



## ELEKTRON SYSTEM

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### I 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.
- Highest level of safety, meeting European CE standards 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	ELEKTRON -SXRF
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	<0,5 $\mu$ S 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

## MAIN FEATURES

- High level of detection and unparalleled operating stability when scanning tall 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).
- Possibility of filling level testing.
- Possibility of applying a mask to exclude parts of the package not subject to inspection, e.g. bottle wall, increasing the detection level.
- High conveyor belt speed allows large volumes of product to be tested.
- Intuitive and very simple operation.
- 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, missing or defective product).
- Optional product weight check - the X-Ray scanner detects products with abnormal weight from as little as 1-5 g depending on product type.
- Quick and precise separation of contaminated or defective product.
- Automatic diagnostics and safety control system (detection of an open inspection door in the unit and immediate shutdown of the unit and switching off of the X-Ray tube radiation).

## „FROST” SYSTEM

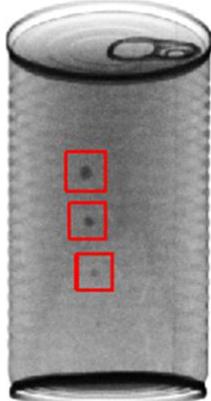
In the low temperature zone, the X-Ray scanner can be equipped with a feature not found in other devices, **“FROST” system** - temperature and humidity control system inside control system housings. A system that protects electronic circuits against moisture, cold and sudden temperature changes while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

## LIST OF COMPONENTS

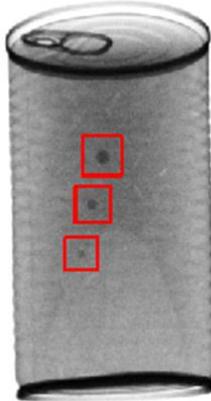
FUNCTION	NAME	PRODUCER
X-Ray source	X-Ray generator	VJ TECHNOLOGIES
X-Ray receiver	X-Ray detector	DETECTION TECHNOLOGY
Device management	17” touch monitor	ADVANTECH
Data processing	Industrial computer	ADVANTECH
Temperature and wetness control	Air conditioner	RITTAL
Conveyor belt drive	Engine with gear	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

## X- RAY ELECTRON-SXRF-1630I SCANNER INSPECTION IMAGE

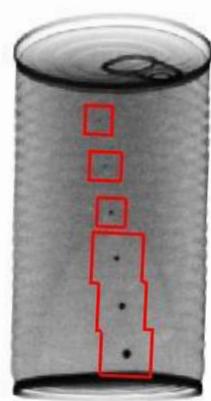
CERAMICS  
from 3,0mm



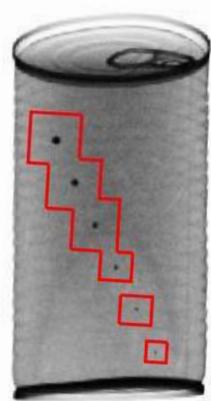
GLASS  
from 3,0mm



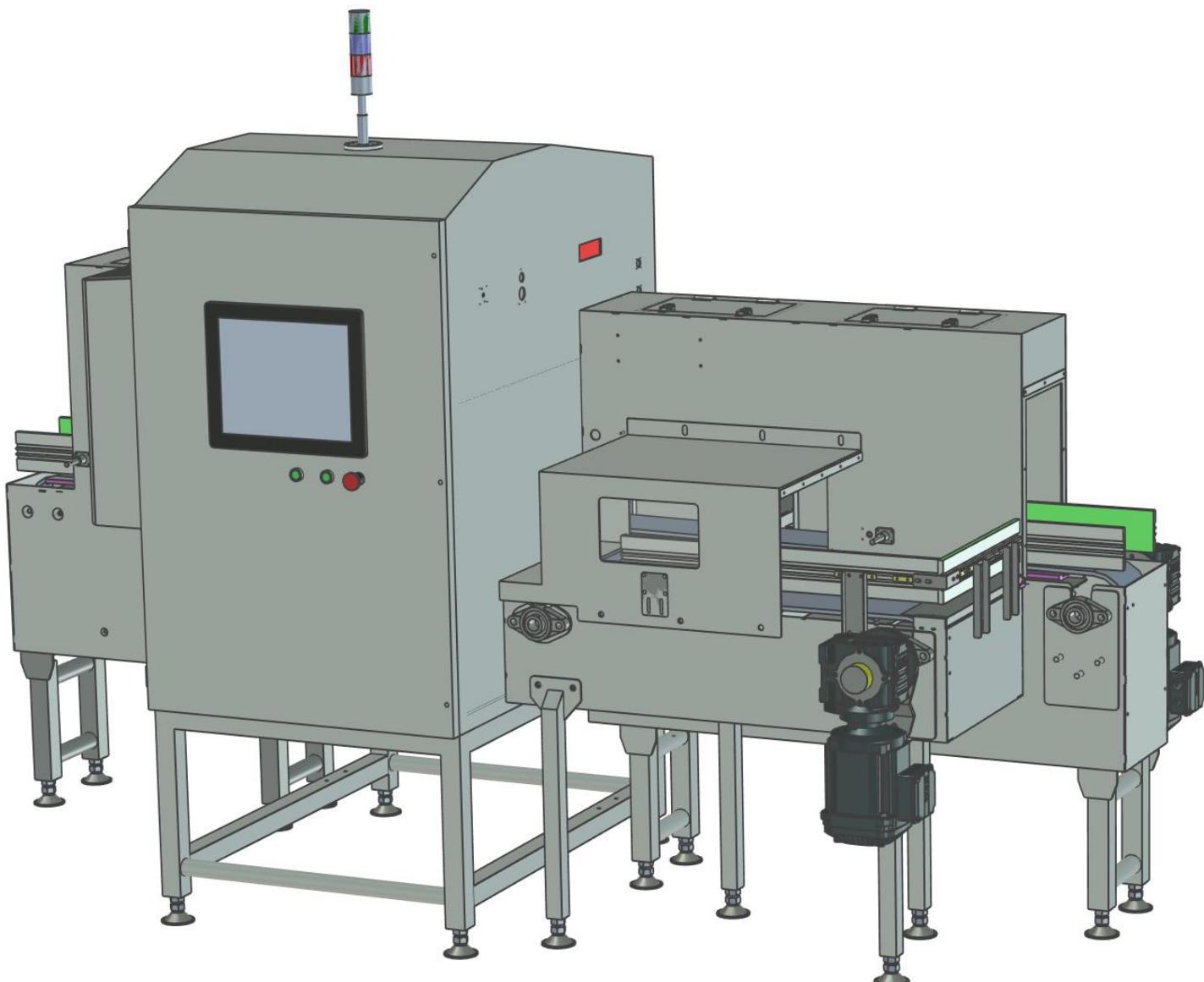
FERRUS  
from 1,0mm



STAINLESS STILL  
from 1,0mm



## 3D DRAWING OF ELEKTRON-SXRF-1630I



# TECHNICAL DRAWING OF ELEKTRON-SXRF-1630I

