **End of Line Packaged Product Inspection**

In order to remain successful in a highly competitive, and increasingly global market place, you must ensure that your products meet the quality standards your customers demand. There is significant costs associated with poor product quality. Before your products even reach the consumer you will need to meet the standards required by retailers and government agencies, we help you demonstrate that commitment to quality. In addition to immediate quality benefits, you will also realize that an Eagle<sup>TM</sup> system offers you much more in terms of added value – with highest cost/benefit ratio in the industry.

#### **Rigid Container Product Inspection**

Smiths Detection's rigid container inspection systems, the Eagle Tall and the Eagle QuadView, make the difficult task of inspecting rigid containers for foreign contaminants -- even glass in glass contaminants -- possible. The Eagle Tall, our single-view system, is designed to allow for installation over a customer's existing conveyor line, eliminating the need for costly line modifications. The over the line systems allow easy access for cleaning and routine maintenance. Smiths Detection's newest system, the Eagle Quad View, inspects glass jars using four separate views to ensure complete inspection of the container even in the bottom of the jar (or the crown area).



SimulTask 4.0 Screen Shot



Optional Side Grip Conveyor for QuadView



Optional Side Transfer Conveyor for QuadView

# Eagle™ QuadView

- Full coverage detection NO BLIND SPOTS
- Ideal for glass-in glass contaminant detection
- Line speeds up to 400 FPM/122MPM
- 4 angles of inspection for contaminants, resulting in a low false reject rate while providing a clear image of the jar bottom
- Fully integrated material handling system available
- Installation ease by dropping over the existing conveyor line
- Image analysis software that adjusts to accommodate varying crowns on jar bottoms
- The only solution to detect glass anywhere on the bottom of a glass container
- Fill level, weight, non-glass contaminants also can be detected



## Eagle™ Tall

The Eagle Tall is used for high-speed online inspection of vertical containers such as cardboard cylinders, vertical cartons, jars and upright bags. This machine sits over an existing conveyor which provides ease of installation, as well as accessibility for cleaning and routine maintenance. The Eagle Tall eliminates the need for costly line modifications required to install most online inspection systems.

- Line speeds up to 400 FPM/122MPM
- 12"/305 mm high detector coverage
- Generates real time streaming statistical data
- Network capable
- Detects metal, glass, and stone inside rigid containers of all types
- Verify total weight and fill level in metal, fiber, and plastic containers
- Single view geometry is ideal for metal and metal/fiber cans plus plastic bottles
- Cost effective solution for the inspection of glass jars for glass contaminants when the contaminant tends to suspend above the jar bottom



## Spotlight Application - High speed checkweighing of cans

In addition to its contaminant detection abilities, the Eagle Tall has the capability to check-weigh cans and reject consecutive cans running at approximately 500 pieces per minute. Dual reject stations remove cans from the line and into separate reject bins depending on whether they contain contaminants or are of an unacceptable weight. A reject-verify system will ensure that each rejected can is actually removed from the line.

# Sample Eagle Tall Applications





Can containing 1.5mm stainless steel contaminant





Jar containing 1.5mm stainless steel and 2.5 x 3 x 5 glass shard





Peanut Butter Jar containing 1.2mm stainless steel and 3.0mm glass





Baby Food Jar containing 1.25mm stainless steel sphere





Salad Dressing containing 1.25mm stainless steel sphere

#### USA

World Headquarters
Smiths Detection
Product Inspection Division
3202 Regal Drive
Alcoa, TN 37701
T: +1 877 379-1670
F: +1 865 379-1677

Smiths Detection Product Inspection Division 319B Lake Hazeltine Drive Chaska, MN 55318 T: +1 952-448-6982

Smiths Detection
Product Inspection Division
50 Nashdene Road, Unit 103
Scarborough, Ontario
Canada M1V 5J2
T: +1 416 291-9229
F: +1 416 291-2906

Smiths Detection Product Inspection Division 2211 E. Winston, Suite E Anaheim, CA 92806 T: +1 714 535-0334 F: +1 714 535-7056

### **Latin America**

Smiths Detection
Product Inspection Division
Blvd. Luis Donaldo Colosio Km. 7.7,
Fracc. Colinas de Plata
Municipio de Mineral de la
Reforma, Hidalgo, 42093
Mexico
T: +52-771-153-2928

### **Europe**

Smiths Heimann GmbH Product Inspection Division Borsigstrasse 15 65205 Wiesbaden Germany

T: +49 (0)611 9412-250 F: +49 (0)611 9412-573

Smiths Heimann S.A.S. Product Inspection Division 36, rue Charles Heller 94405 Vitry sur Seine Cedex France T: +33 015553 5527 F: +33 015553 5535

Smiths Detection International UK Product Inspection Division Pegasus Square Europarc, Grimsby DN37 9TJ United Kingdom

T: + 44 (0)1472 349204 F: + 44 (0)1472 349206

#### Asia/Pacific

Smiths Detection Asia Pacific Pte. Ltd.
Product Inspection Division
3 Toh Tuck Link #04-01
German Districentre
Singapore 596228
T: +65 6 466-1700
F: +65 6 469-2506

Smiths Detection Product Inspection Division Unit 7, 5-9 Ricketty Street MASCOT NSW 2020 Australia

T: +61 2 8338 9722 F: +61 2 8338 9733

