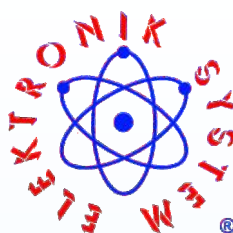


PRODUCT CATALOGUE

# X-RAY SCANNERS

## ELEKTRON



[www.detektorymetali.com](http://www.detektorymetali.com)



Here, in Elektronik System, we have been producing detection systems for all metals and other foreign bodies in food, knitting and industrial products since 1995. Many years of experience and improvements inspired by our clients have allowed us to implement user-friendly and intuitive systems over the years. The highest level of detection, reliability and stability of metal detectors and X-Ray scanners is appreciated by our customers around the world. Our machines replace human work and do not require complicated handling. In our metal detectors, we have introduced a non-contact auto-learning system and an auto-calibration system - unparalleled in other detectors. 10-year warranty on metal detector heads proves the highest quality of our products. X-Ray scanners using state-of-the-art solutions in the field of ionizing radiation are at the forefront of world leaders.







## APPLICATION

X-Ray scanners **ELEKTRON-SXRF** are designed for the detection of foreign bodies in loose and packed products, in particular in metallized, aluminum, glass and metal-closed packaging and in metal cans.

## RANGE OF DETECTION

The X-Ray scanner is distinguished by its high sensitivity and stable operation - the the highest achievable, with the highest penetration of X-rays through the product and its packaging: St/St-o from 0.3mm, St/St wire from 0.2x1mm, glass- o from 1mm, Ceramics: 1 mm and above, stone: 1 mm and above using a high-power lamp and a receiver with a photodiode high-power lamp and photodiode receiver - 0.4mm for small and flat products.

## PRINCIPLE OF OPERATION

The X-Ray scanner detects any foreign bodies which density and specific gravity is higher than water (any body that sinks immediately in the water). For such foreign bodies mainly metals, stones, glass, bones or hard plastic. The **DUAL ENERGY** device raises the level detection of lower density contaminants, e.g. small bones, rubber, plastic.

## MAIN FEATURE

- The highest level of detection,
- Compliant with CE, FDA, CSA directives and standards,
- Warranty for the scanner for 24 months,
- 24h technical support - WAN,
- Easy and intuitive user interface,
- Visual information system with X-rays on,
- Matched contaminated product separation systems to the type, size and weight of the product,
- Testing the product with and without packaging,
- Changing the conveyor belt in 30 seconds,
- Built-in weight controller- X-Ray scanner eliminates products with incorrect weight as low as 1-5 grams depending on the type of product.
- Detection of defective products with detriment (deformed product, crumpled can, missing product or defective product)
- Automatic diagnostics and security control system (detection of open inspection door in immediate device stop and shutdown X-ray lamp radiation).



## ARTIFICIAL INTELLIGENCE

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.

## ADDITIONAL ADVANTAGES

- several password-protected system levels,
- individual adaptation of the machine to the production line with high accuracy,
- modernisation of the equipment according to the requirements and expectations of our customers,
- all our scanners are certified by the National Atomic Energy Agency No. D-17869,
- marking of the X- Ray scanner according to the requirements of the strategic customer,
- technical drawings in DWG form at the detail stage,
- central control of additional equipment, e.g. contamination separators, conveyors feed and receiving and return conveyors.

## „FROST”SYSTEM

The X-Ray scanner can be equipped with an unprecedented **‘FROST’ system** with a built-in intelligent heating and thermostat system inside the control panel. control panel, which protects the internal electronics from moisture and cold. This is the only protection against abrupt temperature changes during washing and prevents moisture absorption into the interior (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	DETECTION TECHNOLOGY
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	Enginr 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



- ▶ Offering small and low-cost X- Ray scanners formetal detectors for the examination of products in PET, PE, vaccum, metallized packaging, aluminium, glass in the form of low jars with metal caps and in metal flat cans.
- ▶ X-Ray scanner, scans products in irregular drift, detects packaging errors, defects, dents, detects incorrect weight with high accuracy.
- ▶ High sensitivity and stable operation-the highest achievable with the highest penetration of radiation through the product.
- ▶ Very easy and intuitive to use.
- ▶ Easy and quick cleaning design. Conveyor belt removable and attachable in tens of seconds.
- ▶ Highest level of safety, meeting European CE standards as well as US FDA standards, optionally UL/CSA.



