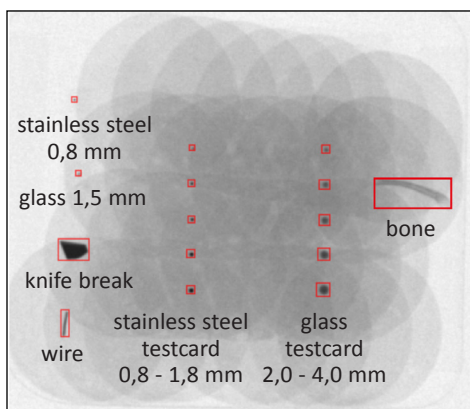


# RAYCON EX1

## Affordable Production inspection system for packaged products

- Hygienic, Industrial Design
- Focus on Usability:
  - Best in class user interface
  - Best cleanability and maintainability
  - Easiest handling & installation

➔ Easy decision!

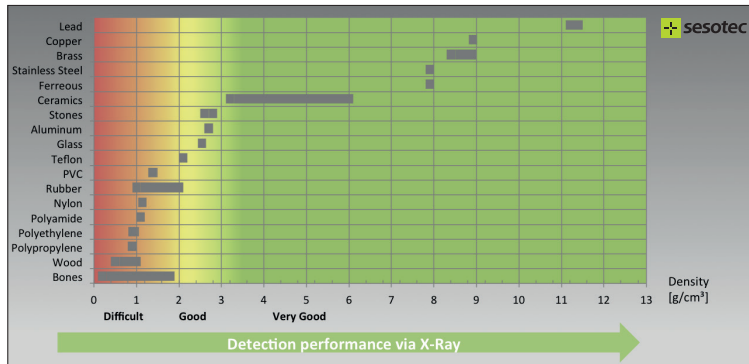


# RAYCON EX1

## Performance features



The RAYCON EX1 product inspection system detects all contaminants that due to their density, chemical composition, or mechanical dimensions absorb X-rays better than the surrounding product. This applies to metal, glass, ceramic, and stone contaminants in food materials. The RAYCON system also detects some types of plastics (e.g. PVC, rubber) as well as other product defects (e.g. trapped air, filling level).

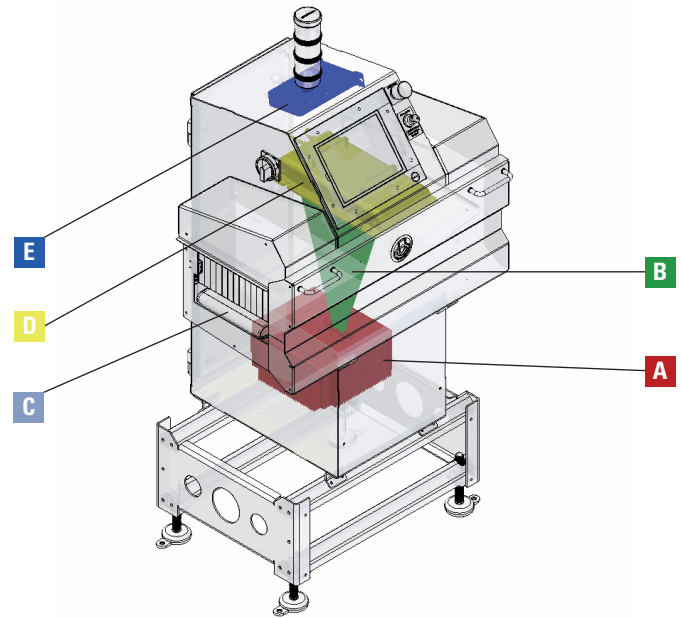


*Detectability of different materials depending on their density*

The RAYCON EX1 product inspection system is characterised by the following performance features:

- Inspection area: 220/120 (W x H)
- Throughput: ~220 pcs./min. (product specific)
- Detection capability starting from Ø 0,6 mm
- 60W Low-Energy X-Ray generator
- Highest operator safety due to low X-Ray emission < 0.5µSv/h
- Short over-all length of only 800mm (1200mm with Optional integrated reject)
- Modular and stable frame design allows easy transportation and safe installation
- Ambient temperatures from 0°C to +40°C
- IP 54 protection class
- Reject system: Signal only (Air Blast or Pusher available on Integrated reject version).

## Function



**The system comprises of the following main components:**

### **A X-ray tube**

This is where X-rays are electrically generated. The X-rays are emitted from the tube through a narrow slot and as a fan-shaped beam pass through the product to be inspected from back to front.

