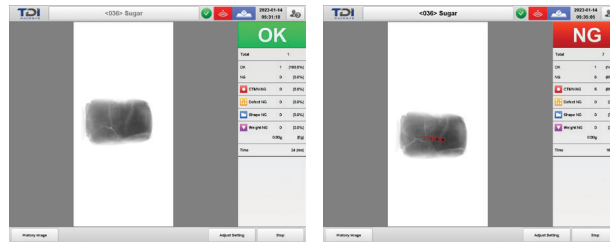


XR-SDE DUAL ENERGY X-RAY INSPECTION SYSTEMS



XR-SDE Dual Energy X-Ray Inspection Systems are our most advanced foreign material detection technology, capable of finding the widest range of contaminants in the smallest sizes. In addition to detecting all metals, the XR-SDE system will find minuscule bone fragments, cartilage, rubber gaskets, glass shards, conveyor belting and other low- or high-density contaminants.

The XR-SDE utilizes a 350-watt beryllium generator and a proprietary 0.4mm Dual Energy TDI (time delay integration) detector. Coupled with our AI Smart Algorithms, the XR-SDE can identify organic and low-density contaminants that escape traditional X-ray technology. The XR-SDE is the leading X-ray inspection choice for protein products, having unrivaled capability for bone, aluminum, and belting detection.



View real-time images of current products for quick location and identification of contaminants.

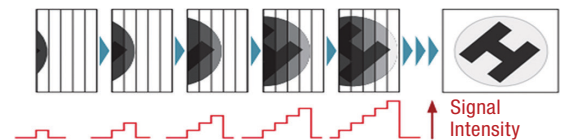
Applications

- Ideal for protein inspection (product thicknesses 4 inches and under)
- Use to find bone fragments, aluminum, rubber, and conveyor belting, as well as high-density contaminants including needle tips, BBs, barbed wire, glass, etc.

System Highlights

TDI Technology (Time Delay Integration)

- Converts multi-row surface images to single-row line images by signal accumulation.
- Core technical advantage: increased detector exposure levels.
- We use an 8-stage TDI detector: for the same x-ray energy, the TDI detector achieves 8 times the exposure of a standard linear array detector.



Dual Energy Technology

- Based on the chemical composition (atomic number) of the product – the absorption of two different x-ray energies by each chemical element is measured separately, analyzed, and compared.
- Can better detect low-density contaminants, fundamentally circumventing the technical drawbacks of traditional detectors, improving the detection of low-density contaminants such as PVC, bone, thin glass, and aluminum.



Low Energy:
Original Product Image



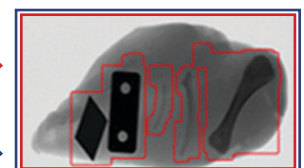
Low Energy:
Processing Image



High Energy:
Original Product Image



High Energy:
Processing Image



- Detect residual low-density chicken bone.
- Better sensitivity for overlap and bumps.

The XR-SDE combines TDI and Dual Energy technologies!

Smart Algorithms (AI)

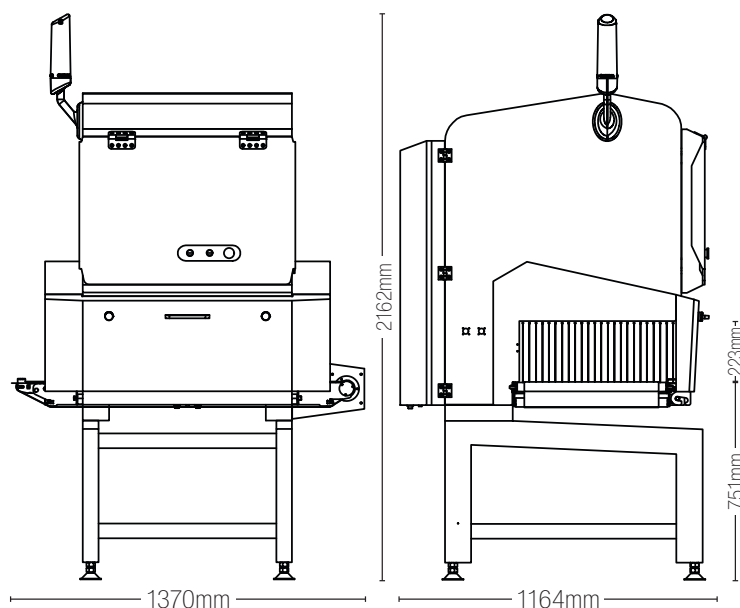
Smart Algorithms (also refer to as AI) add an additional level of inspection to our x-ray systems by enabling them to simulate Computer Vision, and optically inspect the x-ray image for contaminants. If the contaminant can be seen, it can be detected, even if the density is too low to be caught by traditional x-ray algorithms. Smart Algorithms are developed on a per product and per application basis. The system learns the normal product state, and can then identify any visible contaminants, regardless of density. We also employ this technology to find oil in seals, which has a density less than water.

Key Functionality

- **Auto-learning function** for quick new product set-up
- **Auto-shielding function** will ignore parts of product or package to enable inspection (e.g., aluminum clips on sausages, products packed in metal cans, etc.)
- **Ultra-flexible design and functionality** – suitable for a wide range of product types and package formats
- **Customizable programming for each product** – generator strength, speed, and algorithms
- **Controlled access** – passwords for operator / administrator access
- **Easily view and export detailed data logs** on production rates, times, and contamination %s; download via Ethernet or USB
- **User-friendly Windows-based software** – quickly change between programs; real-time images of the current product allow for quick location and identification of contaminants
- **World leading componentry** – VJT, Siemens, and Schneider
- **Heavy-duty construction** – IP69K, 304 stainless bead-blasted finish
- **Optional reject conveyor** automatically removes any product suspected of having contaminants

	XR-2416SDE	XR-4080SDE	XR-6080SDE
X-Ray Generator:	MAX 80kV, 350W		
Inspection Width:	240mm	400mm	600mm
Inspection Height:	160mm	220mm	300mm
Conveyor Speed:	10-60m/min		
Operating System:	Windows Professional		
X-Ray Emissions:	< 1 µSv/h (CE standard)		
IP Rating:	IP69K		
Working Environment:	Temperature: 32-104°F; Humidity: 30-85% (no dew)		
Reject Options:	Sound and Light Alarm; Belt Stop; Optional Rejectors		
Power Supply:	230V, 60Hz, 15A, 1PH		
Construction:	Stainless 304		
Operator Interface:	15" Touchscreen HMI		
Data Export:	USB/Ethernet		
Finish:	Bead-Blasted		

Note: Product models and specifications are subject to change.
For more information, contact TDI Packsys.



Note: Dimensions shown above are for the XR-4080SDE.

TDI Packsys

TDI Packsys is a premier provider of inspection solutions and packaging automation systems. Our expert team is dedicated to delivering state-of-the-art solutions that meet your budget. Contact us to see how we can help optimize your operation.



SCAN ME

There's More

Inspection Systems

- Metal Detectors
- Checkweighers
- Combo Systems
- X-Rays
- Color Sorters
- Vision Systems

Packaging Automation

- Palletizers
- Form, Fill & Seal
- Scaling & Dosing
- Flow Wrappers
- Robotic Packing