



ELEKTRONIK SYSTEM

Piotr Cieślinski

ul. Ustronna 14
89-606 Charzykowy

+48 608 34 34 34
elektron@metaldetektor.pl

I LAMP X-RAY SCANNER ELEKTRON-SXRF-5080

- ▶ X-ray scanners designed primarily for inspecting larger packaged products, both regular and irregular in shape, wrapped in metallized film, 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).

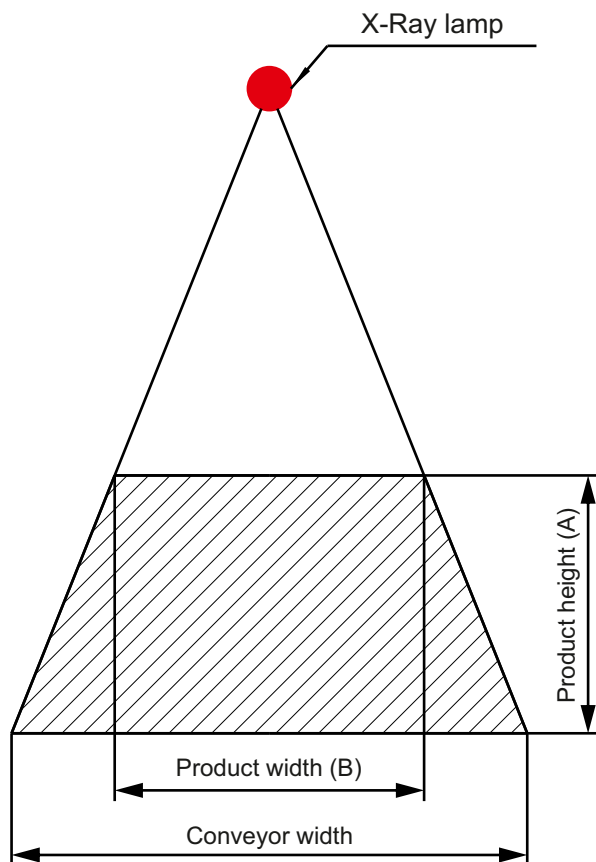


ARTIFICIAL INTELLIGENCE SUPPORT - ADDITIONAL OPTION

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	ELEKTRON-SXRF
Specification	5080
Maximum height of the test product	250 mm
Maximum width of the test product	500 mm
X-Ray lamp	80kV 350W / 480W
The smallest possible detectable testers	St/st ball from 0.4 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	< 1μSv/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 -5080
Product height (A)	Product width (B)
0 mm	500 mm
10 mm	489 mm
20 mm	477 mm
30 mm	466 mm
40 mm	455 mm
50 mm	443 mm
60 mm	432 mm
70 mm	420 mm
80 mm	409 mm
90 mm	398 mm
100 mm	386 mm
110 mm	375 mm
120 mm	363 mm
130 mm	352 mm
140 mm	340 mm
150 mm	329 mm
160 mm	218 mm
170 mm	307 mm
180 mm	295 mm
190 mm	284 mm
200 mm	272 mm
210 mm	261 mm
220 mm	250 mm
230 mm	239 mm
240 mm	227 mm
250 mm	214 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.



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

- Four password-protected access levels.
- The operator can manually adjust settings.
- Detection of defective products with damage (deformed product, dented can, missing product or substandard product).
- Records of product inspections in the form of images, system events in the form of tables and graphs.
- Ability to adjust the automatic separator to the type of product being inspected; equipped with air pressure drop sensors, rejection confirmation, and a container for defective products
- Automatic diagnostics and safety control system (detection of open inspection doors in the device, followed by immediate machine shutdown and deactivation of the X-ray tube).

„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 TECHNOLOGIES
X-Ray receiver	X-Ray detector	ELEKTRON -OEM
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

