



**ELEKTRON SYSTEM**

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## I LAMP X-RAY SCANNER ELEKTRON-SXRF-2480

- This state-of-the-art series of X-ray scanners is designed for examining products packed in regular and irregular packaging, metallization and even flat metal cans.
- The device scans products in irregular packaging, detects packaging errors, defects, dents, detects incorrect weight with high accuracy.
- Selectable power of the ionising radiation lamp up to 350W, which ensures longer life of the entire X-ray scanner.
- Very easy and intuitive operation.
- The use of artificial intelligence technology makes the X-ray scanner almost maintenance-free.
- Easy and quick cleaning. Conveyor belt removable and attachable in seconds, conveyor rollers quick to install and remove.
- Highest level of safety, compliance with European CE standards, as well as American FDA, optionally UL/CSA.
- We can customise the design of the X-ray scanner to the maximum extent according to our customers' requirements (longer conveyor, higher IP level, SUS316 design, conveyor height).

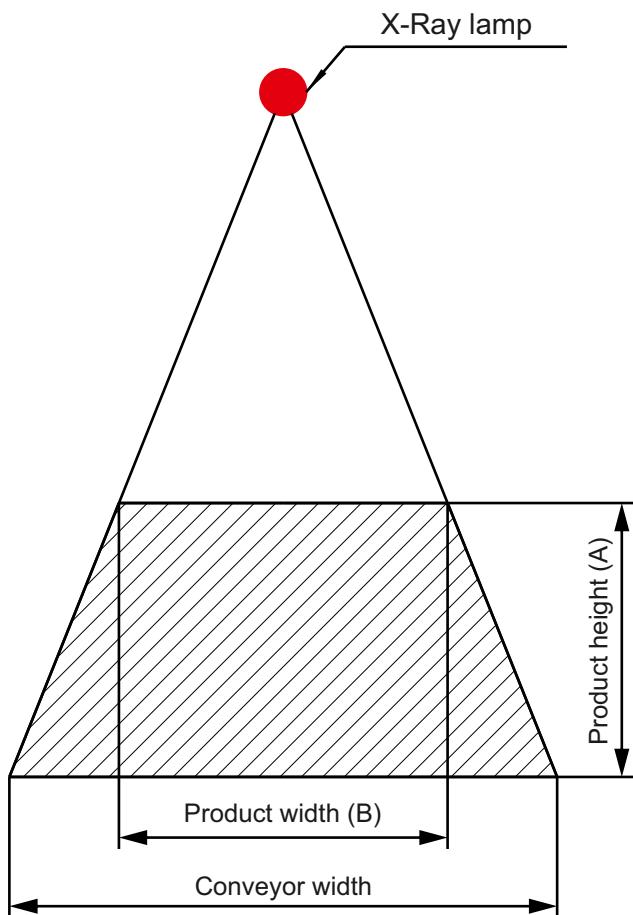


### ARTIFICIAL INTELLIGENCE SUPPORT - ADDITIONAL OPTION

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-2480</b>
<b>Maximum height of the test product</b>	160mm
<b>Maximum width of the test product</b>	240mm
<b>X-ray lamp</b>	210W, 350W
<b>The smallest possible detectable testers</b>	St/st ball from 0.4 mm, wire from 0.2x2 mm Glass/Ceramic ball from 1.0 mm
<b>Tape speed</b>	Adjustable in the range of 10-60 m/min
<b>Communication ports</b>	LAN port, USB port
<b>Product management</b>	Automatic recording of the parameters of the tested product
<b>Image management</b>	Automatic image saving and analysis
<b>Display</b>	17" touch screen
<b>Cooling</b>	Industrial air conditioner
<b>Recoil type</b>	Pneumatic separator
<b>Radiation protection</b>	Protective tunnel and security system
<b>External radiation</b>	< 1 $\mu$ Sv/h
<b>Working temperature</b>	from 0°C to 40°C
<b>Working humidity</b>	30-90% non-condensing water vapor
<b>Supply voltage</b>	230VAC
<b>Power consumption</b>	1200W
<b>Tightness class</b>	IP65
<b>Housing material</b>	Glass-blasted stainless steel

## SELECTING AN X-RAY SCANNER



The type and type of the X-Ray scanner are selected according to the customer's requirements. The product dimension must be entered in the detection cone according to the table below.

Product height(A)	Product width (B)
0 mm	240 mm
10 mm	236 mm
20 mm	233 mm
30 mm	229 mm
40 mm	225 mm
50 mm	221 mm
60 mm	217 mm
70 mm	214 mm
80 mm	210 mm
90 mm	206 mm
100 mm	202 mm
110 mm	198 mm
120 mm	194 mm
130 mm	191 mm
140 mm	188 mm
150 mm	184 mm
160 mm	180 mm

## EXAMPLES OF SEPARATORS

### Pusher

Pusher shaped separator with a lockable container.



