



# COMPLETE SOLUTION FOR INSPECTION

liquid: 0.90

liquid: 0.64

liquid: 0.77

liquid: 0.49

liquid: 0.68

liquid: 0.5





Able to perform a non-invasive, swift and efficient inspection process, our equipment is innovative technological solutions and are constantly evolving to meet the most demanding control and security systems.

The Spectrum line scanners allow for fast, non-invasive, and efficient inspection of small, medium, and large volumes. With powerful generators and cutting-edge technology, our X-ray equipment produces high-quality and clear images.



SPECTRUM  
**5333**



SPECTRUM  
**6040**



SPECTRUM  
**100100**



# SPECTRUM 5333

**COMPACT X-RAY  
SCANNERS  
FOR LIMITED  
SPACE AREAS.**



SECURITY

# SPECTRUM 6040

**More efficiency  
and control for non-  
invasive inspection.**

The Spectrum 6040 is a rugged equipment, specifically designed to meet the needs and applications that require high image quality.

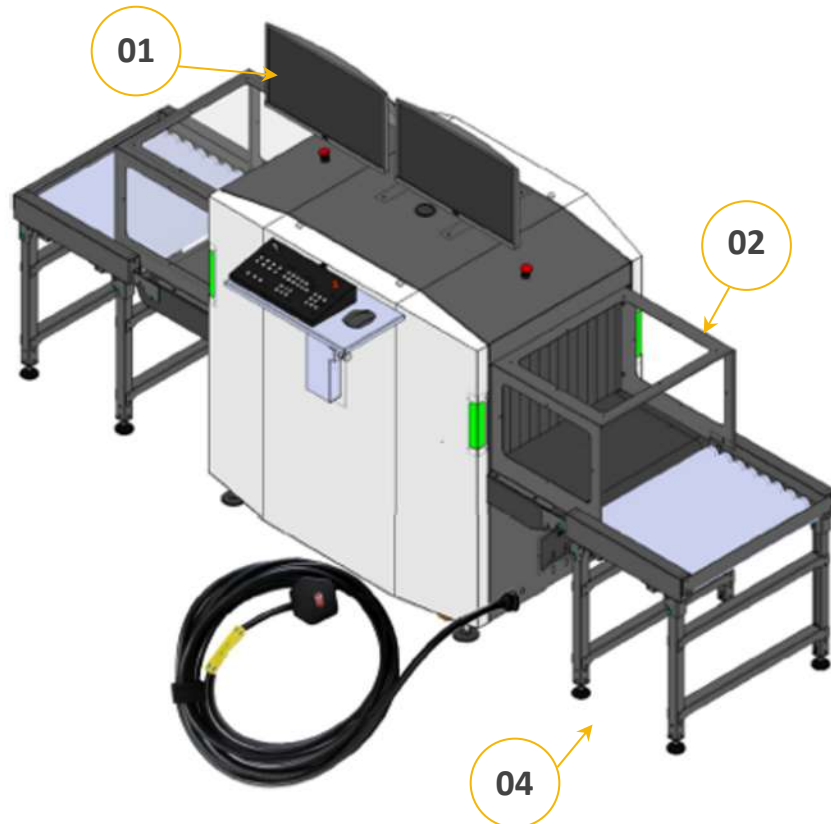




SPECTRUM  
**100100**

Scanners for non-invasive inspection  
of volumes of different dimensions.





**01 – High resolution monitor**  
Different display sizes for better viewing

**02 – Tunnel protection**  
Manufactured with different size and material

**03 – Roller table**  
Conveyor belt extension that can meet configurable size by joining more units

**04 – Lifting base**  
Adjustable to different heights for better ergonomics  
ACCESSORIES



TECHNOLOGICAL  
ADVANTAGES





**The VMI Security solutions use innovative technology to maximize efficiency in non-invasive inspection processes.**

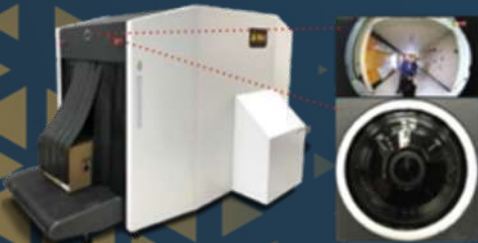


SECURITY



**Integrated monitoring  
between the Spectrum  
line equipment and other  
security systems.**





The VMI SECURITY Spectrum line equipment are ONVIF certified.

