

## **VEDS-Automated system for inspection of vehicles and containers for explosives and other threats**

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Many parts of national infrastructures around the world are very vulnerable to terrorist threats in the form of large vehicle bombs. The larger bomb, the larger is the damage and its extent.

The number of containers and vehicles crossing land or sea ports of entry is huge. Though the probability is low, any vehicle may contain a threat. Any system addressing these enormous security tasks should obviously be based on excellent human intelligence to focus the attention on a much smaller number of high-risk containers and vehicles. These containers must then be subjected to a thorough and reliable inspection for the threats.

Viable security system must incorporate a credible and effective inspection to achieve its purposes. It should have high performance and be operationally acceptable. This means the system must possess high detection capabilities, low false positive rate, fast response and provide automatic decision eliminating the need for human interpretation.

Ancore has developed a range of new inspection devices, which are highly suitable for the above tasks. All the systems are automatic, material specific, high performance for a wide range and type of threats. Some of them are also highly modular, and compact. Some of the systems are fixed, other are relocatable, or fully mobile.

The presentation will discuss Ancore's VEDS (Vehicle Explosive Detection System) which detects bulk explosives (expandable also to radiological and nuclear threats) in marine containers, trucks and cars. The compact and rugged nature of the VEDS sensor makes it suitable for many forms of conveyance: mobile (van mounted), portal, forklift mounted, or mounted on container unloading rig.

The physics principles of the system and some recent applications and results will be presented.