Mail & Parcel X-ray Inspection System

SUMMARY

Based on the field-proven CX product platform, CX Series Mail & Parcel X-ray Inspection Systems combine advanced imaging and networking capabilities into a reliable, user-friendly solution.

Compact and relocatable, CX Series Mail & Parcel X-ray Inspection Systems are optimized for screening demands at government offices, courtrooms, mail facilities, embassies, exhibitions, and other sensitive areas.

TECHNICAL FEATURES

- Unsurpassed image quality through optimized X-ray generator and high-resolution detectors
- Advanced, dual-energy material classification technology for accurate threat and contraband detection
- Efficient operation with ergonomically designed user interface
- Threat Image Projection (TIP) ready
- Centralized station capabilities including image review and enhanced storage and networking capability
- Highly integrated compact design enables minimal footprint and rapid relocation


TECHNICAL DATA

General Specifications

Image Enhancement	Color/BW, negative, high/low penetration, organic/inorganic stripping, general enhancement, multi-absorptivity, etc.
Image Recall	All preceding images recallable
Explosives & Narcotics Detection	Explosives & narcotics alarm and highlight according to atomic number signature
High Density Region Alarm	Impenetrable region alarm and highlight, for possible concealing of threats and contrabands
Threat Image Projection	Inserting fictional, but realistic images of threat items into baggage during screening operation, for maintenance of vigilance, as well as training and assessment of image identification capability
Image Archive	Up to 100,000 images stored automatically, enable transferring to USB storage, and converting to JPG, BMP and other general formats
Network Applications	Image centralized storage and screening, recheck workstation, network TIP, etc.
Radiation Safety	Less than 1 µGy/h (5cm from the housing)
Film Safety	Guaranteed for high speed film up to ASA/ISO1600 (33DIN)

| Products	CX5030T
Tunnel Dimensions (W×H)	534mm×333mm
Load Capacity	60kg
Conveyor Height	160mm
Wire Resolution	40 AWG
Steel Penetration	16mm
Dimensions (L×W×H)	1200mm×770mm×805mm
Weight	210kg
Power Consumption	0.5 kVA

* Image performance specifications are based on Nuctech test piece.
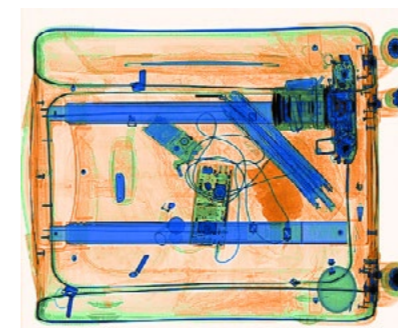
Advanced material classification: orange for organic, blue for metal and green for mixed material & light metal

