GP BULK-FLOW
X-RAY INSPECTION SYSTEMS

TDI ®
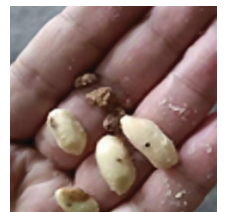**PACKSYS**

Superior inspection of harvested products –
nuts, beans, fruits, grains, etc.

Detect sticks, shells,
wood and other
low-density or organic
foreign bodies.

GP Bulk-Flow X-Ray Inspection Systems catch contaminants before they become costly issues. Designed for unpackaged, free-flowing products like nuts, grains, fruits, vegetables, and seafood — continuously scans product on a conveyor. Use to detect even the smallest foreign materials — including metal, glass, stone, and bone.

Whether you're processing large volumes or small specialty batches, the GP Bulk-Flow ensures your product stays safe, clean, and compliant. With advanced imaging and customizable rejection options, it takes the worry out of food safety — handling inspection with speed and precision.

Applications

- Use to inspect free-flowing bulk products like nuts, grains, fruit, vegetables, and seafood.
- Use to improve product safety, quality, and compliance in high-speed production lines.

Features

- **High-Speed Product Throughput**
  Designed for continuous bulk product flow, enabling efficient inspection without bottlenecks.

- **Wide Inspection Area**
  Easily handles large volumes of bulk-flow product, enabling continuous high-speed inspection.

- **High-Resolution X-Ray Imaging**
  Accurately detects even small or low-density foreign contaminants that other systems might miss, improving overall product safety.

- **Multiple System Sizes Available**
  Scales to match your production line and throughput needs.

- **Advanced A.I.-Powered Quality Inspection**
  Algorithms learn your products' specific characteristics to detect quality issues like hollow nuts, insect bites, and broken pieces.

- **Durable IP67 Stainless Steel Construction**
  Engineered for long-term durability in washdown environments, helping ensure dependable operation shift after shift.

- **Customizable Rejection Systems**
  Removes only the affected portion of product, reducing unnecessary waste while maintaining throughput and product yield.

- **Optional Integrated Vision Systems**
  Simultaneously inspect product by density, as well as color/shape.

GP Bulk-Flow X-Ray Inspection Systems

Key Functionality

- **Real-Time Contaminant Detection**
  Instantly identifies foreign materials to maintain product quality.
- **Auto-Learn Product Profiles**
  Adapts to new products quickly with minimal manual setup.
- **Adjustable Sensitivity Settings**
  Fine-tunes inspection levels to minimize false rejects while improving detection of even low-density contaminants.

- **Reject Confirmation Sensors**
  Verifies that each contaminated product is successfully removed, ensuring full compliance with safety standards.
- **Integrated Reporting and Traceability**
  Tracks inspection data for QA records and audits.
- **Flexible Integration Options**
  Easily fits into existing production lines with minimal disruption.

Advanced A.I. Smart Algorithms

- **Reliable Low-Density & Organic Detection**
  Tailored AI finds hard-to-detect materials like wood, shells, plastics, stems, and pits — even when densities match. Perfect for bulk nuts, grains, and produce.
- **Self-Learning, Auto-Optimizing Performance**
  Machine learning fine-tunes settings over time, reducing recalibration and boosting accuracy.
- **Dynamic Sensitivity & Noise Filtering**
  Automatically adjusts to product flow and density, filtering interference to cut false rejects and ensure precise detection.
- **Real-Time Image Enhancement**
  AI imaging exposes subtle contaminants basic x-ray systems miss.

	XR-4080GP	XR-6080GP
X-Ray Generator:	MAX 80kV, 350W	
Inspection Width:	400mm	600mm
Inspection Height:	50mm	100mm
Conveyor Speed:	10-120m/min	
Operating System:	Windows	
X-Ray Emissions:	< 1 µSv/h (CE standard)	
IP Rating:	IP66 (washdown for tunnel/conveyor)	
Working Environment:	Temperature: 32-104°F; Humidity: 30-90%	
Reject Options:	Integrated Precision Air-Blast	
Power Supply:	220V, 15A, 1PH, 1.5kVA	
Construction:	SUS 304	
Operator Interface:	17" Full-Color Touchscreen HMI	
Data Export:	USB/Ethernet	

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

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
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- Scaling & Dosing
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- Robotic Packing

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