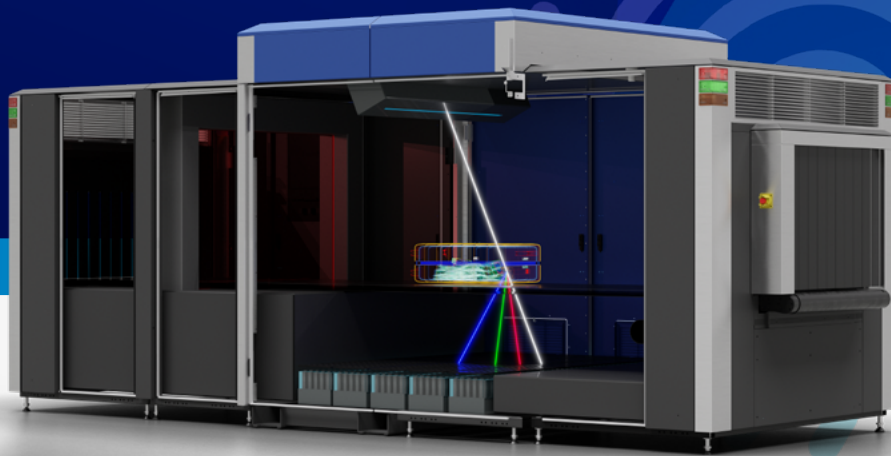


# Future-proofing Hold Baggage Screening

→ Leveraging X-ray Diffraction for optimised security operations



**SDX 10060 XDi**

Automating alarm-resolution with X-ray Diffraction is a game-changer.

Multi-level baggage handling operations are constantly under pressure to screen huge volumes quickly and efficiently. Typically, Explosives Detection Systems (EDS) automatically clear 70-80% of items at Level 1, meaning 20-30% alarmed images are sent to analysts for on-screen resolution at Level 2.

The groundbreaking Smiths Detection SDX 10060 XDi transforms this process by automating up to 80% of these Level 2 decisions, in turn improving both security and efficiency.

## Superior Material Analysis

X-ray Diffraction (XRD) is a well proven, non-invasive inspection technology offering highly accurate material discrimination and

substance identification based on molecular structure. It creates a 'diffraction fingerprint' to differentiate between materials — even those with very similar densities.

## Impressive Advantages

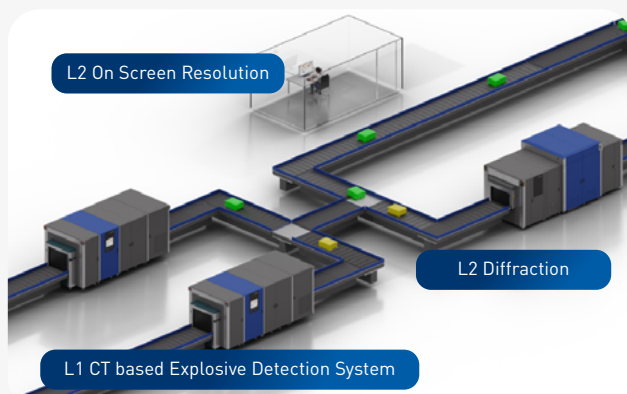
- Automated alarm resolution at level 2
- Minimized overall FAR
- Optimised staff resources
- Increased productivity
- Decreased costs
- Superior material analysis
- Highly accurate substance identification
- Detection of changing compounds
- Mitigates 'homemade explosives' threat
- Complements existing technologies
- Easily integrated into baggage handling system

This precise and orthogonal\* approach makes it particularly suitable for resolving alarms generated at Level 1; and detecting constantly changing powder, liquid or solid compounds such as 'homemade' explosives and narcotics.

## Elevated Operational Efficiency

For automated alarm resolution, the SDX 10060 XDi is easily integrated into baggage handling systems alongside EDS scanners.

Each integrated diffraction scanner can receive alarm queries from several Level 1 systems. This substantially reduces the need for Level 2 on-screen resolution, hand searches, trace detection or other manual inspections by automatically clearing false alarms or benign objects. Overall false alarm rates have been shown to fall from 20% to 4%.



This not only addresses the challenges of staff shortages but also improves overall efficiency, reducing operating costs and the chance of human error.

## Future Proof

The SDX 10060 XDi takes security to new levels. It is designed to meet ECAC 3.1, 3.2 and TSA 7.3 and is also one of the few technologies likely to detect evolving threats and therefore meet future regulatory standards. The detection library will evolve over time ensuring your operation remains future-proofed.

## Additional Benefits and Applications

The impressive material specific detection capabilities can also support customs agencies by transforming inbound screening for a range of contraband items including narcotics.

Dual purpose use of the SDX 10060 XDi is also an option: While resolving Level 1 explosives alarms, it can simultaneously perform precise narcotics screening, and forward this information to relevant law enforcement authorities at the arrival destination via a wide area network.

\*ECAC Implementing Decision C (2015) 8005 permits the use of screening equipment for EDS alarm resolution that is at least of the same standard but based on a different (orthogonal) technology such as X-ray diffraction.

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