

ELEKTRONIK SYSTEM

Piotr Cieślinski

ul. Ustronna 14
89-606 Charzykowy

+48 608 34 34 34
elektron@metaldetektor.pl

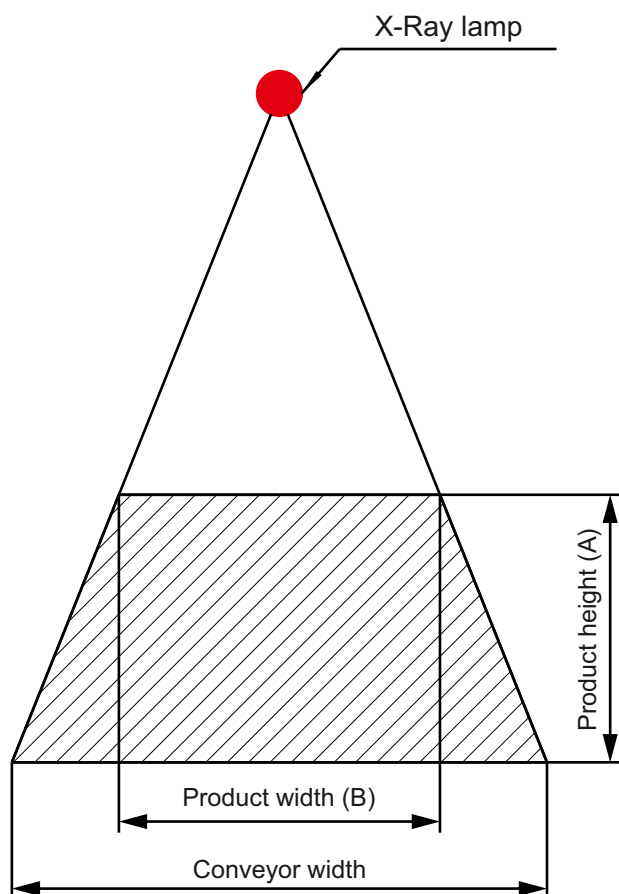
MINI X-RAY SCANNER ELEKTRON-SXRF-2820

- ▶ A range of small, low-cost X-ray scanners for inspecting products in cardboard, plastic, vacuum-sealed, PET and PP packaging, as well as packaging with metallised film, aluminium, glass (in the form of short jars with metal lids) and flat metal tins.
- ▶ The X-ray scanner scans products in a random flow, detecting all metals, stones, glass and ceramics. It checks the weight of products in uniformly shaped packaging.
- ▶ High sensitivity and operational stability – the highest possible achievable with maximum radiation penetration through the product.
- ▶ Very easy and intuitive operation.
- ▶ Designed for quick and easy cleaning. The conveyor belt can be removed and refitted in a matter of tens of seconds.
- ▶ The highest level of safety, complying with international standards and CE requirements, supervised by the PAA in accordance with EUROATOM legislation..



Model	ELEKTRON -SXRF 2820
X-ray lamp	MAX. 65kV, 1 50W
Detector	0,4mm
Maximum product height	150mm
Maximum product width	290mm
Maximum belt load	10kg
Tape speed	Adjustable in the range of 10 -80 m/min
Connection	LAN port, USB port
Product management	Automatic recording of the parameters of the tested product
Image management	Automatic image saving and analysis
Parameter adjustment	Automatic self-learning
Display	17" touch screen
Operating system	windows
Cooling	Industrial air conditioner
Radiation protection	Protective curtains
External radiation	< 1μSv/h
Product temperature	More than 0 °C
Working temperature	from -10°C to 40°C
Working humidity	30-90% non-condensing water vapor
Supply voltage	220V ± 10%
Power consumption	1200 W
Tightness class	IP65
Housing material	Glass-blasted stainless steel

SELECTING AN X-RAY SCANNER



Product height(A)	Product width (B)
0 mm	290 mm
10 mm	282 mm
20 mm	274 mm
30 mm	267 mm
40 mm	260 mm
50 mm	251 mm
60 mm	243 mm
70 mm	237 mm
80 mm	228 mm
90 mm	220 mm
100 mm	213 mm
110 mm	205 mm
120 mm	197 mm
130 mm	190 mm
140 mm	182 mm
150 mm	176 mm

TYPES OF REJECTS

Pusher

A separator in the form of a pusher with a lockable container.



Pusher

A separator in the form of a pusher with a roller conveyor.



Trap separator

A separator in the form of a downward-sloping conveyor for rejecting products fed in a single row.



Air nozzle separator

A separator using a compressed-air nozzle, designed for products weighing up to 500 g.



MAIN FEATURES

- Its compact design and small size make it suitable for installation in production lines with limited space.
- Designed and built to replace expensive metal detectors while simultaneously improving foreign object detection capabilities.
- High detection sensitivity and operational stability when scanning products of various shapes that enter irregularly or even drift.
- Touchscreen enables easy operation and management of functions (with the ability to fine-tune manual parameter settings).
- Detection of all metals, stones, glass, ceramics, rubber, and hard plastic.
- Intuitive and simple operation.
- Seamless management of each detection zone, improving the level and quality of scanning.
- 24-hour remote technical support, regardless of the device's location.

SYSTEM FUNCTIONS

- Four password-protected access levels.
- The operator can manually adjust the settings.
- The built-in weigh controller and X-ray scanner eliminate products with incorrect weights in packages with regular and repeatable shapes.
- Records of product inspections in the form of images, as well as system events presented in tables and graphs.
- The automatic separator can be adjusted to the type of product being inspected; it is equipped with sensors for air pressure loss, rejection confirmation, and detection of a full container for non-conforming products.
- Automatic diagnostics and safety control system (detection of an open inspection chamber door, followed by immediate machine shutdown and deactivation of the X-ray tube).

LIST OF COMPONENTS

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