Automatic detection and alarm of contrabands

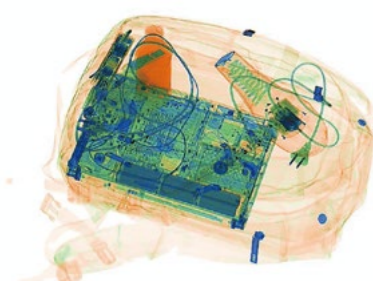# Carry-on Baggage X-ray Inspection System
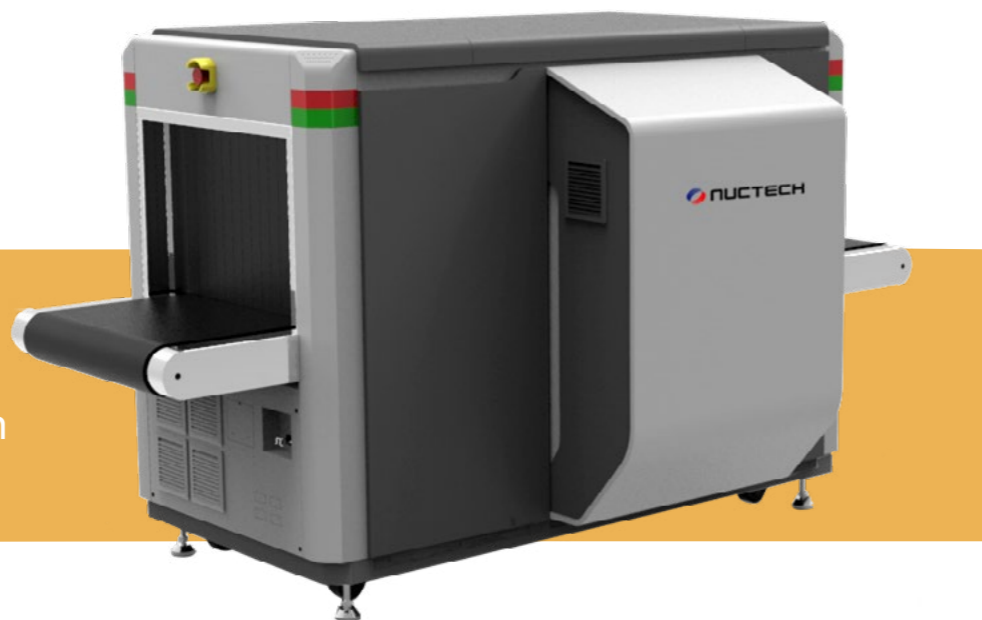
SUMMARY

Engineered for X-ray inspection in all checkpoint configurations including at airports, mass transit stations, critical infrastructure, and customs facilities, Nuctech's CX Series Carry-on Baggage X-ray Inspection Systems deliver advanced imaging and throughput capabilities in reliable solution.

With various tunnel sizes and portability to meet evolving security challenges, CX systems feature an ergonomic user interface, reduced power consumption, and central station capabilities including networking and remote monitoring.
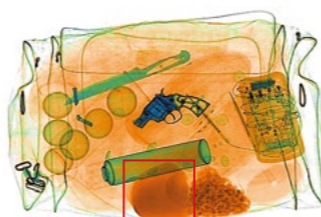
TECHNICAL FEATURES

- Unsurpassed image quality through optimized X-ray generator and high-resolution detectors
- Advanced, dual-energy material classification technology for accurate threat and contraband detection
- Efficient operation with ergonomically designed user interface
- Threat Image Projection (TIP) ready
- Centralized station capabilities including image review and enhanced storage and networking capability
- Highly integrated compact design enables minimal footprint and rapid relocation

Advanced material classification: orange for organic, blue for metal and green for mixed material & light metal

Automatic detection and alarm of contrabands

TECHNICAL DATA

General Specifications

Image Enhancement	Color/BW, negative, high/low penetration, organic/inorganic stripping, general enhancement, multi-absorptivity, etc.
Image Recall	All preceding images recallable
Explosives & Narcotics Detection	Explosives & narcotics alarm and highlight according to atomic number signature
High Density Region Alarm	Impenetrable region alarm and highlight, for possible concealing of threats and contrabands
Threat Image Projection	Inserting fictional, but realistic images of threat items into baggage during screening operation, for maintenance of vigilance, as well as training and assessment of image identification capability
Image Archive	Up to 100,000 images stored automatically, enable transferring to USB storage, and converting to JPG, BMP and other general formats
Network Applications	Image centralized storage and screening, recheck workstation, network TIP, etc.
Radiation Safety	Less than 1 μGy/h (5cm from the housing)
Film Safety	Guaranteed for high speed film up to ASA/ISO1600 (33DIN)

Products	CX5636B	CX6040BI	CX6040D(Dual-view)
Tunnel Dimensions (W×H)	566mm×370mm	606mm×420mm	620mm×420mm
Load Capacity	160kg	160kg	160kg
Conveyor Height	680mm	680mm	680mm
Wire Resolution	40 AWG	40 AWG	40 AWG
Steel Penetration	38mm	38mm	38mm
Dimensions (L×W×H)	2042mm×810mm×1251mm	2042mm×850mm×1300mm	2392mm×1207mm×1317mm
Weight	490kg	510kg	820kg
Power Consumption	0.8 kVA	0.8 kVA	1.2 kVA

