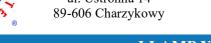
# elektronik system

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# I LAMP X-RAY SCANNER ELEKTRON-SXRF

- This state-of-the-art X-Ray scanner series is designed for the examination of products packaged in regular and irregular packaging, metallization and even flat metal cans.
- ► The device, scans products in irregular drift, detects packaging errors, defects, dents, incorrect weight with high accuracy.
- ► Very easy and intuitive operation.
- The high-powered ionising radiation lamp used, ensures longer life of the entire X-Ray scanner.
- Using artificial intelligence technology, the X-Ray scanner is almost maintenance-free.
- Easy and quick cleaning design. Conveyor belt removable and attachable in tens of seconds, conveyor rollers quick to install and remove.
- ► Highest level of safety, complying with European CE standards as well as the US FDA, optionally UL/CSA.
- ► We can adapt the design of the X-Ray scanner to the maximum extent in accordance with our customers' requirements (longer conveyor, higher IP level, SUS316 design, conveyor height).

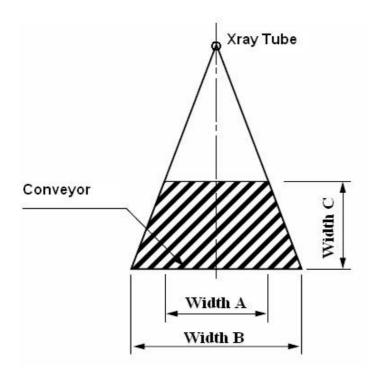


# **ARTIFICIAL INTELLIGENCE - OPTIONAL**

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                                    | ELEKTRON-SXRF   |  |
|--|---|--|
| Specification                            | 4080  |  |
| Maximum height of the test product       | 220 mm  |  |
| Maximum width of the test product        | 400 mm  |  |
| X-Ray lamp                               | Max. 80kV 350/480 W   |  |
| The smallest possible detectable testers | St/st ball from 0.3 mm, wire from 0.2x1 mm<br>Glass/Ceramics ball from 1.0 mm |  |
| Belt speed                               | Adjustable in the range of 0-60 m/min   |  |
| Connection                               | port LAN, port USB  |  |
| 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                       | $< 1\mu Su/h$   |  |
| Working temperature                      | od -10°C do 40 °C   |  |
| Operating humidity                       | 30-90% non-condensed water vapor  |  |
| Supply voltage                           | 230 VAC   |  |
| Power consumption                        | 1200 W  |  |
| Tightness class                          | IP65  |  |
| Air pressure                             | 6-8 bar   |  |
| Housing material                         | Glass-blasted stainless steel   |  |

#### SELECTING AN X-RAY SCANNER

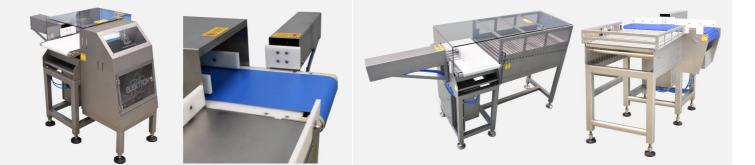


We select the type and type of X-Ray scanner accordingly with customer requirements. Product dimension must be included in the detection cone according to the table below.

| Model           | SXRF-4080      |
|-----------------|----------------|
| Products height | Products width |
| (A)             | <b>(B)</b>     |
| 0 mm            | 400 mm         |
| 10 mm           | 390 mm         |
| 20 mm           | 380 mm         |
| 30 mm           | 371 mm         |
| 40 mm           | 361 mm         |
| 50 mm           | 351 mm         |
| 60 mm           | 341 mm         |
| 70 mm           | 331 mm         |
| 80 mm           | 322 mm         |
| 90 mm           | 312 mm         |
| 100 mm          | 302 mm         |
| 110 mm          | 292 mm         |
| 120 mm          | 282 mm         |
| 130 mm          | 272 mm         |
| 140 mm          | 263 mm         |
| 150 mm          | 253 mm         |
| 160 mm          | 244 mm         |
| 170 mm          | 234 mm         |
| 180 mm          | 224 mm         |
| 190 mm          | 214 mm         |
| 200 mm          | 204 mm         |
| 210 mm          | 194 mm         |
| 220 mm          | 185 mm         |

# **EXAMPLE OF SEPARATORS**

**Pusher** Separator in the form of a pusher with a lockable container. **Pusher** Separator in the form of a pusher with a conveyor roller conveyor.