Enabling integration of other security systems with the Spectrum line equipment.



ONVIF is a standard for talking to Network Camera Devices and other similar security hardware. This standard was established in 2008 to integrate multiple equipment and technologies from different manufacturers into one single monitoring platform. The Spectrum x-ray scanners are the only scanners in the market compatible with this technology, which brings important flexibility to the operation and enhances the security process while improving the CONOPS on site.

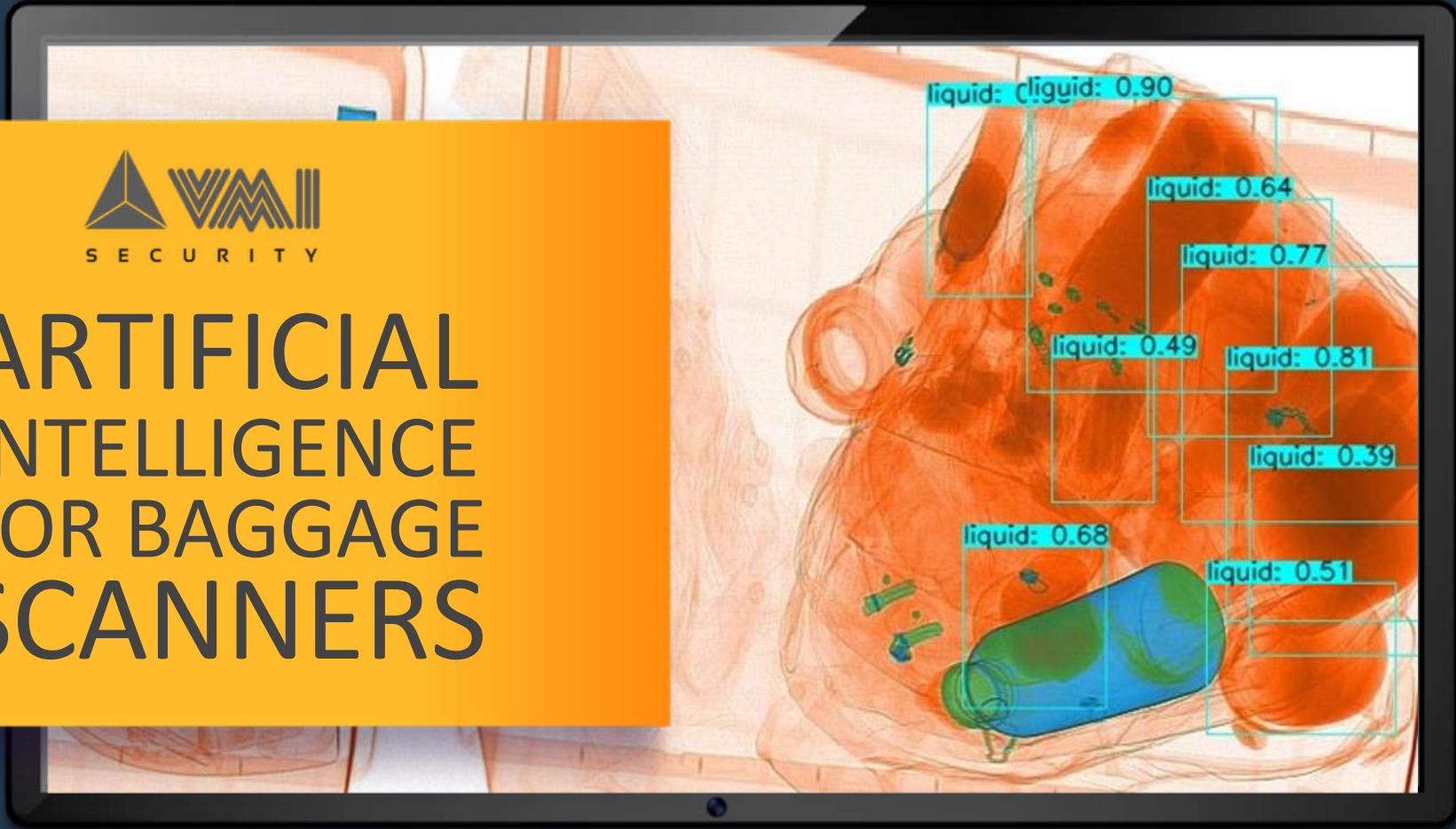


## ONVIF ADVANTAGES

- Integrate the Spectrum x-ray scanners inspection systems into the existing security network system, regardless the manufacturer.
- Remote monitor the Spectrum x-ray scanners with the same platform as cameras, control excess, etc.
- Synchronize the events (Spectrum x-ray scanners image with the attitude of the owner of inspected objects and the security guards).