Products	CX6550BI	CX7555BI	CX7555D(Dual-view)
Tunnel Dimensions (W×H)	655mm×503mm	755mm×555mm	755mm×555mm
Load Capacity	160kg	160kg	160kg
Conveyor Height	680mm	750mm	750mm
Wire Resolution	40 AWG	40 AWG	40 AWG
Steel Penetration	40mm	38mm	38mm
Dimensions (L×W×H)	2042mm×899mm×1388mm	2340mm×1000mm×1507mm	2397mm×1412mm×1531mm
Weight	530kg	650kg	1100kg
Power Consumption	0.8 kVA	1.0 kVA	1.2 kVA

* Image performance specifications are based on test piece complying with CAAC standard.
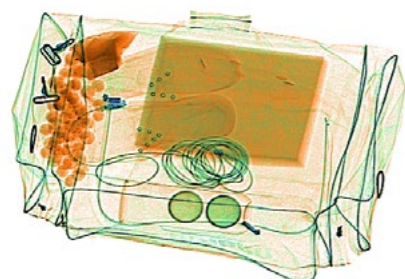
Luggage & Cargo
X-ray Inspection System

SUMMARY

Nuctech's X-ray inspection systems for hold baggage and air cargo leverage advanced dual-energy material classification and optimized X-ray sensors to enhance imaging, throughput, and detection capabilities in the most challenging operational environments.

Based on the field-proven operational capabilities of the CX platform, CX Luggage & Cargo X-ray Inspection Systems are engineered in various tunnel sizes and dual-view imaging options to meet the customized needs of each deployment. As a result, CX Luggage & Cargo X-ray Inspection Systems are trusted worldwide including at airports, air cargo facilities, rail stations, critical infrastructure, and major events.

TECHNICAL FEATURES

- Unsurpassed image quality through optimized X-ray generator and high-resolution detectors
- Advanced, dual-energy material classification technology for accurate threat and contraband detection
- Efficient operation with ergonomically designed user interface
- Threat Image Projection (TIP) ready
  Centralized station capabilities including image review and enhanced storage and networking capability

Advanced material classification: orange for organic, blue for metal and green for mixed material & light metal

Automatic detection and alarm of contrabands

TECHNICAL DATA

General Specifications

Image Enhancement	Color/BW, negative, high/low penetration, organic/inorganic stripping, general enhancement, multi-absorptivity, etc.
Image Recall	All preceding images recallable
Explosives & Narcotics Detection	Explosives & narcotics alarm and highlight according to atomic number signature
High Density Region Alarm	Impenetrable region alarm and highlight, for possible concealing of threats and contrabands
Threat Image Projection	Inserting fictional, but realistic images of threat items into baggage during screening operation, for maintenance of vigilance, as well as training and assessment of image identification capability
Image Archive	Up to 100,000 images stored automatically, enable transferring to USB storage, and converting to JPG, BMP and other general formats
Network Applications	Image centralized storage and screening, recheck workstation, network TIP, etc.
Radiation Safety	Less than 1 µGy/h (5cm from the housing)
Film Safety	Guaranteed for high speed film up to ASA/ISO1600 (33DIN)

Products	CX8065TI	CX8065D(Dual-view)	CX10080T
Tunnel Dimensions (W×H)	810mm×655mm	830mm×663mm	1010mm×805mm
Load Capacity	200kg	200kg	200kg
Conveyor Height	300mm	300mm	300mm
Wire Resolution	38 AWG	38 AWG	38 AWG
Steel Penetration	35mm	35mm	35mm
Dimensions (L×W×H)	2960mm×1100mm×1565mm	3000mm×1525mm×1500mm	3126mm×1340mm×1650mm
Weight	850kg	1230kg	1000kg
Power Consumption	1.0 kVA	1.2 kVA	1.0 kVA