Model	<b>ELEKTRON-SXRF-2820</b>
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
Working temperature	from -10°C to 40°C
Working humidity	30-90% non-condensing water vapor
Supply voltage	220VAC
Power consumption	1200W
Tightness class	IP65
Machine cleaning level	Easy
Material	Glass-blasted stainless steel

- ▶ This state-of-the-art series of X-Ray scanners 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 and detects incorrect weight with high accuracy.
- ▶ Selectable wattage of the radiation lamp ionising radiation lamp up to 350W, ensuring longer lifetime of the entire X-Ray scanner.
- ▶ Very easy and intuitive to use.
- ▶ Using artificial intelligence technology, the X-Ray scanner is almost maintenance-free.
- ▶ Easy and quick cleaning design. Conveyor belt can be removed and replaced in seconds, conveyor rollers for quick quick to assemble and dismantle.
- ▶ Highest level of safety, meeting European CE standards as well as US FDA standards, optionally UL/CSA.
- ▶ We can customise the design of the X-Ray scanner to the maximum extent according to our customer's requirements (higher IP level, longer transporter, SUS316 design, height of the transporter).



<b>Model</b>	<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>Connection</b>	LAN port, USB port
<b>Product management</b>	Automatic recording of the parameters of the tested product
<b>Image management display</b>	Automatic image saving and analysis 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>	< 1μSv/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>Material</b>	Glass-blasted stainless steel

- ▶ This state-of-the-art series of X-Ray scanners is designed for the examination of products packaged in regular and irregular, metallised and even flat metal cans.
- ▶ The device, scans products in an irregular drift, detects packaging errors, defects, dents, incorrect weight with high accuracy.
- ▶ Very easy and intuitive to use.
- ▶ The high-powered ionising radiation lamp used high-powered, ensures longer lifetime of the entire X-Ray scanner.
- ▶ Using artificial intelligence technology the X-Ray scanner is virtually maintenance-free.
- ▶ Easy and quick cleaning design. Conveyor belt can be removed and replaced in seconds, conveyor rollers for quick quick to assemble and dismantle.
- ▶ Highest level of safety, meeting European CE standards as well as US FDA standards, optionally UL/CSA.
- ▶ We can customise the design of the X-Ray scanner to the maximum extent according to our customer's requirements ( higher IP level, longer transporter, SUS316 design, height of the transporter).



Model	<b>ELEKTRON -SXRF</b>
Specification	<b>4080</b>
Maximum height of the test product	220 mm
Maximum width of the test product	400 mm
X-Ray Lamp	MAX. 80 kV, 350 /480 W
Smallest detectable testers possible	St / st ball from 0.4 mm, wire from 0.2x1 mm Glass / Ceramic ball from 1.0 mm
Belt speed	Adjustable in the range of 0 -60 m / min
Connection	LAN port, USB port
Product management	Automatic saving of the parameters of the tested product
Image management	Automatic image saving and analysis
Display	17 "touch screen
Cooling	Industrial air conditioner
Radiation protection	Protective tunnel and security system
External radiation	< 1μSv/h
Working temperature	from -10°C to 40 °C
Working humidity	30-90% non-condensing steam
Supply voltage	230 VAC
Power	1200 W
IP class	IP65
Air pressure	6-8 bar
Main material	Glass-blasted stainless steel



DUAL ENERGY supported by artificial intelligence

- ▶ X-Ray scanner designed for examining bulk products, e.g. cuts meat, offal, fish.
- ▶ X-ray detector combined with **DUAL ENERGY** technology for the highest level of sensitivity available on the market,
- ▶ Particularly suitable for the elimination of bones and bones as well as other foreign bodies, i.e. glass, rubber, hard plastic.
- ▶ Easy and quick to clean design.
- ▶ Highest level of safety, meeting European CE and as well as the American FDA, optionally UL/CSA.