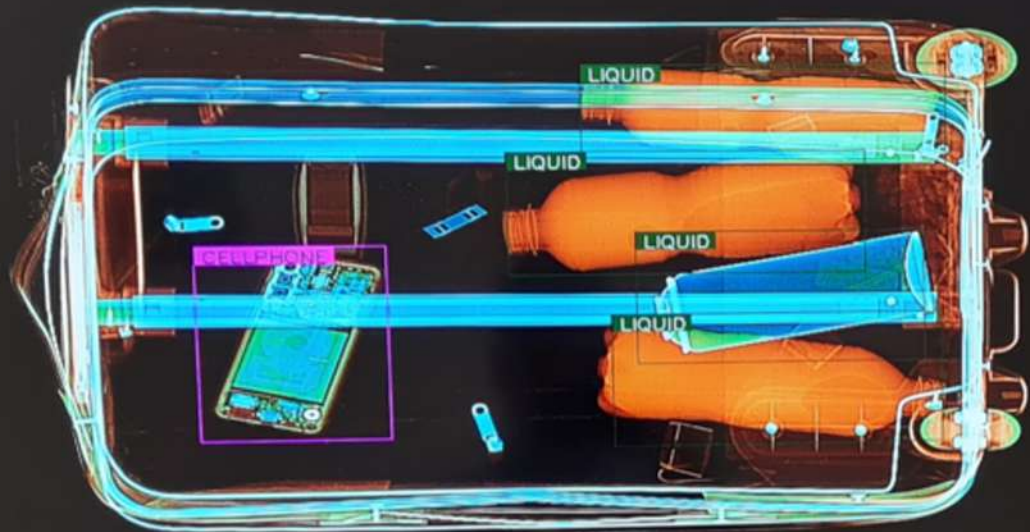
# ARTIFICIAL INTELLIGENCE FOR BAGGAGE SCANNERS



## ARTIFICIAL INTELLIGENCE APPLIED IN THE INSPECTION OF BAGGAGE AND OBJECTS

This feature helps the operators and specialists quickly and efficiently recognize images that are more complex. Which means, within the scope of the AI developed by VMI (Deep-Learning Machine), distinguishing, and identifying threats such as weapons, sharp objects, cellphones, tablets, laptops, chargers and liquids. Especially those difficult for human operators to detect, such as partially occluded, overlapping or at different viewing angles items.

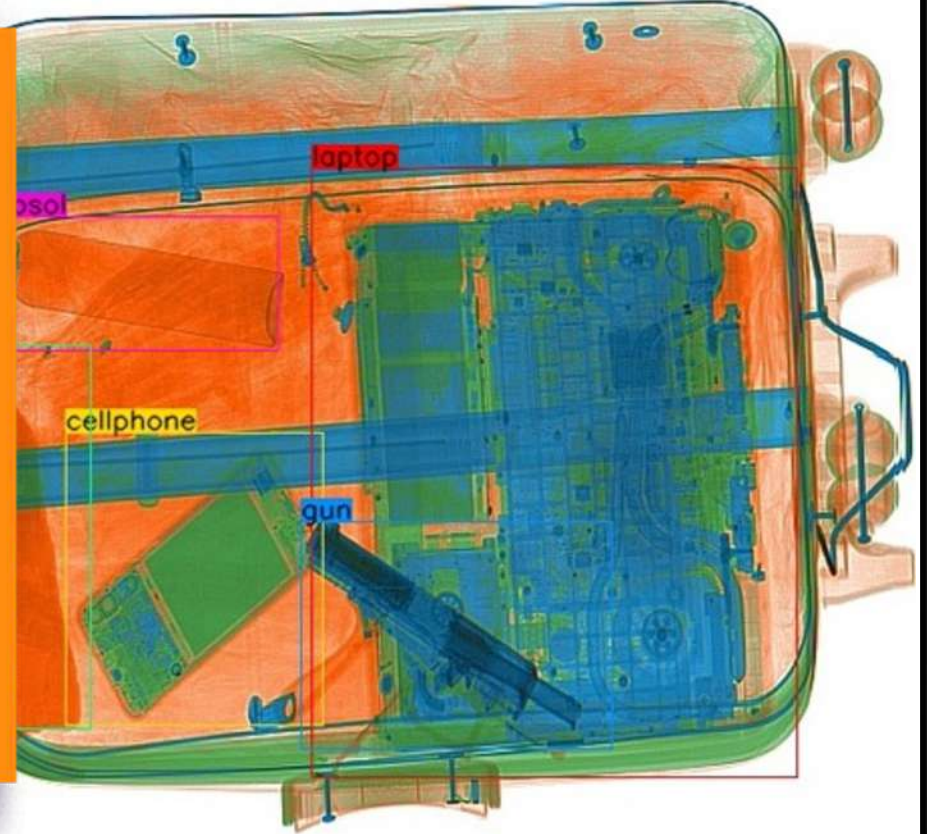
In addition, the developed model performs real-time detection, regardless whether equipment operates online or offline. Moreover, it can be integrated with other existing systems, as long as the equipment in question uses the same standard communication protocol between systems.