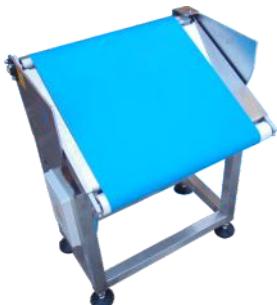
### Pusher

Separator in the form of a bulldozer with a conveyor roller conveyor.



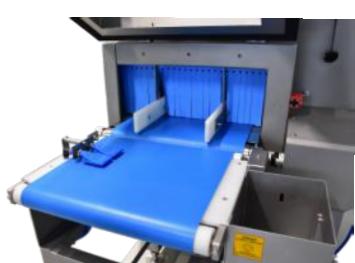
### Single separator

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



### Separator with blower

Separator in the form of a conveyor with an air blower, designed for the separation of light products.



## 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).

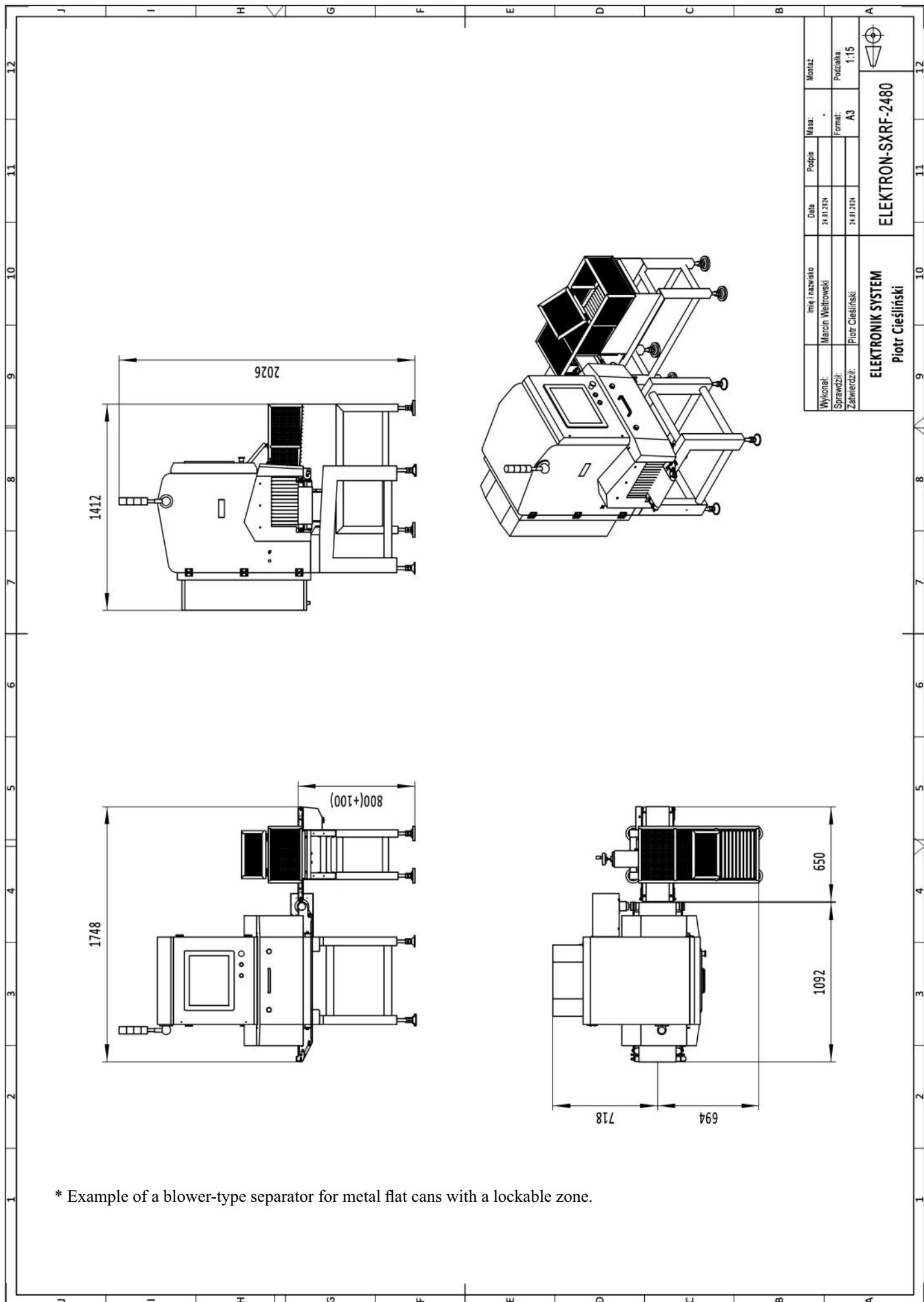
## „FROST” SYSTEM

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 DRAWINGS OF ELEKTRON-SXRF-2480



\* Example of a blower-type separator for metal flat cans with a lockable zone.