ELEKTRONIK SYSTEM

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I LAMP X-RAY SCANNER ELEKTRON-4080S-FLAP

► The scanner is dedicated to bulk frozen fruit and vegetables due to its design.
► The software allows irregularly shaped and uniquely drifting products to be inspected.
► The high-powered ionising radiation lamp used ensures longer life of the entire X-Ray scanner.
► Very easy and intuitive operation.
► Easy and quick cleaning design. Conveyor belt removed and inserted in seconds.
► We can adapt the design of the X-Ray scanner to the maximum extent according to our customers' requirements (longer conveyor, higher IP protection level, SUS316 design, conveyor height).
► Highest level of safety, meeting European CE and as well as American FDA, optionally UL/CSA.
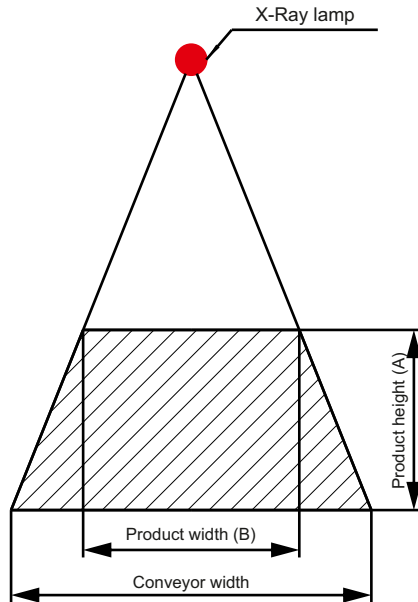
FROST

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	**ELEKTRON -SXRF**
Specification	4080, 5080, 6080, 8040
Maximum height of the test product	220mm, 250mm, 300mm, 400mm
Maximum width of the test product	400 mm, 500mm, 600mm, 795mm
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
Recoil mode	flap
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
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	IP65
Air pressure	0.8Mpa
Housing material	Glass-blasted stainless steel

SELECTING AN X-RAY SCANNER

We select the type and type of X-Ray scanner accordingly with customer requirements. Product dimension must be included in the detection cone according to the table below.

Model	SXRF-4080	SXRF-5080	SXRF-6080	SXRF-8040
Product height **(A)**	Product width **(B)**			
0 mm	400 mm	500 mm	600 mm	795 mm
10 mm	390 mm	489 mm	589 mm	785 mm
20 mm	380 mm	477 mm	576 mm	777 mm
30 mm	371 mm	466 mm	564 mm	768 mm
40 mm	361 mm	455 mm	552 mm	759 mm
50 mm	351 mm	443 mm	540 mm	750 mm
60 mm	341 mm	432 mm	528 mm	742 mm
70 mm	331 mm	420 mm	515 mm	733 mm
80 mm	322 mm	409 mm	503 mm	724 mm
90 mm	312 mm	398 mm	490 mm	716 mm
100 mm	302 mm	386 mm	478 mm	707 mm
110 mm	292 mm	375 mm	466 mm	-
120 mm	282 mm	363 mm	454 mm	-
130 mm	272 mm	352 mm	441 mm	-
140 mm	263 mm	340 mm	429 mm	-
150 mm	253 mm	329 mm	417 mm	663 mm
160 mm	244 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	619 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	576 mm
260 mm	-	-	282 mm	-
280 mm	-	-	258 mm	-
300 mm	-	-	233 mm	532 mm
350 mm	-	-	-	488 mm
400 mm	-	-	-	445 mm

MAIN FEATURES

- Very high level of detection and unparalleled operating stability when scanning bulk fed products with irregular shapes and alignment.
- Remote 24-hour service support regardless of location.
- Touchscreen for easy operation and management of functions (possibility to fine-tune manual parameter settings).
- Detection of all metals, stones, glass, ceramics, rubber, hard plastic.
- Conveyor speed - 10-120m/min, adjustable according to product specifics.
- Smooth management of each detection zone increasing the level and quality of scanning.
- Intuitive and very simple operation of the machine.

SYSTEM FUNCTIONS

- 2 password-protected system levels.
- The operator can additionally adjust the settings.
- Automatic product self-learning system.
- Automatic diagnostics and safety control system (detection of open doors, inspection door in the device and immediately stop the device and turn it off 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 wiht 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

After dismantling the side guide, simply release the tensioning element and the tape is ready to be removed.

TECHNICAL DRAWING OF ELEKTRON-SXRF-FLAP