



**ELEKTRONIK SYSTEM**

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## I LAMP X-RAY SCANNER ELEKTRON-SXRF-1630I

- ▶ The X-Ray scanner is designed for testing products in an upright position, i.e. bottles, jars with metal caps, tall cans, doypacks, etc.
- ▶ High level of detection and stable operation during product scanning, fast and precise contaminated product separator.
- ▶ Single-beam scanning technology product by means of a lamp directed from the side on the product to be tested in a standing position.
- ▶ The high-powered high-power ionising radiation lamp, ensures longer lifetime of the entire X-Ray scanner.
- ▶ Unusually easy and intuitive to use.
- ▶ Highest level of safety, meeting European CE standards and American FDA standards, optionally UL/CSA.



## ARTIFICIAL INTELLIGENCE - OPTIONAL

The X-Ray scanner can be equipped with artificial intelligence support, which much more accurately than a human analyzes the comparison data with tremendous computational speed. The AI robot learns to recognise and eliminate foreign bodies, errors, damage, deficiencies much more accurately than scanners of competing companies. AI significantly increases the level of detection and improves the accuracy of weighing a product of fixed form and shape.

| Model                                    | <b>ELEKTRON-SXRF</b>  |
|--|---|
| Maximum height of the test product       | 300 mm  |
| Maximum width of the test product        | 160 mm  |
| X-Ray lamp                               | 480W/ 120kV   |
| The smallest possible detectable testers | St/st ball from 0.5 mm, wire from 0.3x2 mm<br>Glass/Ceramics ball from 1.5 mm |
| The belt speed is adjustable             | 10-60 m/ min  |
| Operating system                         | Windows 7   |
| Communication ports                      | LAN port, USB port  |
| Product management                       | Automatic recording of parameters of the tested product                       |
| Image management                         | Automatic image recording and analysis  |
| Display                                  | 17" touch screen  |
| Cooling                                  | Industrial air conditioner  |
| Radiation protection                     | Protective tunnel and security system   |
| External radiation                       | <0,5μSu/h   |
| Working temperature                      | od -10°C do 40 °C   |
| Operating humidity                       | 30-90% non-condensed water vapor  |
| Tightness class                          | IP66  |
| Housing material                         | Glass-blasted stainless steel   |

## MAIN FEATURES

- High level of detection and unparalleled operating stability when scanning tall products.
- Touchscreen for easy operation and management of functions (possibility to fine-tune manual parameter settings).
- Detection of glass in glass (bottles, jars) and metal in metal packaging (cans).
- Possibility of filling level testing.
- Possibility of applying a mask to exclude parts of the package not subject to inspection, e.g. bottle wall, increasing the detection level.
- High conveyor belt speed allows large volumes of product to be tested.
- Intuitive and very simple operation.
- Remote 24-hour service support regardless of location.

## SYSTEM FUNCTIONS

- 2 password-protected access levels.
- The operator can manually adjust the settings.
- Detection of defective products with damage (deformed product, crumpled can, missing or defective product).
- Optional product weight check - the X-Ray scanner detects products with abnormal weight from as little as 1-5 g depending on product type.
- Quick and precise separation of contaminated or defective product.
- Automatic diagnostics and safety control system (detection of an open inspection door in the unit and immediate shutdown of the unit and switching off of the X- Ray tube radiation).

## „FROST” SYSTEM

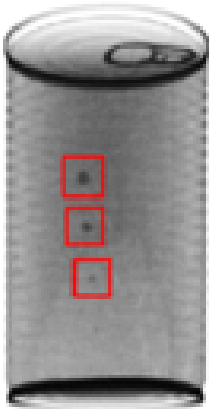
In the low temperature zone, the X-Ray scanner can be equipped with a feature not found in other devices, **"FROST" system** - temperature and humidity control system inside control system housings. A system that protects electronic circuits against moisture, cold and sudden temperature changes while washing. Protects against moisture absorption inside (e.g. a cold machine washed with hot water).

## LIST OF COMPONENTS

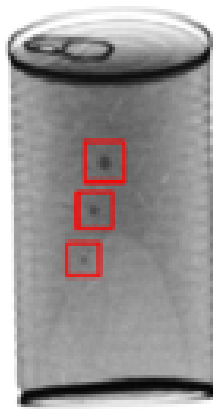
| FUNCTION                        | NAME                       | PRODUCER                |
|---------------------------------|----------------------------|-------------------------|
| X-Ray source                    | X-Ray generator            | VJ TECHNOLOGIES         |
| X-Ray receiver                  | X-Ray detector             | DETECTION TECHNOLOGY    |
| Device management               | 17" touch monitor          | ADVANTECH               |
| Data processing                 | Industrial computer        | ADVANTECH               |
| Temperature and wetness control | Air conditioner            | RITTAL                  |
| Conveyor belt drive             | Engine wiht gear           | ORIENTAL MOTOR          |
| Speed regulation                | Engine controller          | ORIENTAL MOTOR          |
| Electric protection             | Miniature circuit breakers | SCHNEIDER ELECTRIC /ABB |
| Connection between devices      | Military connectors        | PLT                     |
| Safety management               | Limit switches             | OMRON                   |
| Automation management           | PLC driver                 | SCHNEIDER ELECTRIC      |
| Warning information             | Optical-acoustic signaller | WERMA                   |

## X- RAY ELECTRON-SXRF-1630I SCANNER INSPECTION IMAGE

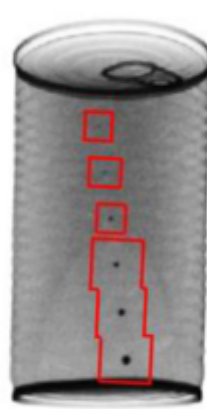
CERAMICS  
from 3,0mm



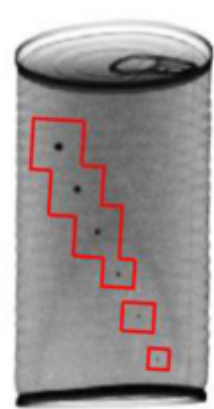
GLASS  
from 3,0mm



FERRUS  
from 1,0mm



STAINLESS STILL  
from 1,0mm



## 3D DRAWING OF ELEKTRON-SXRF-1630I

