X-RAY SCANNER

ELEKTRON SXRF-4080-SRT WITH SAFETY TUNNELS







PRINCIPLE OF OPERATION

ELEKTRON-SXRF with safety tunnels is used to detect foreign bodies in the form of particles of all metals, bones, stones, glass, hard plastic and even rubber. The device has been equipped with safety tunnels, which are necessary during high tests products introduced into the scanner one by one, at short intervals in order to prevent ionizing radiation from penetrating outside (the safety curtains are raised by the product, which creates space for ionizing radiation). These types of X-Ray scanners are used to test products packed in jars - mushrooms, cucumbers, pickled peppers, as well as glass and plastic bottles, for example water, oil or drinks such as juice or orangeade.

ELEKTRON-5XRF has been designed so that it can work with products packed in metallized foil, aluminum foil and low metal cans. Our X-Ray scanners are able to detect particles of foreign bodies even from Φ 0.4 mm, which makes them in the forefront of the best scanners in the world.

"FROST" SYSTEM

The X-Ray scanner can be equipped with the "FROST" system, unparalleled in other devices, with a built-in intelligent heating and thermostat system, inside the control panel, which protects the internal electronics against moisture and cold. It is the only protection against sudden temperature changes during washing and prevents the absorption of moisture inside (for example, a cold machine washed with hot water).

DESTINY

- loose products packed, e.g. sugar, groats, dried fruits, rice, coffee, nuts, spices and the like,
- pickled products, e.g. sauerkraut, pickled cucumbers, salads and vegetable pickles and many others.
- products in low metal cans, e.g. fish, canned food, corn, peas, beans, pineapple, peach, products in low glass jars, e.g. jams, preserves, concentrates, lunches for children and many more,
- meat products, eg poultry fillet.

LIST OF COMPONENTS						
FUNCTION	NAME	PRODUCENT				
X-ray source	X-ray generator	VJ USA				
X-ray receiver	X-ray detector	DT FINLANDIA				
Device management	17 "touch monitor	iEi				
Data processing	Industrial computer	Moxa				
Internal communication	PLC	Adlink				
Temperature and humidity	Air conditioner	Hailite				
control						
Conveyor belt drive	Gear motor	ORIENTAL MOTOR				
Speed regulation	Inverter	YASKAWA/OMRON				
Electric protection	Switches	SCHNEIDER ELECTRIC /ABB				
Electric protection	Transmitter	LS KOREA				
Electric protection	Fuses	SCHNEIDER ELECTRIC				
Connection between devices and power supply	Military connectors	PLT				
Safety management	Limit switches	OMRON Colin				
Electricity management	Set of relays	OMRON Colin				

SPECIFICATION

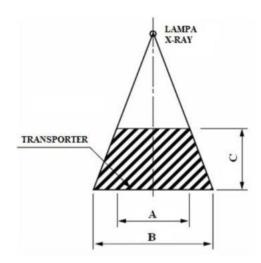
- Permit by the President of the National Atomic Energy Agency No. D-17869.
- Single beam product scanning technology with one top down lamp.
- High level of detection and stability of work when scanning products fed linearly and, which is unusual, falling drifting
- High level of security.
- Easy-to-use intuitive menu.
- technical support and remote assistance via an internet connection
- Efficient and quick disassembly of the conveyor belt for cleaning.
- Menu in Polish and English (standard).

SYSTEM FUNCTIONS

- Detection of glass in glass (jars, bottles) and metals in metal packaging (cans).
- Automatic detection of missing product in the package.
- Unique, full-range, multi-layer product control system.
- Smooth management of each detection zone increasing the level and quality of scanning.
- Password protected system levels.
- A wide range of parameter adjustments enable the system to detect bone.
- Automatic warning system about the current state of the X-Ray scanner.
- Automatic highlighting of pollution with a color corresponding to the assigned algorithm.
- Ability to save the report in an .xls file, so you can open the report on a private computer using Excel.
- Automatic saving of the defective product, possibility of saving the selected photo on an external data carrier.
- Seven times the image to identify contamination.

PARAMETERS					
Model	ELEKTRON-SXRF				
X-Ray lamp	MAX. 80 kV, 350 W				
Detector	LED 0,4 mm				
The smallest detectable testers	Fe, NoFe, St/st ball from 0,4 mm,				
	Wire St/st from 0,4 x 0,8 mm				
	glass/Ceramics ball od 1,0 mm				
Belt speed	Adjustable in scope 0-60 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				
Display	17 "touch screen				
Cooling	Industrial air conditioner				
Type of repeller	Pneumatic separator of the pusher type				
Radiation protection	Protective tunnel and security system				
External radiation	< 1μSu/h				
Working temperature	from -10°C to 40 °C				
Working humidity	30-90% non-condensing water vapor				
Supply voltage	230 VAC				
Power consumption	1200 W				
Tightness class	IP66				
Air pressure	6-8 bar				
Housing material	Glass-blasted stainless steel				

X-RAY SCANNER SELECTION



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.

Model	SXRF-2080	SXRF-4080	SXRF-5080	SXRF-6080	
Product height C	Product width B				
0 mm	240 mm	400 mm	500 mm	600 mm	
10 mm	232 mm	388 mm	489 mm	589 mm	
20 mm	224 mm	377 mm	477 mm	576 mm	
30 mm	216 mm	365 mm	466 mm	564 mm	
40 mm	208 mm	354 mm	455 mm	552 mm	
50 mm	200 mm	342 mm	443 mm	540 mm	
60 mm	192 mm	331 mm	432 mm	528 mm	
70 mm	184 mm	320 mm	420 mm	515 mm	
80 mm	180 mm	308 mm	409 mm	503 mm	
90 mm	176 mm	297 mm	398 mm	490 mm	
100 mm	172 mm	285 mm	386 mm	478 mm	
110 mm	168 mm	274 mm	375 mm	466 mm	
120 mm		263 mm	363 mm	454 mm	
130 mm		251 mm	352 mm	441 mm	
140 mm		240 mm	340 mm	429 mm	
150 mm		228 mm	329 mm	417 mm	
160 mm		218 mm	218 mm	405 mm	
170 mm			307 mm	393 mm	
180 mm			295 mm	380 mm	
190 mm			284 mm	368 mm	
200 mm			272 mm	356 mm	
210 mm			261 mm	344 mm	
220 mm			250 mm	331 mm	
230 mm			239 mm	319 mm	
240 mm			227 mm	307 mm	
250 mm			216 mm	295 mm	
260 mm				282 mm	
280 mm				258 mm	
300 mm				233 mm	

OUR X-RAY SCANNERS ON THE PRODUCTION LINE