Products	CX100100TI	CX100100BI	CX100100D(Dual-view)	CX100100DB(Dual-view)
Tunnel Dimensions (W×H)	1010mm×1005mm	1010mm×1005mm	1010mm×1005mm	1010mm×1005mm
Load Capacity	200kg	200kg	200kg	200kg
Conveyor Height	300mm	700mm	300mm	700mm
Wire Resolution	38 AWG	38 AWG	38 AWG	38 AWG
Steel Penetration	35mm	35mm	35mm	35mm
Dimensions (L×W×H)	3600mm×1300mm×1790mm	3555mm×1330mm×1955mm	3595mm×1735mm×1835mm	3555mm×1709mm×1950mm
Weight	1060kg	1420kg	1400kg	1790kg
Power Consumption	1.0 kVA	1.0 kVA	1.5 kVA	1.5 kVA

* Image performance specifications are based on test piece complying with CAAC standard.

Pallet & Cargo
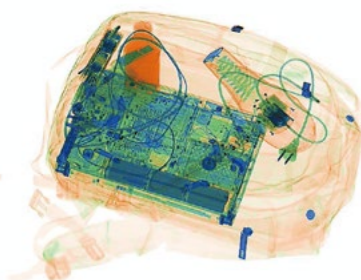# X-ray Inspection System

SUMMARY

The NUCTECH™ CX Series Pallet & Cargo X-ray Inspection Systems are engineered in large tunnel sizes for palletized cargo screening. Based on the field proven CX platform, CX Pallet & Cargo X-ray Inspection Systems combine an ergonomic user interface, dual-energy material classification, and customizable configurations into reliable solutions trusted globally including at airports, customs facilities, border crossings, rail stations, critical infrastructure, and global events.
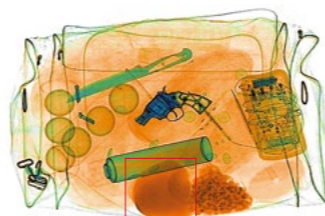
TECHNICAL FEATURES

- Unsurpassed image quality through optimized X-ray generator and high-resolution detectors
- Advanced, dual-energy material classification technology for accurate threat and contraband detection
- Efficient operation with ergonomically designed user interface
- Threat Image Projection (TIP) ready
- Centralized station capabilities including image review and enhanced storage and networking capability
- Roller type conveyors for high load capacity

Advanced material classification: orange for organic, blue for metal and green for mixed material & light metal

Automatic detection and alarm of contrabands

TECHNICAL DATA

General Specifications

Image Enhancement	Color/BW, negative, high/low penetration, organic/inorganic stripping, general enhancement, multi-absorptivity, etc.
Image Recall	All preceding images recallable
Explosives & Narcotics Detection	Explosives & narcotics alarm and highlight according to atomic number signature
High Density Region Alarm	Impenetrable region alarm and highlight, for possible concealing of threats and contrabands
Threat Image Projection	Inserting fictional, but realistic images of threat items into baggage during screening operation, for maintenance of vigilance, as well as training and assessment of image identification capability
Image Archive	Up to 100,000 images stored automatically, enable transferring to USB storage, and converting to JPG, BMP and other general formats
Network Applications	Image centralized storage and screening, recheck workstation, network TIP, etc.
Radiation Safety	Less than 1 μGy/h (5cm from the housing)
Film Safety	Guaranteed for high speed film up to ASA/ISO1600 (33DIN)

