Container & Cargo Explosive Detector

Maritime Cargo Security

Inspecting the millions of shipping containers moving through the world’s ports for explosives, drugs and other contraband material is critical to international security. Yet, keeping cargo flowing is vital for the global economy. TeknoScan offers practical, rapid and reliable substance trace detection and identification systems for port security applications.

The swift and secure passage of these containers is critical to the world’s economies. Yet, these containers represent the greatest concern for security and vulnerability. Currently, only a very small percentage of cargo containers are actually inspected for security threats. To improve security, the US Congress has mandated that all inbound cargo containers should be 100 per cent inspected for explosives, narcotics and other threat substances by 2012. However, using current screening methods and technologies, this objective presents significant challenges.

Since opening each container is clearly not practical, it is necessary to introduce another screening method that will not disrupt the flow of commerce. TeknoScan Systems complements imaging, radiation and canine solutions with its trace detection technology to quickly detect and identify explosives, narcotics and other threat substances. TeknoScan offers these detection and identification systems for ports without the high capital cost for imaging systems. Many cargo containers can be quickly checked for target substances using a high volume vacuum sampling system attached to a container’s ventilation port. Where a ventilation port is blocked or not available, a probe can be inserted through the container doors to extract air samples from the container’s interior.

TeknoScan Systems is currently focused on the development and deployment of its technology to quickly detect and identify explosives, drugs and other contraband in cargo containers, making 100 per cent cargo inspection requirements achievable.
Air Cargo Security

The explosion of a bomb planted in an air cargo container is a catastrophic event with far-reaching human and economic consequences. Screening 100 per cent of all cargo on U.S. passenger flights is now required. The current canine and imaging solutions are insufficient for the task. Additional approaches are required. TeknoScan offers practical, rapid and reliable threat substance detection and identification systems for air cargo security applications.

The U.S. Transportation Security Administration (TSA) wants to boost screening of cargo on international aircraft carriers to 100 per cent by 2013. Air cargo security is seen to be the Achilles’ heel in the security net, and universal screening of airfreight would have a massive negative economic and logistic impact.

Cargo security need not be air transport’s Achilles’ heel. For air transport and government security decision-makers, TeknoScan provides the trace detection and identification solution of choice. TeknoScan’s Trace Detection and Identification technology screens for potential threat substances in vehicles, on pallets, in ULDs, and in packages, boxes or luggage.

The technology is even capable of securing entire aircraft passenger cabins. Extraction of air samples for analysis can occur simply and rapidly via aircraft ventilation dump valves.
Land Cargo Security

The current global security situation requires new approaches to identify and prevent security threats from both internal and external sources. Ground-based security solutions are essential in both civilian and police applications. TeknoScan offers practical, rapid and reliable threat substance trace detection and identification systems for land cargo security applications.

As recent homegrown terrorist incidents have shown, threats can originate from both internal and external sources. Threats are not limited to explosives; they can also involve nuclear material, chemical and biological agents, smuggling of individuals and narcotics. Although imaging technologies, such as X-ray systems, have been developed to a very high standard, they are still unable to detect all types of threats, being relegated to those which have a shape; further, they have high capital and operating costs, require skilled operators and can still be circumvented. Although sniffer dogs are a valuable asset, they too are not infallible.

A combination of technologies and methods is the best solution available to address this complex and multi-faceted problem because all existing technologies and methods have limitations. TeknoScan brings a practical and accurate technology to the ground-based security solution mix.

TeknoScan offers a lightweight and portable sampling system for containers, vehicles, packages or people. These systems can be deployed in logistic centers, border crossings and other operational sites. These mobile systems deliver TeknoScan’s Rapid Trace Detection & Identification (RTDI) technology for cargo, packages, people and vehicles at virtually any location. Portable and non-invasive, easy to use hand-held or high volume vacuum systems are designed to deal with almost any operational environment. On-site sampling and analysis dramatically improves ground-based security.