



ELEKTRON SYSTEM

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

- ▶ The X-ray scanner is designed for thorough inspection of upright products packaged in bottles, jars with metal caps, and 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 the detection of hard-to-find contaminants by fully covering the product in an upright position.
- ▶ The X-ray beams complement each other so that even minute foreign objects are detected.
- ▶ The highest level of safety, compliant with European CE standards as well as U.S. FDA standards, and optionally UL/CSA.



ARTIFICIAL INTELLIGENCE SUPPORT

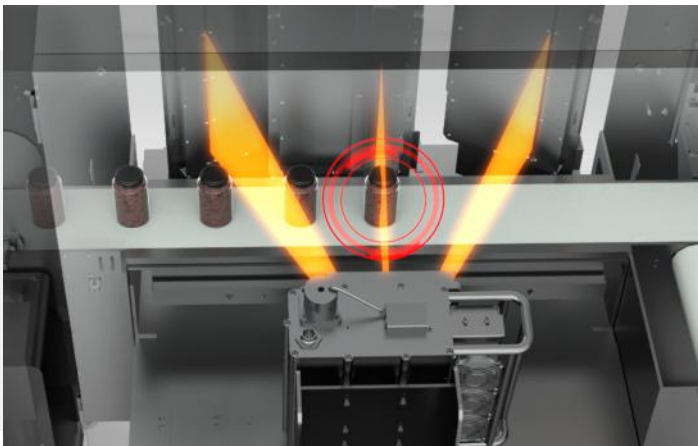
The X-ray scanner is equipped with artificial intelligence that analyzes comparative data with far greater accuracy than a human can, using immense computational speed. The AI acts as a virtual operator, ensuring the highest quality of the X-ray scanner's performance at all times and replacing a qualified operator at this workstation. The AI robot learns to recognize and eliminate foreign objects, defects, damage, and missing parts much more accurately than scanners from competing companies. AI significantly improves detection rates, increases the weighing accuracy of products with a consistent form and shape, and dramatically reduces the number of false rejects.

Model	ELEKTRON -SXRF
Maximum height of the test product	260 mm
Maximum width of the test product	160 mm
X-Ray lamp	480W / 100kV / 8mA
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
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

