



**ELEKTRON SYSTEM**

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## THREE-DIMENSIONAL X-RAY SCANNER ELEKTRON-SXRF-1630I-TRIPLE ENERGY

- The X-Ray scanner is designed for the accurate examination of upright products packaged in bottles, jars with metal caps, tall cans.
- Three-dimensional detection of foreign bodies in areas that are difficult to inspect such as the bottom of the bottle, the place where the cap is located, the irregular shape of the bottle/jar.
- Unique three-beam technology enables detection of difficult contaminants by covering the product in an upright position.
- The angles of the light beams are complementary each other so that even small foreign bodies are detected.
- Highest degree of safety, meeting European CE and American FDA standards, optionally UL/CSA.



## ARTIFICIAL INTELLIGENCE SUPPORT

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 that 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>
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	< 1 $\mu$ Sv/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

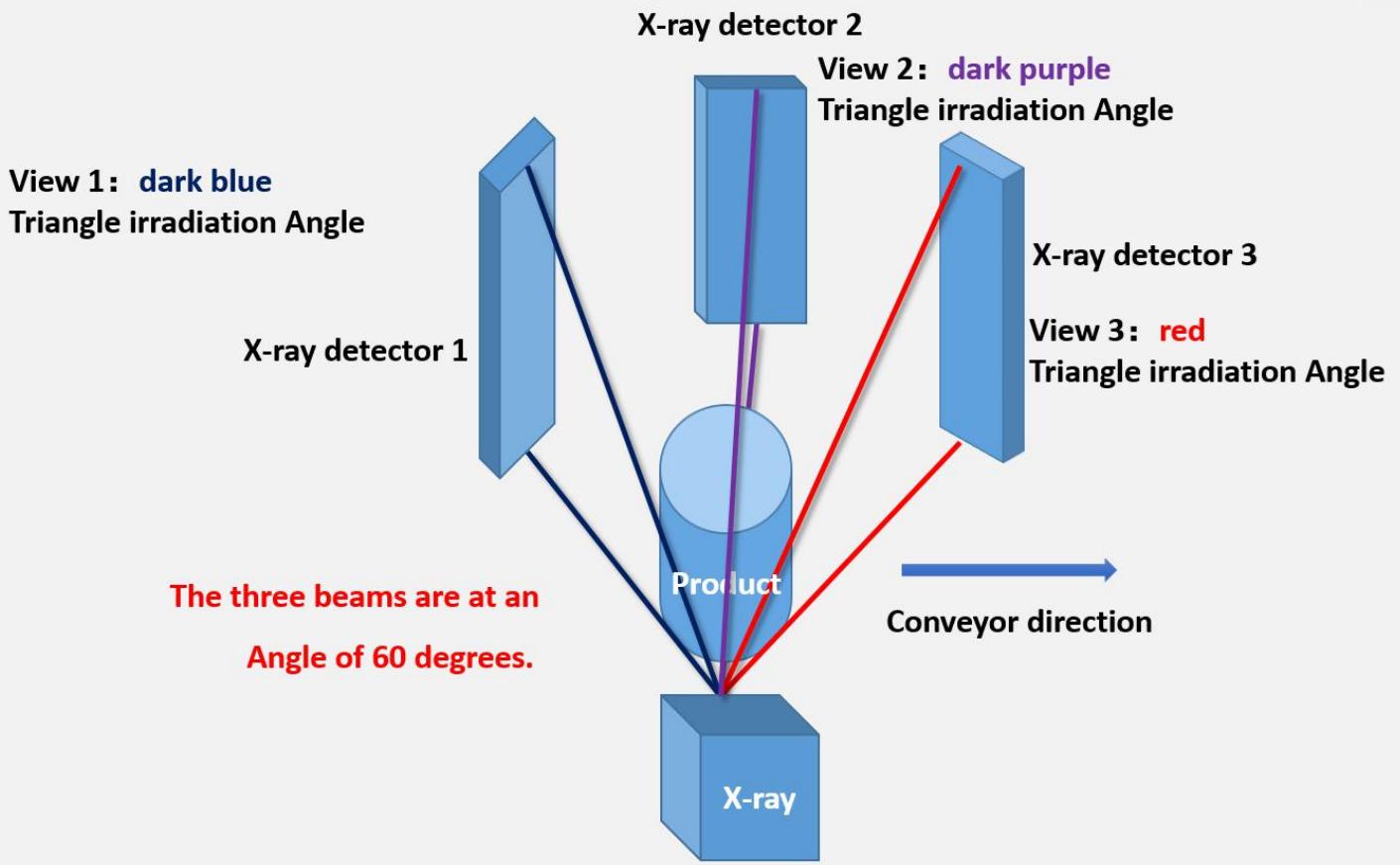
## MAIN FEATURES

- Very high level of detection and unparalleled operational stability when scanning high products.
- Touchscreen for easy operation and management of functions (possibility to fine-tune manual parameter settings).
- Detection of glass in glass (bottles, jars) and metal in metal packaging (cans).
- High conveyor belt speed allows large volumes to be tested.
- Intuitive and very simple operation.
- Easy-to-clean design.
- Automatic diagnostic and safety check system (detection of open inspection doors in the device and immediate detection of an open inspection door in the machine and immediate shutdown of the machine and deactivation of the radiation X-rays).
- Remote 24-hour service support regardless of location.

## LAMP SETTING DIAGRAM



Three-dimensional design with three beams makes the detection range wider.



ST/ST 0,7mm



GLASS 2,0mm



ST/ST WIRE 0,4 x 2,0mm



## „FROST” SYSTEM

In the low temperature zone, the X-Ray scanner can be equipped with a feature not found in other devices, **“FROST” system** - temperature and humidity control system inside control system housings. A system that protects electronic circuits against moisture, cold and sudden temperature changes while washing. Protects against moisture absorption 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	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	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