Products	CX130130D(Dual-view)	CX150150U(Dual-view)	CX150180SI	CX150180D(Dual-view)
Tunnel Dimensions (W×H)	1310mm×1318mm	1550mm×1510mm	1550mm×1806mm	1550mm×1806mm
Load Capacity	320kg	3000kg	2000kg	3000kg
Conveyor Height	350mm	945mm	330mm	330mm
Wire Resolution	38 AWG	34 AWG	38 AWG	38 AWG
Steel Penetration	50mm	75mm	50mm	50mm
Dimensions (L×W×H)	3720mm×2095mm×2380mm	5270mm×2716mm×2712mm	5136mm×2732mm×2402mm	5736mm×2802mm×3151mm
Weight	2490kg	5500kg	2980kg	4145kg
Power Consumption	1.8 kVA	4.5 kVA	1.8 kVA	2.5 kVA

Products	CX150180U(Dual-view)	CX180180D(Dual-view)	CX180180DH(Dual-view)
Tunnel Dimensions (W×H)	1550mm×1806mm	1850mm×1806mm	1850mm×1806mm
Load Capacity	3000kg	3000kg	3000kg
Conveyor Height	756mm	330mm	330mm
Wire Resolution	38 AWG	38 AWG	34 AWG
Steel Penetration	55mm	50mm	70mm
Dimensions (L×W×H)	5270mm×2716mm×2818mm	6336mm×3102mm×3153mm	6336mm×3102mm×3153mm
Weight	5100kg	5315kg	5770kg
Power Consumption	2.5 kVA	2.5 kVA	4.5 kVA

* Image performance specifications are based on test piece complying with CAAC standard.
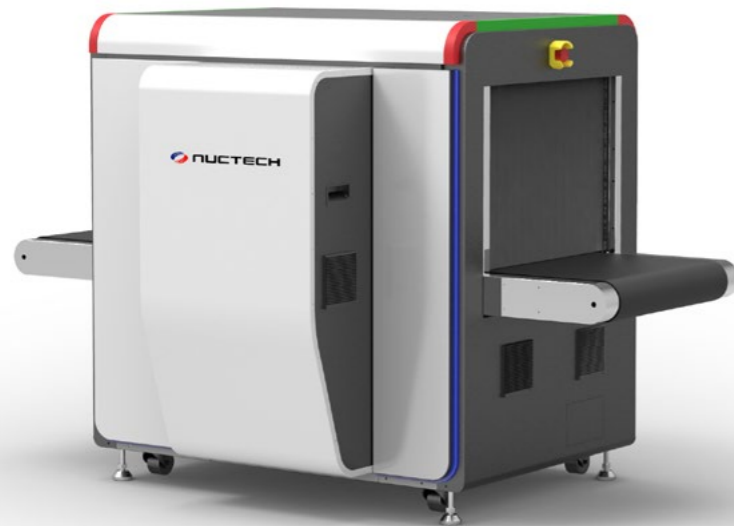
Economical
X-ray Inspection System

SUMMARY

The NUCTECH™ CX Series Economical X-ray inspection systems are built on the field proven CX product platform. Each CX system contains enhanced image quality and a variety of robust professional image processing functions, ergonomic and friendly user interface, intelligent networking capabilities and applications, excellent reliability and maintainability.

With various tunnel sizes and dual-view options, the CX Series' dual-energy material classification and user-friendly interface make it optimal for screening of baggage and parcels at customs facilities, rail transportation stations, critical infrastructure, and events.

TECHNICAL FEATURES

- Unsurpassed image quality through optimized X-ray generator and high-resolution detectors
- Advanced, dual-energy material classification technology for accurate threat and contraband detection
- Efficient operation with ergonomically designed user interface
- Threat Image Projection (TIP) ready
- Centralized station capabilities including image review and enhanced storage and networking capability

