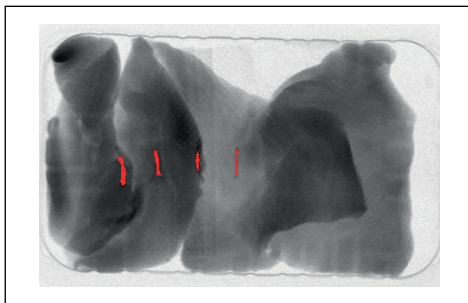
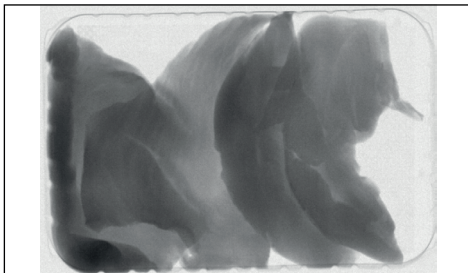
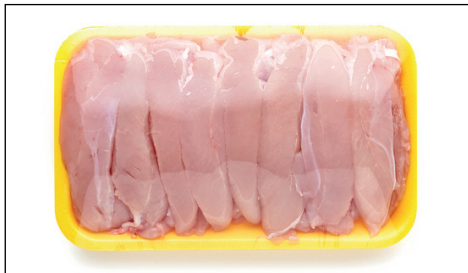


# RAYCON D+

## Product Inspection system for medium and large sized packaged products

- Highly accurate foreign body detection starting from 0.3 mm
- Identification of soft contaminants
  - Glass, stones, bones, ceramic, ...) due to "Dual-Energy" detection technology
- Enhanced Usability features ensuring highest possible uptime:
  - Tool-Less cleanability, maintainability
  - Intelligent software filtering proposals
- Operator friendly
  - 15" wide screen touch display for large x-ray image visibility
  - Login within 1second due to RF-ID chip login (full traceability)
  - Automatic X-Ray power selection for best detection results and maximum component lifetime
- Hygienic, Industrial Design
  - Sloped surfaces
  - Water flows off easily
  - Robust construction



Arrow on impurity  
"Fresh chicken bones within chicken fillet"



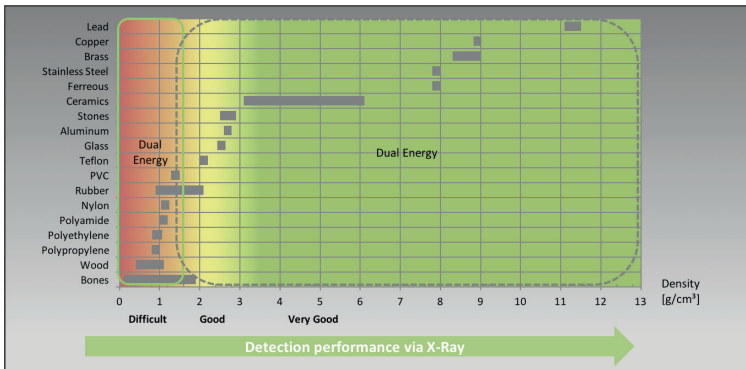
# RAYCON D+

## Performance features



The RAYCON D+ product inspection system detects all contaminants that due to their density, chemical composition, or mechanical dimensions absorb X-rays better than the surrounding product.

With its optional capability using Dual-Energy technology the performance for soft contaminants gets extremely improved for materials e.g. types of plastics (PVC, aso.), rubber, ceramics, stones, calcified bones and similar materials.