Model	<b>ELEKTRON-SXRF</b>
Specification	4080DE
Maximum height of the test product	100 mm
Maximum width of the test product	400 mm
X-Ray Lamp	MAX. 80 kV, 350W
Smallest detectable testers possible	St/st ball from 0.3 mm, wire from 0.2x2 mm Glass/Ceramic ball from 1.0 mm
Belt speed	Adjustable in the range of 1-10 m / min
Operating system	Windows 7
Display	17" touch screen
Cooling	Industrial air conditioner
Kind of kickback	Pneumatic separator
Radiation protection	Protective tunnel and security system
External radiation	< 0,5µSv/h
Working temperature	from -10°C to 40 °C
Working humidity	30-90% non-condensing steam
Supply voltage	230 VAC
Power consumption	1200 W
Tightness class	IP66, optionally IP69/IP69K
Air pressure	0.8 Mpa
Material	Glass-blasted stainless steel

DUAL ENERGY X -RAY SCANNER

The **ELEKTRON-SXRF-4080DE** X- Ray scanner uses dual-energy beams at two different levels. The first beam of ionising radiation enters the attenuation receiver. This effect occurs, when the beam is filtered on part of the receiver system. The scanner then generates a second high-energy beam to the other part of the receiver to analyse the scanned object and compare the image. The high and low energy signals obtained by the dual energy system are sent to a computer, which are calculated from the processed data and the values associated with the equivalent atomic number of the substance. The software automatically compares the high and low energy images, analysing whether there is a difference in the atomic number of the stored standard and the foreign body using a hierarchical algorithm.

DUAL ENERGY supported by ARTIFICIAL INTELLIGENCE

- ▶ X-Ray scanner designed for the examination of bulk products such as cuts of meat, offal, fish.
- ▶ **PHOTON** X-Ray detector combined with **DUAL ENERGY** technology provides the highest level of sensitivity available on the market.
- ▶ The main purpose is to remove bones from meat and bones from fish. It is excellent at finding foreign bodies such as ceramics, glass, rubber and hard plastic.
- ▶ Designed for easy and quick cleaning.
- ▶ Highest level of safety, meeting European CE standards as well as American FDA standards, UL/CSA optional.
- ▶ Possibility of adapting the device structure to the conditions of the production line (longer conveyor, higher IP protection level, SUS316 construction, conveyor height).



Model	<b>ELEKTRON -SXRF</b>
Specification	4080 <b>DE-FC</b>
Maximum height of the test product	100 mm
Maximum width of the test product	400 mm
X-ray lamp	MAX. 80 kV, 350W
The smallest possible detectable testers	St/st ball from 0.3 mm, wire from 0.2x2 mm Glass/Ceramic ball from 1.0 mm
Tape speed	Adjustable in the range of 0 -40 m/min
Display	17" touch screen
Cooling	Industrial air conditioner
Radiation protection	Protective tunnel and security system
External radiation	< 0.5μS v/h
Working temperature	from -10°C to 40°C
Working humidity	30-90% non -condensing water vapor
Supply voltage	230VAC
Power consumption	1200W
Tightness class	IP66, optionally IP69/IP69K
Air pressure	0.8Mpa
Housing material	Glass -blasted stainless steel



- ▶ The scanner, due to its design dedicated to frozen fruit and vegetables served in bulk.
- ▶ The software allows the inspection of irregularly shaped and uniquely drifting.
- ▶ The high-powered ionising radiation lamp used high-powered, ensures longer lifetime of the entire X-Ray scanner.
- ▶ Very easy and intuitive to use.
- ▶ Easy and quick cleaning design. Conveyor belt detachable and attachable in seconds.
- ▶ We can adapt the design of the X-Ray scanner as much as possible according to our customers' requirements (longer transporter, higher IP, SUS316 design, conveyor height).
- ▶ Highest level of safety, meeting European CE standards as well as US FDA, optionally UL/CSA.