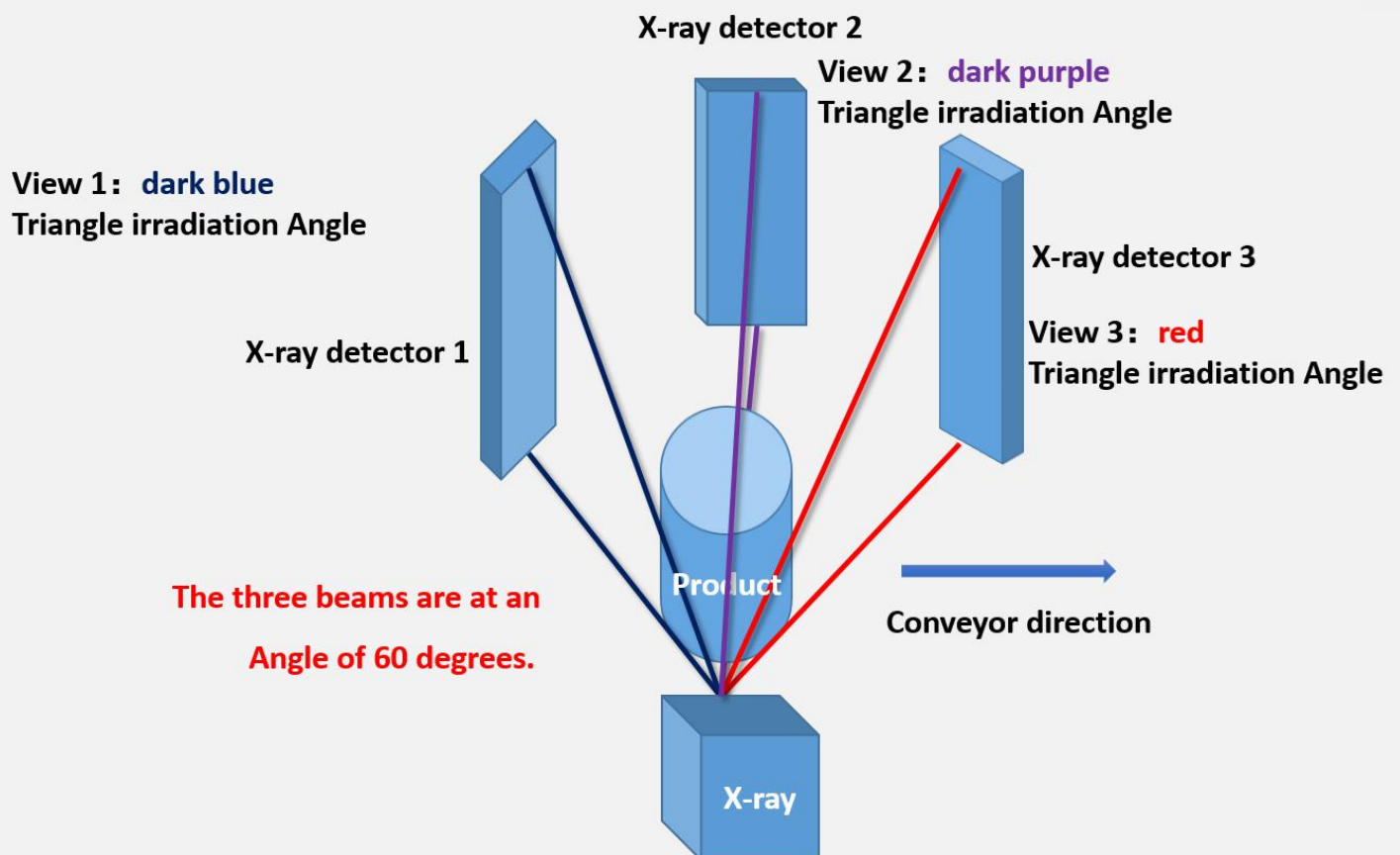
MAIN FEATURES

- Very high detection sensitivity and unparalleled operational stability when scanning tall products.
- Touchscreen for easy operation and function management (with the ability to fine-tune manual parameter settings).
- Detection of glass within glass (bottles, jars) and metals within metal packaging (cans).
- The high speed of the conveyor belt allows for the inspection of large quantities of product.
- Intuitive and very simple operation of the device.
- Design that is easy to keep clean.
- Automatic diagnostic and safety control system (detects when the inspection door is open, immediately stops the machine, and shuts off the X-ray tube).
- 24-hour remote technical support, regardless of the machine's 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