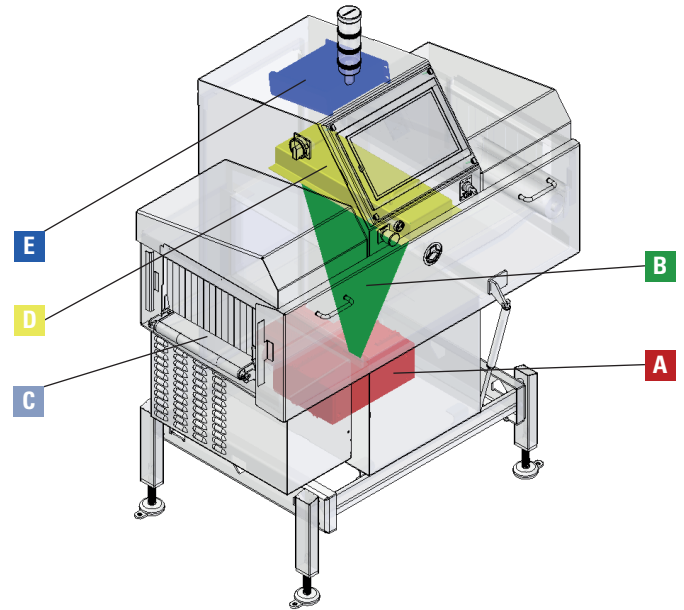


*Detectability of different materials depending on their density*

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

- Throughput: ~1200 pcs./min. (product specific)
- Detection capability starting from  $\varnothing$  0,3 mm
- 200W long life X-Ray generator
- Highest operator safety due to low X-Ray emission  $< 0.5\mu\text{Sv/h}$
- Modular and stable frame design allows easy transportation and safe installation
- Ambient temperatures from  $0^{\circ}\text{C}$  to  $+ 40^{\circ}\text{C}$
- IP 66 protection class within conveyor area

## 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.

- 0,4 mm resolution (standard)
- 0,8 mm Dual Energy (optional)

### **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 industry-type PC with real-time operating system and sophisticated visualisation software.

Due to its artificial intelligence features it provides maximum availability and supports the operator thoroughly.

- Maximum sensitivity and longest component lifetime without any manual adjustment
  - ➔ Automatic X-ray power adjustment feature adjusts the necessary x-ray energy automatically based on the absorption of the inspected product.
- Minimum false rejects, Minimum rework
  - ➔ Based on the package shape or packaging effects the software suggests necessary filter setups to the operator

## 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

Quick operator access within seconds due to RF-ID login

- ➔ Full traceability of actions

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.

For detailed information please request our technical data sheet.

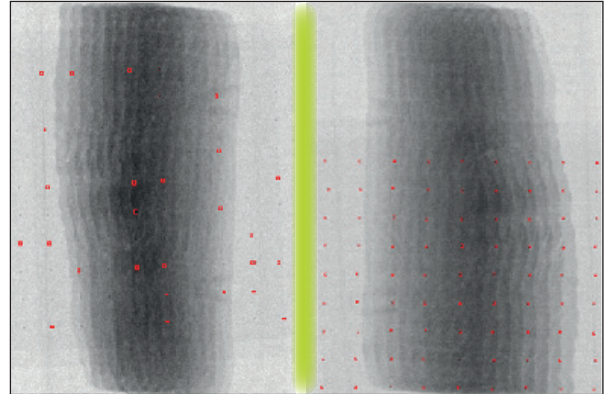
## Technology comparison

Single Energy vs. Dual Energy

### Sensitivity:

#### Conventional systems

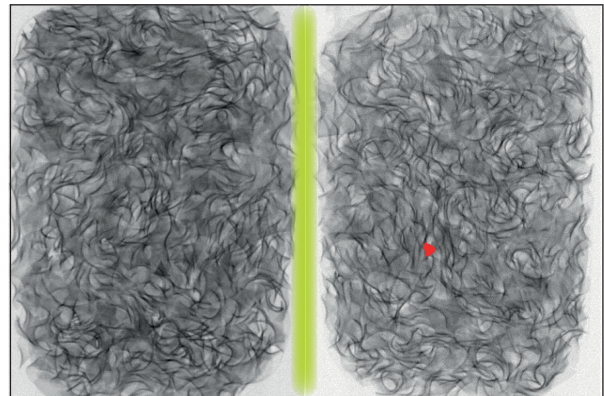
#### RAYCON D+



Sliced bacon with 0.4 mm stainless steel impurities

#### Conventional systems

#### RAYCON D+ Dual Energy



Noodles with glass splinter 2 mm x 3 mm (W x L)

### 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!

## Sesotec Inc.

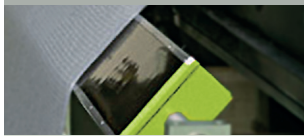
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# Sesotec system world



### 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

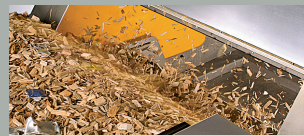
Quantitative defects:

- 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:



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