<b>Model</b>	<b>ELEKTRON -SXRF</b>
<b>Specification</b>	4080
<b>Maximum height of the test product</b>	220 mm
<b>Maximum width of the test product</b>	400 mm
<b>X-ray lamp</b>	MAX. 80 kV, 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>Belt speed adjustable in the range</b>	0-60 m/min
<b>Recoil mode</b>	flap
<b>Connection</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>Radiation protection</b>	Protective tunnel and security system
<b>External radiation</b>	< 1μSv/h
<b>Working temperature</b>	from -10°C to 40°C
<b>Working humidity</b>	30-90% non-condensing water vapor
<b>Supply voltage</b>	230VAC
<b>Power consumption</b>	1500W
<b>Tightness class</b>	IP65
<b>Air pressure</b>	0.8Mpa
<b>Housing material</b>	Glass-blasted stainless steel



- The scanner is particularly dedicated to the examination of all dry bulk products (coffee, herbs, cereal grains, salt, sugar, nuts, seeds, nuts, seeds, nuts, etc.). It can be adapted to the detection of fresh fruit and vegetables.
- Very easy and intuitive to use.
- Using artificial intelligence technology, the X-Ray scanner is almost maintenance-free.
- **ASG** (air shotgun)- separator with multiple air nozzles air nozzles to precisely remove contaminants together with a small amount of the test product.
- Easy and quick cleaning design.
- Highest level of safety, meeting European CE standards as well as US FDA standards, optionally UL/CSA.



Model	<b>ELEKTRON -SXRF</b>	
Specification	4080, 5080, 6080	
Maximum height of the test product	220 mm, 250mm, 300mm	
Maximum width of the test product	400 mm, 500mm, 600mm	
X-ray lamp	MAX. 80 kV, 350W	
The smallest possible detectable testers	St/st ball from 0.4 mm, wire from 0.2x2 mm Glass/Ceramic ball from 1.0 mm	
Belt speed adjustable in the range	0-60 m/min	10-120 m/min
Recoil mode	Air separator composed of 32 independent channel jets. Dividable into 4/2/1 channels.	Air separator composed of 48 independent channel jets. Dividable into 4/2/1 channels.
Connection	LAN port, USB port	
Product management	Automatic recording of the parameters of the tested product	
Image management display	Automatic image saving and analysis 17" touch screen	
Cooling	Industrial air conditioner	
Radiation protection	Protective tunnel and security system	
External radiation	< 1μSv/h	
Working temperature	from -10°C to 40°C	
Working humidity	30-90% non-condensing water vapor	
Supply voltage	230VAC	
Power consumption	1500W	
Tightness class	IP66	
Air pressure	0.8Mpa	
Housing material	Glass-blasted stainless steel	

- ▶ X-Ray scanners, whose main purpose is the examination of larger products packed in regular and irregular packaging, metallization and even even flat metal cans.
- ▶ The device, which scans products in an irregular drift, detects packaging errors, defects, dents and false weight with high accuracy.
- ▶ Very easy and intuitive to use.
- ▶ The ionising radiation lamp used high-powered, ensures longer lifetime of the entire X-Ray scanner.
- ▶ Using artificial intelligence the X-Ray scanner is almost maintenance-free.
- ▶ Easy and quick cleaning design. Belt conveyor belt can be removed and replaced in tens of seconds, quick-action conveyor rollers. quick to assemble and dismantle.
- ▶ Highest level of safety, meeting European CE standards and American FDA standards, optionally UL/CSA.
- ▶ We can customise to the maximum extent the X-Ray scanner design according to our customer's requirements (longer transporter, higher IP, SUS316 design, conveyor height).



