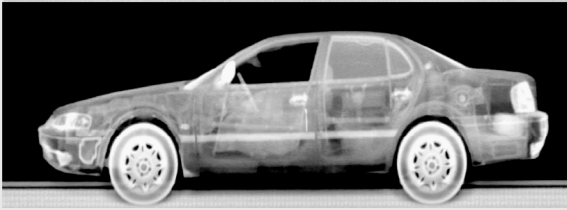
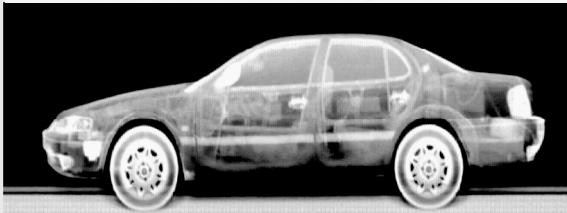
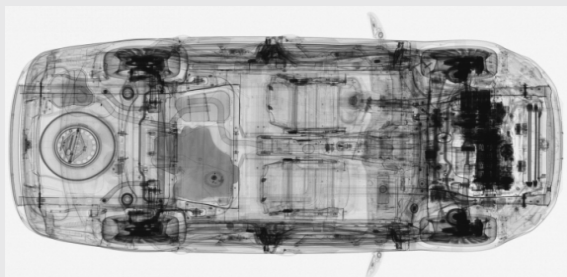


NUCTECH™ CS1000T(BX) Passenger Car Inspection System

The NUCTECH™ CS1000T(BX) Passenger Car Inspection System is a multi-imaging technology inspection system that combines transmission and backscatter imaging technology and provides comprehensive image information to scanned passenger cars. The system adopts a patented conveyor to transport cars through the scanning tunnel and generate one top-view and two side-view scanning images of a car in one pass, providing great help for image analysts to identify concealed contraband or dangerous materials hidden in the cars. It can be deployed at land border, police checkpoint, airport and entries of important infrastructure and public building.



→ **High Penetration Top-view Scanning Image**

The Inspection System can provide high penetration top-view scanning image to help analysts to identify concealed contrabands or dangerous materials. It is particularly suitable for a chassis inspection.

→ **Backscatter Imaging**

Backscatter imaging can highlight low atomic number materials (e.g. explosives and drugs), which helps the analyst to find the contraband and dangerous goods concealed in the car.

→ **Self-shielding Structure**

The Inspection System adopts self-shielding structures, which effectively reduce the radiation protection area.

→ **Patented Conveyor**

The Inspection System is equipped with a patented two-piece conveyor, which ensures that cars will be parked and transported safely and smoothly without impacting imaging results.

Technical Data

| | Transmission module | Backscatter module |
|---|--|--|
| Type of X-ray source | Electron Linear Accelerator | X-ray Tube |
| X-ray energy | 1 MeV | 225 keV |
| Penetration | 150 mm steel | 6 mm steel |
| Contrast sensitivity | 2.0% thickness steel sheet behind 15 mm thick steel plate 4.0% thickness steel sheet behind 75 mm thick steel plate 8.0% thickness steel sheet behind 120 mm thick steel plate | 6mm plastic sheet in front of 100 mm thick plastic plate 3mm plastic sheet in front of 6 mm thick steel plate |
| Wire detection | Φ1.5 mm cooper wire in free air | Φ3.0 mm cooper wire |
| Spatial resolution | Horizontal: 3.0 mm Vertical: 4.0 mm | Horizontal: 10.0 mm Vertical: 10.0 mm |
| Max. Dim. of scanned vehicle | 7.0 m (L) × 2.5 m (W) × 3.0 m (H) | |
| Scanning method | The conveyor transfers the passenger car through the scanning tunnel | |
| Throughput | 25 units of passenger vehicles per hour | |
| Scanning speed | 0.2 m/s for standard | |
| Operating temperature | -20 °C - +55 °C | |
| Humidity range | 0% - 95%, non-condensing | |
| Average dose rate on the system boundary | ≤ 0.5 μSv/h | |
| Computer monitor | 24" LCD Monitor or better | |
| Zoom | 1X, 2X, 4X, 8X, 16X | |
| Image acquisition mode | Real-time, synchronized | |
| Operator number | 4 (one for system control, one for check-in and two for image inspection) | |