TECHNICAL DATA

## General Specifications

Image Enhancement	Color/BW, negative, high/low penetration, organic/inorganic stripping, general enhancement, multi-absorptivity, and suspect material enhancement etc.
Image Recall	All preceding images recallable
Explosives & Narcotics Detection	Explosives & narcotics alarm and highlight according to atomic number signature
High Density Region Alarm	Impenetrable region alarm and highlight for possible concealing of threats and contraband
Threat Image Projection	Inserting fictional, but realistic images of threat items into baggage during screening operation, for maintenance of vigilance, as well as training and assessment of image identification capability
Image Archive	Up to 100,000 images stored automatically, enable transferring to USB storage, and converting to JPG, BMP and other general formats
Network Applications	Image centralized storage and screening, recheck workstation and network TIP etc.
Radiation Safety	Less than 1 μGy/h (5cm from the housing)
Film Safety	Guaranteed for high-speed film up to ASA/ISO1600 (33DIN)

Products	CX6040BC	CX6550DC	CX100100TC	CX100100DC
Tunnel Dimensions (W×H)	610mm×420mm	670mm×520mm	1010mm×1005mm	1010mm×1005mm
Load Capacity	160kg	160kg	200kg	200kg
Conveyor Height	700mm	300mm	300mm	300mm
Wire Resolution	40 AWG	40 AWG	38 AWG	38 AWG
Steel Penetration	38mm	38mm	35mm	35mm
Dimensions (L×W×H)	1660mm×800mm ×1290mm	2140mm×1280mm ×1400mm	3600mm×1350mm ×1820mm	3600mm×1700mm ×1820mm
Weight	360kg	680kg	1298kg	1480kg
Power Consumption	0.8 kVA	1.2 kVA	1.0 kVA	1.5 kVA
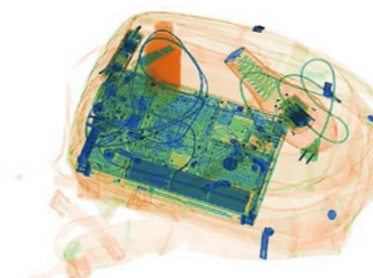
Advanced material classification: orange for organic, blue for metal and green for mixed material & light metal

Automatic detection and alarm of contrabands
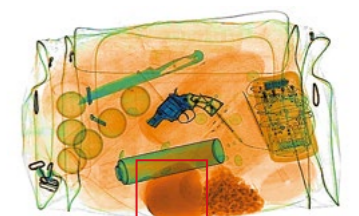
SUMMARY

The NUCTECH™ MX Series Mobile X-ray Inspection Systems integrate the field-proven detection capabilities of the CX platform into a fully functional vehicle to enable rapid deployment and response to evolving security situation and threats.

Customizable with various tunnel sizes and dual-view options, the MX Series' dual-energy material classification and user-friendly interface make it optimal for temporary screening of baggage and parcels at airports, customs facilities, rail transportation stations, critical infrastructure, and events.

Mobile X-ray Inspection System

TECHNICAL DATA

General Specifications

Image Enhancement	Color/BW, negative, high/low penetration, organic/inorganic stripping, general enhancement, multi-absorptivity, etc.
Image Recall	All preceding images recallable
Explosives & Narcotics Detection	Explosives & narcotics alarm and highlight according to atomic number signature
High Density Region Alarm	Impenetrable region alarm and highlight, for possible concealing of threats and contrabands
Threat Image Projection	Inserting fictional, but realistic images of threat items into baggage during screening operation, for maintenance of vigilance, as well as training and assessment of image identification capability
Image Archive	Up to 100,000 images stored automatically, enable transferring to USB storage, and converting to JPG, BMP and other general formats
Network Applications	Image centralized storage and screening, recheck workstation, network TIP, etc.
Radiation Safety	Less than 1 μGy/h (5cm from the housing)
Film Safety	Guaranteed for high speed film up to ASA/ISO1600 (33DIN)

Products	MX8585T	MX100100D(Dual-view)
Tunnel Dimensions (W×H)	860mm×860mm	1010mm×1010mm
Load Capacity	160kg	200kg
Wire Resolution	38 AWG	38 AWG
Steel Penetration	35mm	35mm

* Image performance specifications are based on test piece complying with CAAC standard.