Model	<b>ELEKTRON-SXRF</b>
Specification	<b>5080</b>
Maximum height of the test product	250 mm
Maximum width of the test product	500 mm
X-Ray Lamp	MAX. 80 kV, 350/480 W
Smallest detectable testers possible	St / st ball from 0.4 mm, wire from 0.2x1 mm Glass / Ceramic ball from 1.0 mm
Belt speed	Adjustable in the range of 0 -60 m / min
Connection	LAN port, USB port
Product management	Automatic saving of the parameters of the tested product
Image management	Automatic image saving and analysis
Display	17 "touch screen
Cooling	Industrial air conditioner
Radiation protection	Protective tunnel and security system
External radiation	< 1μSv/h
Working temperature	from -10°C to 40 °C
Working humidity	30-90% non-condensing steam
Supply voltage	230 VAC
Power	1200 W
IP class	IP65
Air pressure	6-8 bar
Main material	Glass-blasted stainless steel

- ▶ The X-Ray scanner, due to its large window size, allows the examination of products packed in large cartons and bulk pallets.
- ▶ 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 customer's requirements (longer conveyor, higher IP level, SUS316 design, conveyor height).



Model	<b>ELEKTRON-SXRF</b>
Specification	<b>6080</b>
Maximum height of the test product	300 mm
Maximum width of the test product	600 mm
X-Ray Lamp	MAX. 80 kV, 350/480 W
Smallest detectable testers possible	St / st ball from 0.4 mm, wire from 0.2x1 mm Glass / Ceramic ball from 1.0 mm
Belt speed	Adjustable in the range of 0 -60 m / min
Connection	LAN port, USB port
Product management	Automatic saving of the parameters of the tested product
Image management	Automatic image saving and analysis
Display	17 "touch screen
Cooling	Industrial air conditioner
Radiation protection	Protective tunnel and security system
External radiation	< 1μSv/h
Working temperature	from 0°C to 40 °C
Working humidity	30-90% non-condensing steam
Supply voltage	220 VAC
Power	1200 W
IP class	IP65
Air pressure	6-8 bar
Main material	Glass-blasted stainless steel



- ▶ X-Ray scanners dedicated to the inspection of products packed in E1, E2 crates and bulky cartons.
- ▶ 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 customer's requirements (longer conveyor, higher IP level, SUS316 design, conveyor height).



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	MAX. 80 kV, 350 /480 W
Smallest detectable testers possible	St/St ball from 0.4 mm, wire from 0.2x1 mm Glass / Ceramic ball from 1.0 mm
Belt speed	Adjustable in the range of 0 -60 m / min
Connection	LAN port, USB port
Product management	Automatic saving of the parameters of the tested product
Image management	Automatic image saving and analysis
Display	17 "touch screen
Cooling	Industrial air conditioner
Radiation protection	Protective tunnel and security system
External radiation	< 1μSv/h
Working temperature	from 0°C to 40 °C
Working humidity	30-90% non-condensing steam
Supply voltage	220 VAC
Power	1200 W
IP class	IP65
Air pressure	6-8 bar
Main material	Glass-blasted stainless steel

## SINGLE-LAMP X-RAY SCANNER ELEKTRON-SXRF-1630I

- The X-Ray scanner is designed for testing products in an upright position, i.e. bottles, jars with metal caps, tall cans, doypacks, etc.
- High level of detection and stable operation during product scanning, fast and precise contaminated product separator.
- Single-beam scanning technology product by means of a lamp directed from the side on the product to be tested in a standing position.

- The high-powered high-power ionising radiation lamp, ensures longer lifetime of the entire X-Ray scanner.
- Unusually easy and intuitive to use.



Model	<b>ELEKTRON -SXRF</b>
Maximum height of the test product	300 mm
Maximum width of the test product	160 mm
X-Ray lamp	480W/ 120kV
The smallest possible detectable testers	St/st ball from 0.5 mm, wire from 0.3x2 mm Glass/Ceramics ball from 1.5 mm
The belt speed is adjustable	10-60 m/ min
Operating system	Windows 7
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	<0,5µS v/h
Working temperature	od -10°C do 40 °C
Operating humidity	30-90% non -condensed water vapor
Tightness class	IP66
Housing material	Glass-blasted stainless steel

- The X-Ray scanner is designed for accurate examination of products in upright products packaged in bottles, jars with metal caps, tall cans.
- Three-dimensional foreign body detection foreign bodies in areas that are difficult to inspect such as the bottom of the bottle, the location of the cap, the irregular shape of the bottle/jar.
- Highest level of safety, meeting European CE standards as well as US FDA standards, optionally UL/CSA.