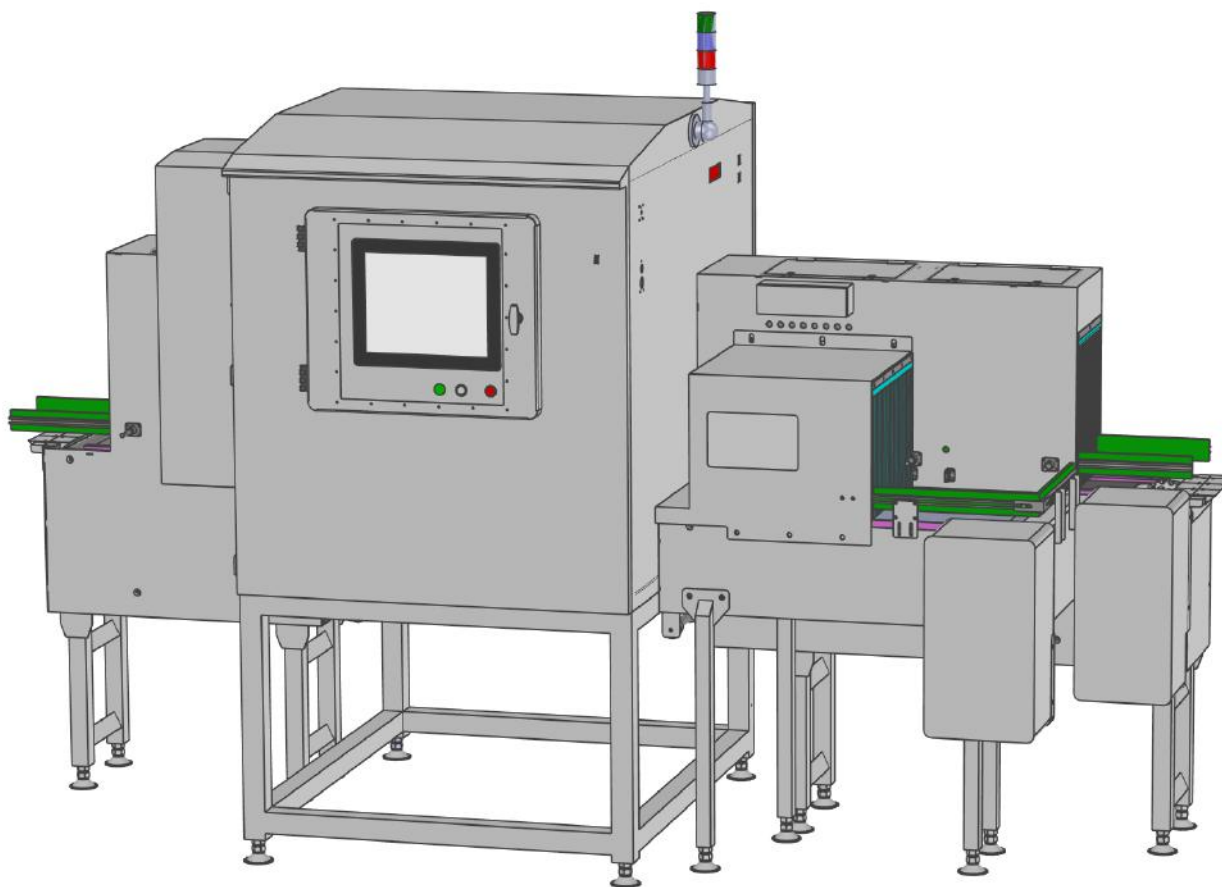
„FROST” SYSTEM

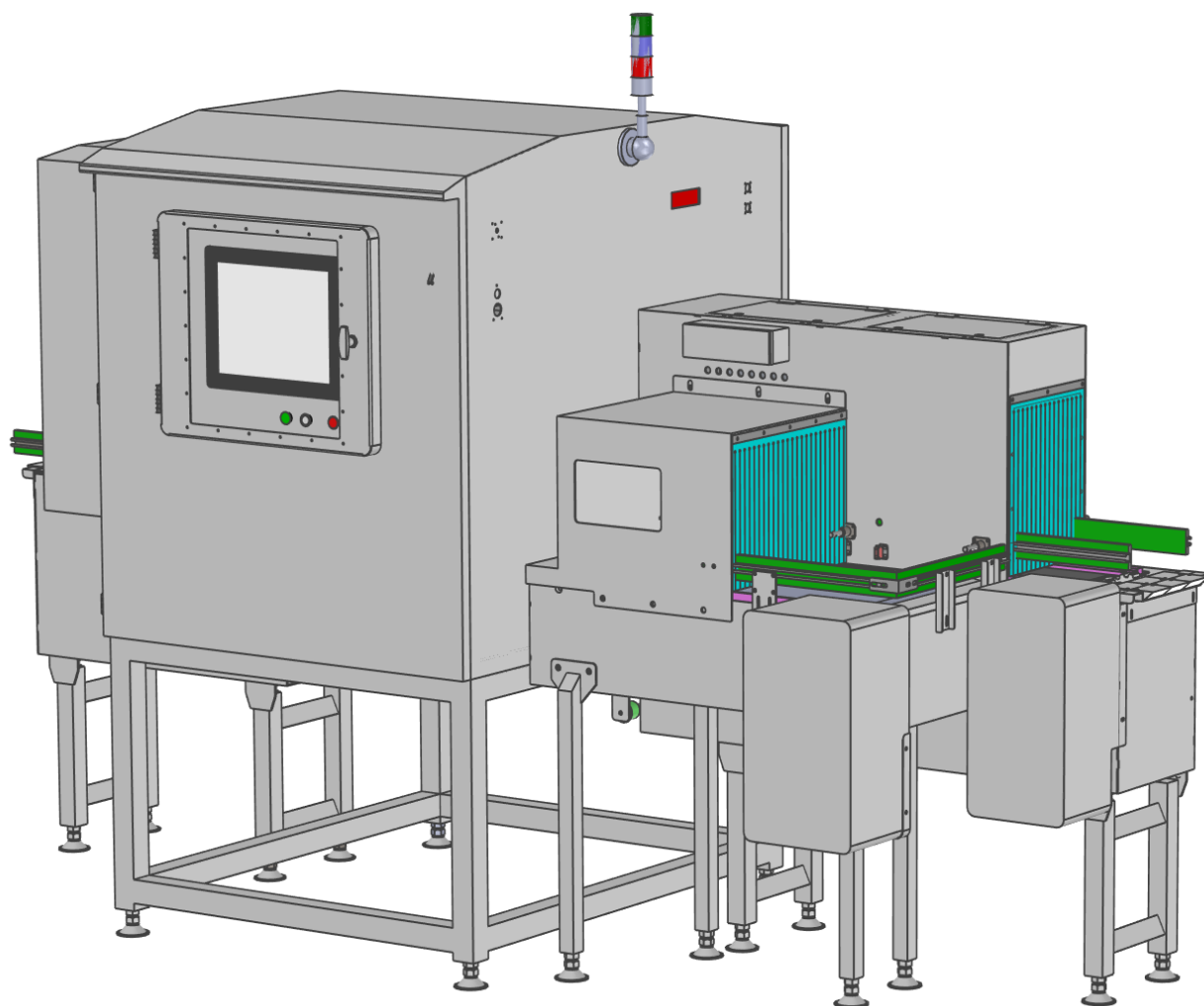
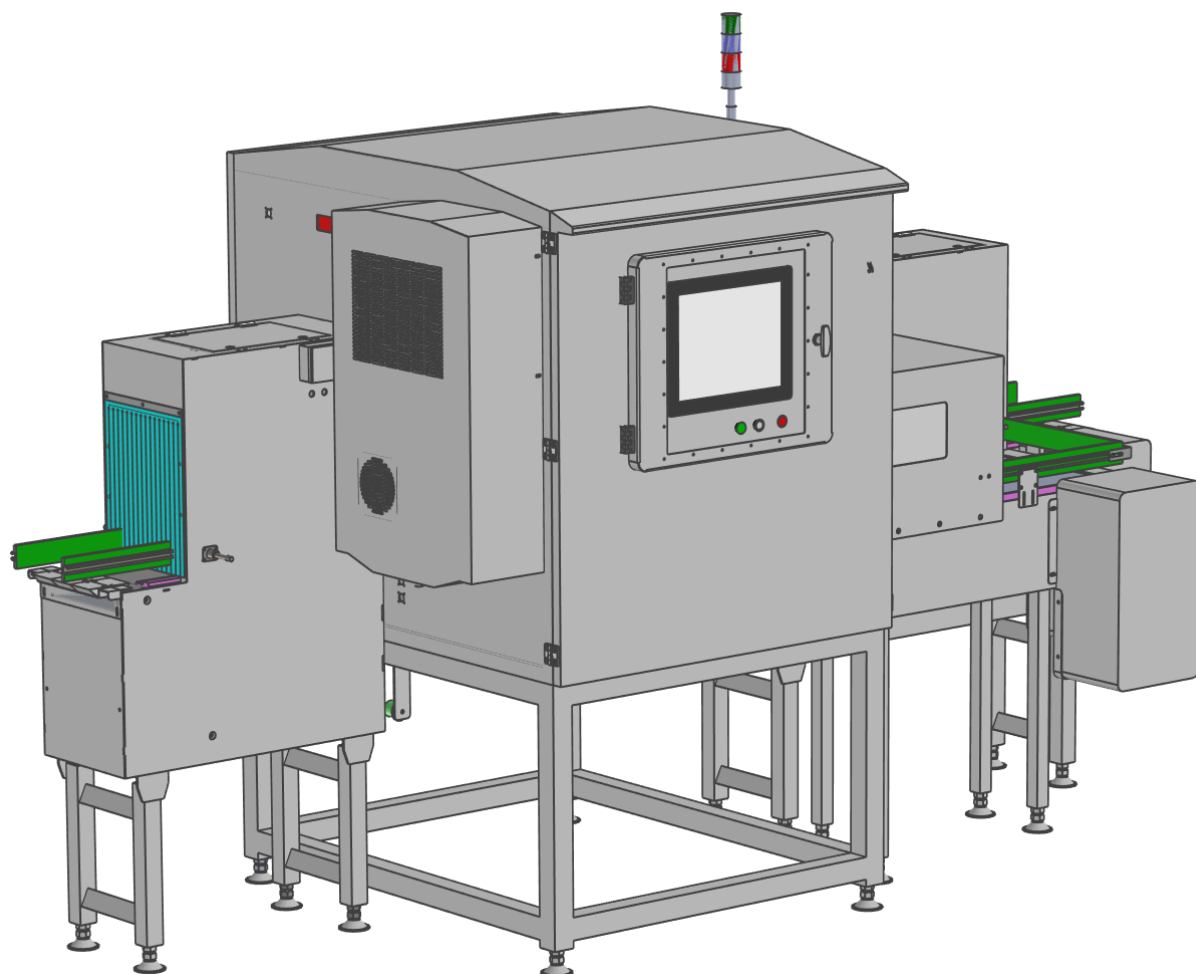
In the low temperature zone, the X-Ray scanner can be equipped with a feature not found in other devices, **"FROST" system** - temperature and humidity control system inside control system housings. A system that protects electronic circuits against moisture, cold and sudden temperature changes while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

