

SAFE WITH TECHIK

TXR-B3 Series

X-Ray Inspection System for Bulk Products



TECHIK[®] Designed for a wide range of bulk products, including nut kernels, dehydrated or frozen fruit and vegetables, grains, beans and seafood. Optional capabilities include shape analysis and empty-shell and mold detection, enabling simultaneous identification of foreign contaminants and product defects. The system detects metal, glass, ceramic and stone, as well as defects such as shriveling and insect damage. Combined with a high-speed air-jet rejection system, it delivers higher throughput, lower product loss and greater returns.



Contaminant Detection

Detects organic and inorganic contaminants across a wide density range, including metal, glass, ceramic, stone, snail shells and twigs.



Defect Detection

Intelligent algorithms identify defects in bulk products, including shriveled or undersized nuts, insect damage, hollow kernels and breakage.



Intelligent Algorithms

Techik's proprietary deep-learning algorithms emulate human image interpretation, significantly improving the detection of low-density contaminants while increasing inspection accuracy and reducing false rejects.



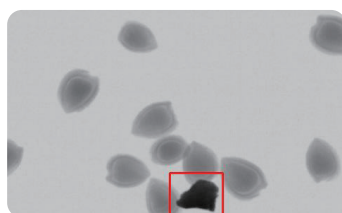
High-Speed Rejection

Choose from 64/80/96/120-channel air-jet rejection configurations. Multi-lane inspection with targeted rejection increases throughput and minimizes product loss.

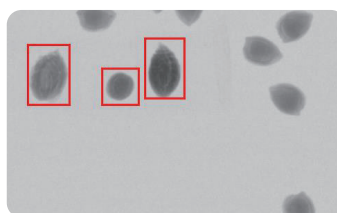
> INSPECTION EXAMPLES



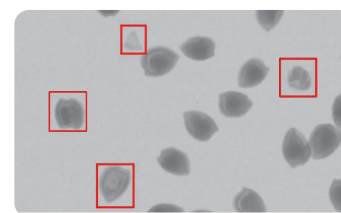
In-Shell Almonds



X-Ray image: a stone in in-shell almonds



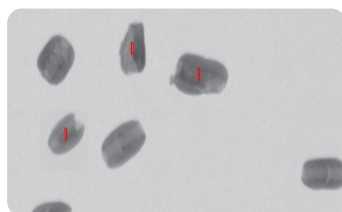
X-Ray image: off-type almonds among in-shell almonds



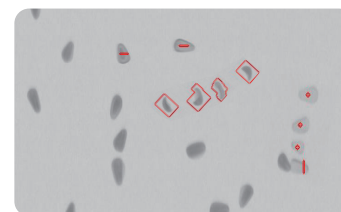
X-Ray image: insect damage & foreign material in in-shell almonds.



Pitted Red Dates



X-Ray image: an unpitted date among pitted red dates.



X-Ray image: shriveled kernels/empty shells/ incomplete pine nuts in in-shell pine nuts.

> DETAILED DESCRIPTION

Model	TXR-4080GP	TXR6080GP
X-Ray Tube	210W/350W Optional	
Inspection Width	400mm	600mm
Inspection Height	100mm	
Best Inspection Sensitivity	Stainless steel ball Φ0.3mm Stainless steel wire Φ0.2*2mm Glass/Ceramic ball Φ0.8mm	
Conveyor Speed	10-120m/min	
O/S	Windows	
Protection Method	SUS Shield	
X-Ray Leakage	< 1 μSv/h (CE Standard)	
IP Rate	IP66 (Under belt)	
Working Environment	Temperature: -10~40 C	
	Humidity:30~90% no dew	
Cooling Method	Industrial air conditioning	
Rejecter Mode	64/80/96/120-channel air-jet rejection (optional)	
Air Pressure	0.8Mpa	
Power Supply	3 kW	
Main Material	SUS304	
Surface Treatment	Mirror polished/Sand blasted	

Note:

The technical parameter above namely is the result of sensitivity by inspecting only the test sample on the belt. The actual sensitivity would be affected according to the products being inspected.

