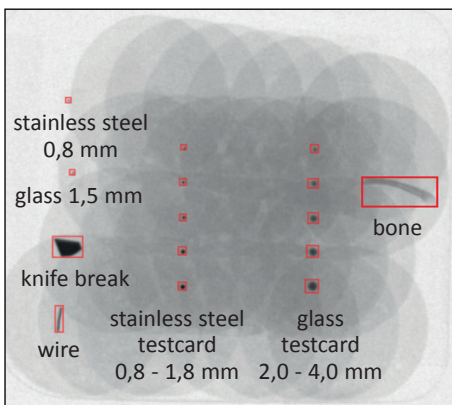# sesotec

RAYCON EX1
Product inspection system
for slim and packaged products
at moderate pricing

■ Hygienic, Industrial Design

■ Focus on Usability:

■ Best in class user interface

■ Best cleanability, maintainability

■ Easiest handling & installation

➜ Easy decision!

stainless steel
0,8 mm

glass 1,5 mm

bone

knife break

wire   stainless steel   glass
        testcard   testcard
        0,8 - 1,8 mm   2,0 - 4,0 mm
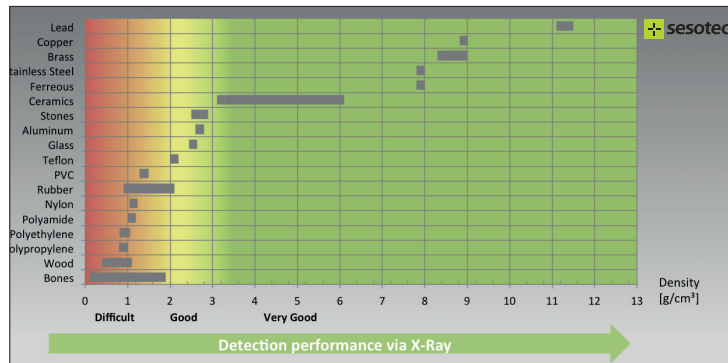

RAYCON

Made in Germany

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. For example 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
- Total length of 800mm only
- 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 (for customer specific reject systems)

Function
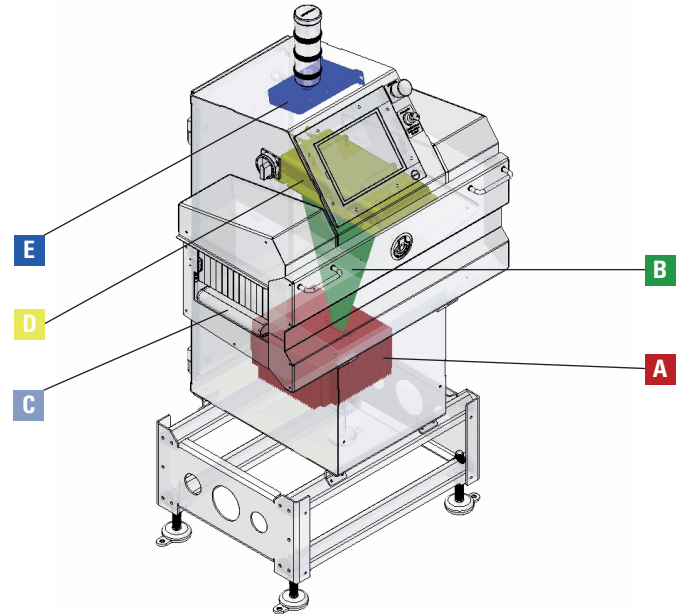
The system comprises the following main components:

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. Depending on the product height and density a part of the X-rays is absorbed by the product.

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, which makes it possible to scan the product line-by-line.

D Detector unit

The linear detector line that is installed beside the conveyor belt 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 industry-type PC with real-time operating system and sophisticated visualisation software.

The system is operated by way of a 10" – LCD monitor with touch-screen.

X-ray images are evaluated by means of a product-specific visualisation software. Contaminated or defective products are detected and separated.

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 due to operators command by just marking the x-ray image with fingers
➔ Saves time consuming adjustments

No special knowledge required

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 within 2 minutes

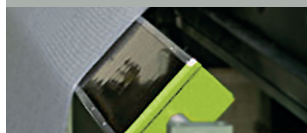

Example with integrated reject system

> ### Important information:
> X-radiation is classified as ionising radiation. However, X-radiation is no 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.

raycon-ex1-pr-en-0618-v1.1

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

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

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Choose Success!**