



**ELEKTRON SYSTEM**

Piotr Cieślinski

ul. Ustronna 14  
89-606 Charzykowy

+48 608 34 34 34  
elektron@metaldetektor.pl

## I LAMP X-RAY SCANNER ELEKTRON-SXRF-8040

- X-Ray scanners dedicated to the inspection of products packed in E1, E2 and bulky cardboard boxes.
- 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).

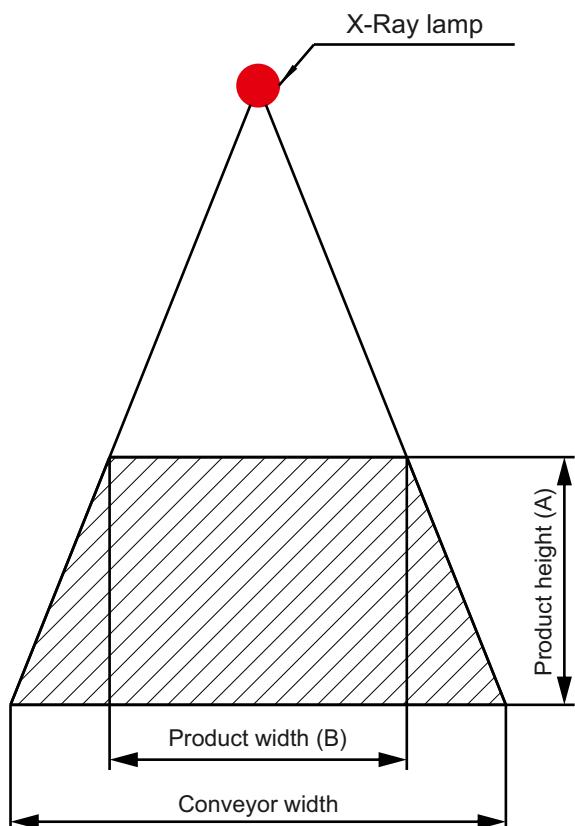


## ARTIFICIAL INTELLIGENCE SUPPORT - ADDITIONAL OPTION

The X-Ray scanner is equipped with artificial intelligence support, which analyzes comparative data much more accurately than humans, with enormous computing speed. AI is like a virtual operator, which constantly ensures the highest quality of the X-Ray scanner's work, replacing a qualified operator in this position. The AI robot learns to recognize and eliminate foreign objects, errors, damage, and deficiencies much more accurately than competing scanners. AI significantly increases the level of detection, improves the accuracy of weighing products with a fixed form and shape, and disproportionately reduces the number of false rejects.

Model	<b>ELEKTRON-SXRF</b>
Specification	<b>8040</b>
Maximum height of the test product	400 mm
Maximum width of the test product	795 mm
X-Ray lamp	80kV 350W / 480W
The smallest possible detectable testers	St/st ball from 0.5 mm, wire from 0.2x1 mm Glass/Ceramics ball from 1.0 mm
Belt speed	Adjustable in the range of 10-40 m/min
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	< 1 $\mu$ Sv/h
Working temperature	od 0°C do 40 °C
Operating humidity	30-90% non-condensed water vapor
Supply voltage	220 VAC
Power consumption	1200 W
Tightness class	IP65
Air pressure	6-8 bar
Housing material	Glass-blasted stainless steel

## SELECTING AN X-RAY SCANNER



Model	SXRF-8040
Wysokość produktu (A)	Szerokość produktu (B)
0 mm	795 mm
10 mm	785 mm
20 mm	777 mm
30 mm	768 mm
40 mm	759 mm
50 mm	750 mm
60 mm	742 mm
70 mm	733 mm
80 mm	724 mm
90 mm	716 mm
100 mm	707 mm
150 mm	663 mm
200 mm	619 mm
250 mm	576 mm
300 mm	532 mm
350 mm	488 mm
400 mm	445 mm

## EXAMPLE OF SEPARATORS

### Pusher

Separator in the form of a bulldozer for discarding large and heavy bags, cardboard boxes and E1, E2 boxes.



## 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" system - a 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 with 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 DRAWING OF THE ELEKTRON-SXRF-8040 SCANNER