TECHNICAL FEATURES

- Unsurpassed image quality through optimized X-ray generator and high-resolution detectors
- Advanced, dual-energy material classification technology for accurate threat and contraband detection
- High mobility vehicle integration
- Efficient operation with ergonomically designed user interface
- Threat Image Projection (TIP) ready
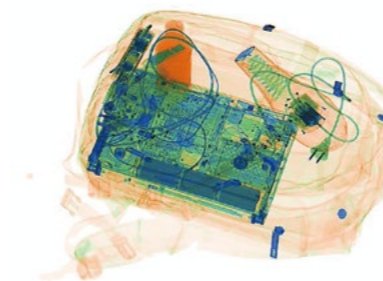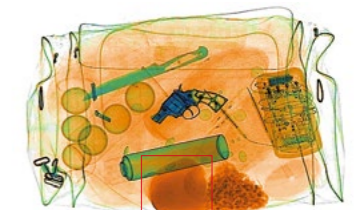- Dual-view identification of threats and contrabands by two perpendicular viewing angle

Advanced material classification: orange for organic, blue for metal and green for mixed material & light metal

Automatic detection and alarm of contrabands

High-Speed In-line X-ray Inspection System

SUMMARY

The AX Series High-Speed In-line X-ray inspection systems are Nuctech's next generation systems designed specifically for integration into Baggage Handling Systems (BHS). With top conveying speed of 0.5m/s, the system achieves a high throughput of up to 1800 BPH. Images can be distributed via network in real time to remote operators for centralized image interpretation. NUCTECH's smart algorithm is applied for automatic explosives detection based on atomic number signatures.

With powerful and flexible integration interface, the AX Series is compatible with diverse BHS configurations, fulfilling the BHS integration demands of all airports.

TECHNICAL FEATURES

- Powerful and flexible integration interface to diverse BHS
- Automatic detection and alarm of explosives by effective atomic number
- Real time images distribution to remote operators and centralized image interpretation
- High throughput up to 1800 BPH with 0.5m/s belt speed
- Excellent image quality from powerful X-ray generator and advanced detectors
- Network ready for centralized image analysis, management and Net TIP
- High reliability and easy maintenance

TECHNICAL DATA

General Specifications

Image Enhancement	Color/BW, negative, high/low penetration, organic/inorganic stripping, general enhancement, multi-absorptivity and suspect material enhancement etc.
Image Recall	All preceding images recallable
Explosives & Narcotics Detection	Explosives & narcotics alarm and highlight according to atomic number signature
High Density Region Alarm	Impenetrable region alarm and highlight, for possible concealing of threats and contraband
Threat Image Projection	Inserting fictional, but realistic images of threat items into baggage during screening operation, for maintenance of vigilance, as well as training and assessment of image identification capability
Image Archive	Up to 100,000 images stored automatically, enable transferring to USB storage, and converting to JPG, BMP and other general formats
Network Applications	Image centralized storage and screening, recheck workstation and network TIP etc.
Radiation Safety	Less than 1 μGy/h (5cm from the housing)
Film Safety	Guaranteed for high speed film up to ASA/ISO1600 (33DIN)
Working Mode	In-line, off-line, transfer
Interface Type	PROFIBUS DP, PROFINET, RJ45, RS485, Relay Switch

Products	AX5000	AX5000H
Tunnel Dimensions (W×H)	1010mm×1005mm	1010mm×1005mm
Load Capacity	200kg	200kg
Conveyor Height	850mm	850mm
Wire Resolution	38 AWG	38 AWG
Steel Penetration	35mm	38mm
Dimensions (L×W×H)	3555mm×1710mm×2170mm	3555mm×1710mm×2170mm
Weight	2300kg	2300kg
Power Consumption	3.0 kVA	3.0 kVA

Automatic detection and alarm of solid explosives