### **B X-ray beam**

### **C Transport system**

A PE flat belt (self guiding) uniformly transports the product to be inspected through the X-ray beam. This makes it possible to scan the product line-by-line.

### **D Detector unit**

The linear detector that is installed above the inspection aperture converts the arriving X-rays into an electrical signal from which a digital X-ray image is created.

### **E Industry-type PC**

The PC is used to evaluate the images and to accurately control the reject systems.

# Software advantages

## Evaluation software

The product inspection system is equipped with a high-performance industrial PC with real-time operating system and sophisticated visualisation software.

A 10" LCD touch screen monitor is used for the user interface.

X-ray images are evaluated by a product specific visualization software. Contaminated or defective products are detected and rejected.

## User Interface

Drag & Drop menus

The operator receives a visual feedback instantly

→ Time saving

Menu guide

The operator is guided by the software through necessary steps of product setup or troubleshooting

→ Time saving

## Easiest and fastest product setup

Autolearn with 5 product samples only

→ Startup in less than 2 minutes

Retrain for automatic sensitivity adjustment.

Software increases/decreases sensitivity automatically based on the Operator marking the x-ray image on the touch screen.

→ Saves time consuming adjustments

**No special expertise or knowledge required to operate.**

## RAYCON EX1 design overview

### Design & Hygiene:

Saving time for maintenance & cleaning due to:

- Inclined surfaces, water flows off easily
- Tool-less accessibility
- Tool-less removal of curtains in less than 1 minute
- Tool-less conveyor belt removal in less than 2 minutes



Example of RAYCON EX1 with Integrated reject.

### Important information:

X-radiation is classified as ionising radiation. However, X-radiation is not radioactive radiation! In accordance with EU directive 1999/2/EC, Sesotec X-ray systems due to the minimum radiation energy can be used for the contaminant inspection of food materials even with organic products. The RAYCON product inspection system is subject to the German X-ray ordinance and requires certification. Please observe any country-specific regulations!

For detailed information please request our technical data sheet.

## Sesotec Inc.

1234 Hardt Circle  
Bartlett, IL 60103  
USA  
Tel.: +1 224-208-1900  
Fax: +1 224-208-1909  
info@sesotec.us  
www.sesotec.us

## Sesotec GmbH

Regener Straße 130  
D-94513 Schönberg  
Germany  
Tel. +49 8554 308-0  
Fax +49 8554 2606  
info@sesotec.com  
www.sesotec.com

raycon-ext-pr-en-0618-v1.1\_US

# Sesotec system world



### Detecting and separating contaminants:

Removing contaminants:

- metals
- plastics
- glass
- ceramics, porcelain, stones
- and many others

Removing from (good material):

- bulk materials
- liquids and pastes
- individually packaged product
- packed and loose items

Product types:

- end-products (food, textiles, plastics etc)
- industrial raw materials
- recycled materials

can be integrated into all types of conveyor systems



### Detecting and separating sub-standard products:

Qualitative defects:

- incorrect colour
- agglomerations
- breakages
- air inclusions in packs
- incorrect positioning / distribution

Quantitative defects:

- incorrect weight
- count errors (incorrect number of items in package)

Product types:

- end-products (food, textiles, plastics etc)
- industrial raw materials
- recycling materials

can be integrated into all types of conveyor systems



### Sorting mixed materials into single fractions:

Types of material:

- glass
- plastics
- metals
- and many others

Delivery flows:

- bulk materials
- individually packaged product

can be integrated into:

- conveying systems
- bulk material flows

## Operating Companies:



### Sesotec ASM S.r.l.

Bologna  
Italy  
info.asm@sesotec.com  
www.sortingasm.com



### Sesotec Inc.

Bartlett  
USA  
info@sesotec.us  
www.sesotec.us



### Sesotec Canada Ltd.

Cambridge  
Canada  
info@sesotec.us  
www.sesotec.ca



### Sesotec Pte. Ltd.

Singapore  
info@sesotec.com.sg  
www.sesotec.com.sg



### Sesotec Pvt. Ltd.

Pune  
India  
info.india@sesotec.com  
www.sesotec.com



### Sesotec Shanghai Co. Ltd.

Shanghai  
China  
enquiry@sesotec.com.cn  
www.sesotec.com.cn



### Sesotec Thailand Ltd.

Bangkok  
Thailand  
info@sesotec.com  
www.sesotec.com

... and more than 40 agencies worldwide

Made in Germany

For further information or to discuss your particular application contact one of our specialists.

# www.sesotec.us



**Choose the Original**  
**Choose Success!**