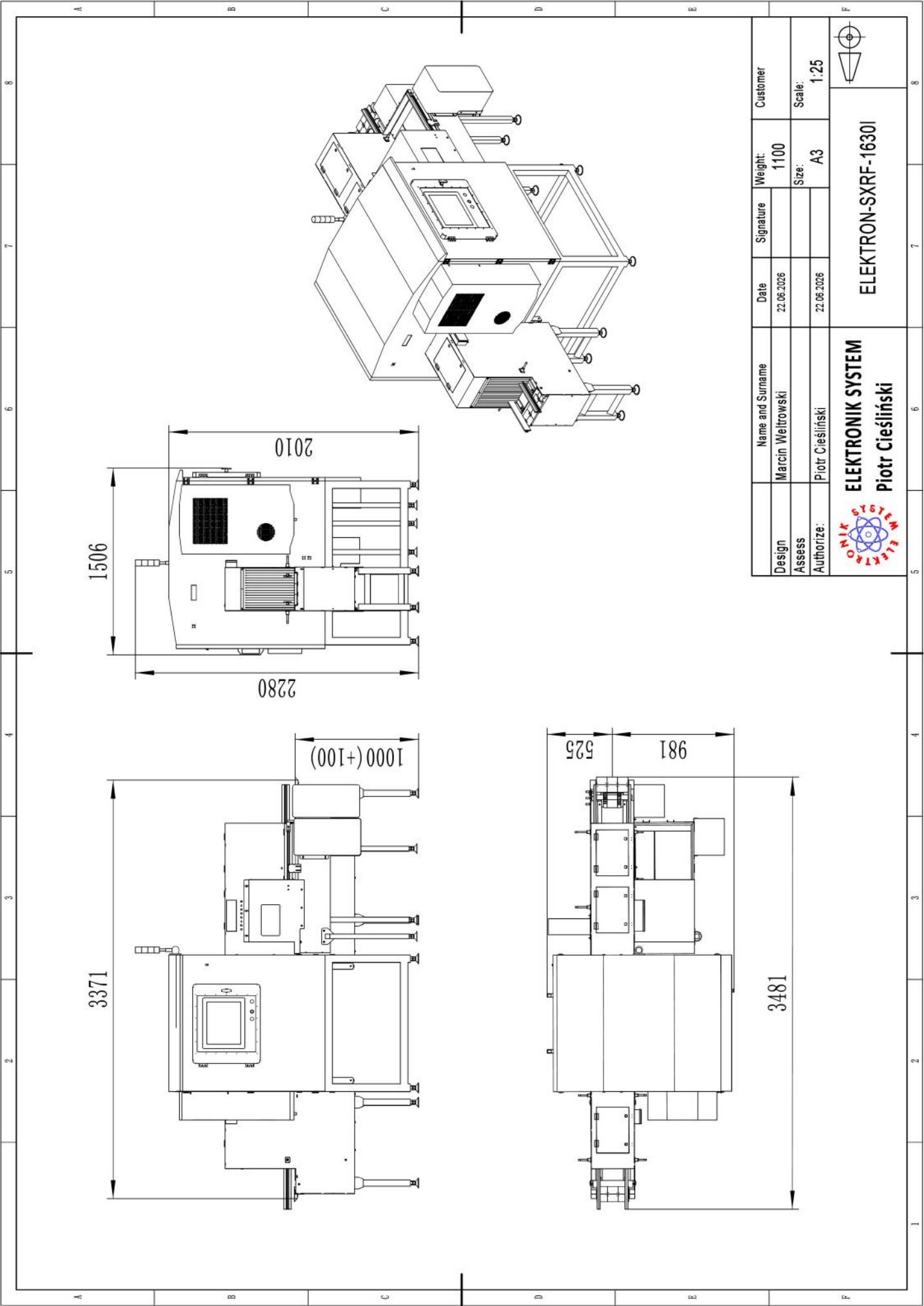
LIST OF COMPONENTS

FUNCTION	NAME	PRODUCER
X-Ray source	X-Ray generator	VJ TECHNOLOGIES
X-Ray receiver	X-Ray detector	ELEKTRON-OEM
Device management	17" touch monitor	ADVANTECH
Data processing	Industrial computer	ADVANTECH
Temperature and wetness control	Air conditioner	PFANNENBERG
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	WEIPU
Safety management	Limit switches	OMRON
Automation management	PLC driver	SCHNEIDER ELECTRIC
Warning information	Optical-acoustic signaller	WERMA

3D TECHNICAL VISUALIZATION







Design	Name and Surname	Date	Signature	Weight:	Customer
Assess	Marcin Weltrowski	22.06.2026		1100	
Authorize:	Piotr Cieśliński	22.06.2026		Size:	Scale:
				A3	1:25
		ELEKTRON-SXRF-1630I			
ELEKTRONIK SYSTEM Piotr Cieśliński					