- The unique three-beam technology enables the detection of difficult contaminants by covering the product vertically.
- The angles of the light beams complement each other so that even small foreign bodies are detected.



receiver 1

receiver 2

receiver 3

product

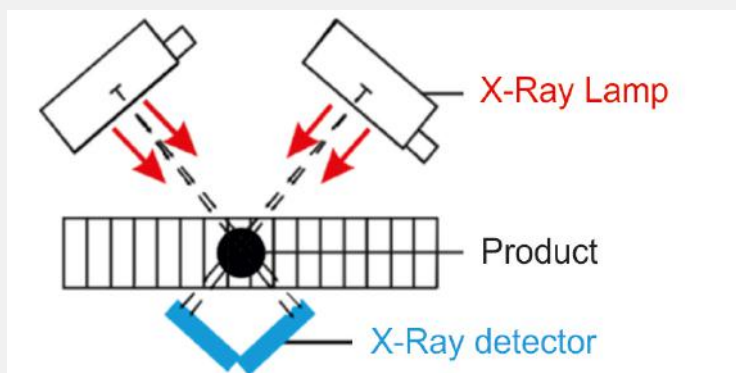
X-Ray lamp

Model	<b>ELEKTRON -SXRF</b>
Maximum height of the test product	260 mm
Maximum width of the test product	160 mm
X-Ray lamp	480W
The smallest possible detectable testers	St/st ball from 0.5 mm, wire from 0.3x2 mm Glass/Ceramics ball from 1.5 mm
The belt speed is adjustable	10-90 m/ min
Operating system	Windows
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
External radiation	< 1μSv/h
Working temperature	od -10°C do 40 °C
Operating humidity	30-90% non-condensed water vapor
Tightness class	IP65
Housing material	Glass-blasted stainless steel



- High-spectrum X-Ray scanner "DUAL" dedicated to the examination of products in an upright position, i.e. bottles, jars with metal caps, tall cans, etc.
- Two horizontal X-Ray beams, intersecting at 90 degrees, eliminate the formation of blind spots to the maximum extent. Contamination titled under the cap or in package cavities is visible in two planes, enabling effective detection.

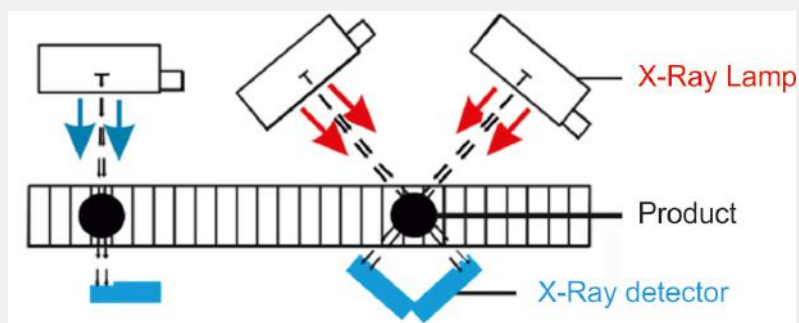
- Possibility to create several independent detection areas for selected product zones (e.g. top, middle or bottom of product).



Model	<b>ELEKTRON -SXRF</b>
Two X-Ray lamps	MAX. 480W/120kV
Maximum width of the tested product	200 mm
Maximum height of the tested product	250 mm
The smallest possible detectable testers	Steel ball from 0.5 mm Steel wire from 0.3*2mm Glass/Ceramic ball from 1.5 mm
Transporter speed	10-60 m/min
Operating system	Windows 7
Radiation protection	Protective tunnel
External radiation	< 0,5 µSv/h
Tightness class	IP66
Working temperature	Od -10 do +40 °C
Operating humidity	30 ~ 90 %
Cooling	Industrial air conditioner
Air pressure	0,6 - 0,8 Mpa
Power supply	3,5 kW
Material	Glass-blasted stainless steel

- ▶ The X-Ray scanner is designed for the most demanding customers, dedicated to examining products in an upright position, i.e. bottles, jars with metal caps, tall cans, etc.
- ▶ A highly advanced analysis system using 3 radiation sources and 3 imaging systems provides the highest level of protection for the product examined in the upright position.
- ▶ Non-regular shape and defects of the product packaging do not affect the detection level.
- ▶ By x-raying the product from three different angles, in two stages and with two lamps, the system eliminates as far as possible dead spots, which most often occur at the bottom of the jar or bottle and under the cap.