**Single separator** Separator in the form of a dropping conveyor for rejecting products fed in a single row.

 Double separator

 Separator in the form of two dropping conveyors for

 \_\_\_\_\_\_reject products fed in two rows.



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### MAIN FEATURES

- Very high level of detection and unparalleled operating stability when scanning products of different shapes entering irregularly or even drifting.
- Touchscreen for easy operation and management of functions (possibility to fine-tune manual parameter settings).
- Detection of all metals, stones, glass, ceramics, rubber, hard plastics.
- Intuitive and simple operation.
- Smooth management of each detection zone increasing the level and quality of scanning.
- 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, no product or defective product).
- Built-in weight controller X-Ray scanner eliminates products with incorrect weight from 1-5 grams depending on the type of product.
- Possibility of cooperation with any separator.
- Automatic diagnostics and safety control system (detection of open inspection doors in the device and immediate stopping of the device and turning off the X-Ray lamp radiation).

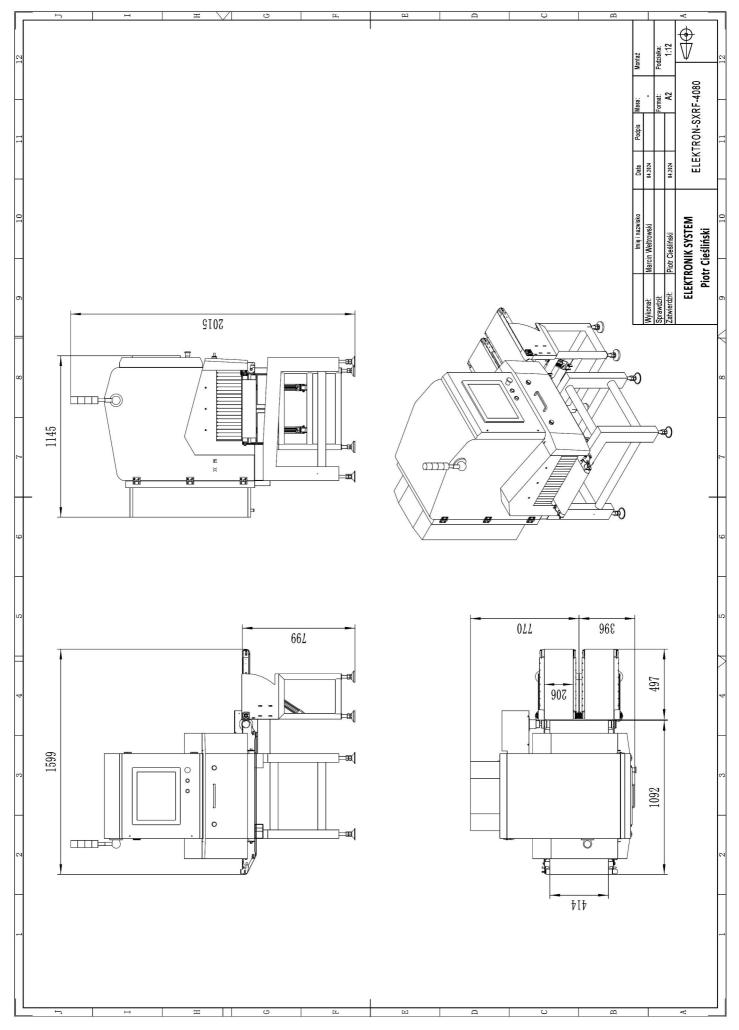
## "FROST" SYSTEM

In the low temperature zone, the X-Ray scanner can be equipped with an unprecedented "FROST" systema system for controlling the temperature and humidity inside the enclosures of the control systems. A system that protects the electronics against humidity and cold and abrupt temperature changes during cleaning. It prevents the absorption of moisture inside (e.g. a cold machine washed with hot water).

## LIST OF COMPONENTS

| FUNCTION                        | NAME                       | PRODUCER                |
|---------------------------------|----------------------------|-------------------------|
| X-Ray source                    | X-Ray generator            | VJ USA                  |
| X-Ray receiver                  | X-Ray detector             | DT FINLANDIA            |
| 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                   |

## **TECHNICAL DRAWINGS OF ELEKTRON-SXRF-4080**



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