- ▶ The high-powered ionising radiation lamps used power, ensure longer service life of the entire X-Ray scanner.

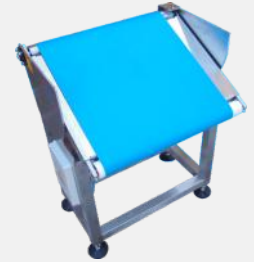
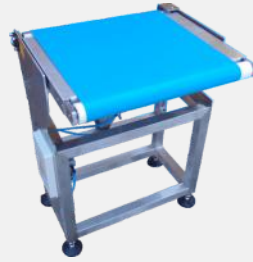


Model	<b>ELEKTRON -SXRF</b>
Three X-Ray lamps	MAX. 480W/120kV
Maximum width of the tested product	200 mm
Maximum height of the tested product	250 mm
The smallest possible detectable testers	Steel ball from 0.5 mm Steel wire from 0.4*2mm Glass/Ceramic ball from 1.5 mm
Transporter speed	10-50 m/min
Operating system	Windows 7
Radiation protection	Protective tunnel
External radiation	< 1 µSv/h
Tightness class	IP66
Working temperature	From -10 to +40 °C
Operating humidity	30 ~ 90 %
Cooling	Industrial air conditioner
Air pressure	0,8 Mpa
Power supply	3,5 kW
Material	Glass-blasted stainless steel

## TYPES OF SEPARATORS

### Single separator

Separator in the form of a mobile trap door for rejecting loose products in one row.



### Double separator

Separator in the form of two movable chutes for the discharge of products fed in two rows independently.



### Separator in the form of a falling conveyor

Separator in the form of a descending conveyor for the discharge of loose products in one row, with a closed zone and a lockable container.



### Pusher

Separator in the form of a pusher for the rejection of E1, E2 boxes and large and heavy bags and cartons.



### Blower

Highly efficient and ergonomic system for lightweight products up to 0.5 kg.



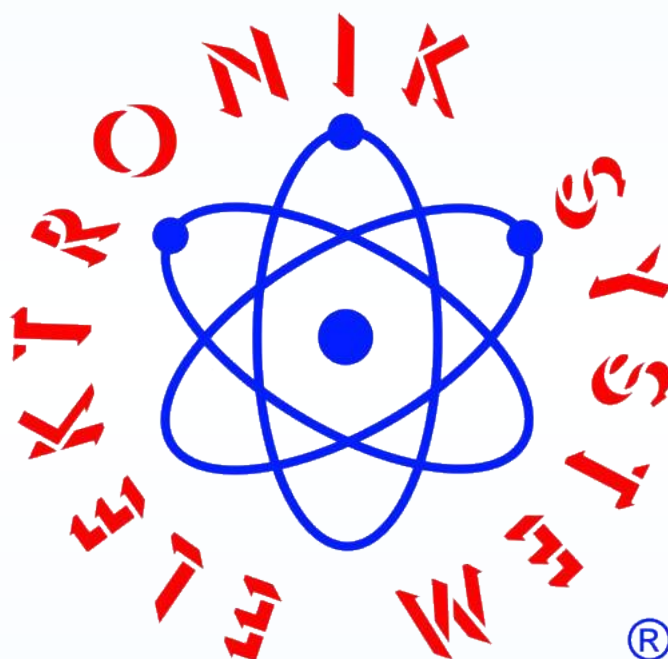
### ASG (air shotgun) - separator

The X-Ray scanner divides the conveyor belt into 8 independent channels, with 34 or 48 air nozzles for precise rejection of foreign objects with a small amount of product.





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