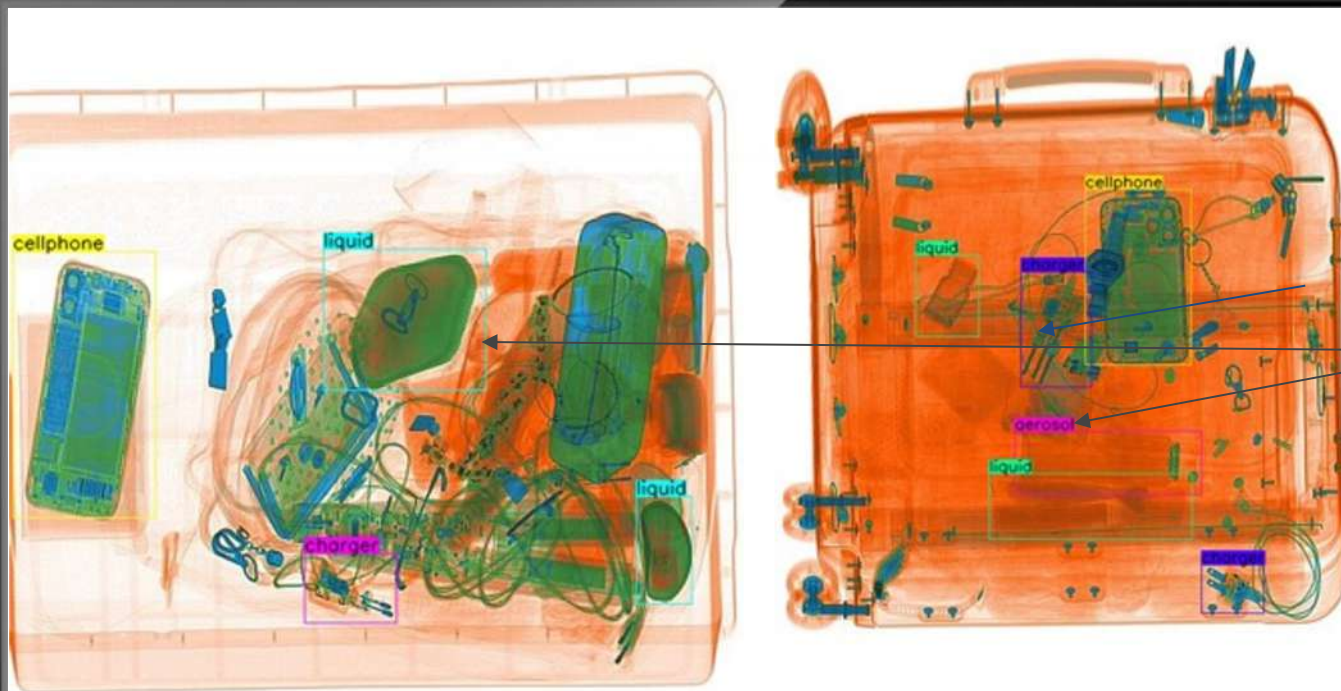
## OBJECTS AUTOMATICALLY IDENTIFIED

- Liquid
- Aerosol
- Cellphone
- Laptop
- Charger
- Firearm
- Knives
- Lithium battery
- Keys
- Lighter





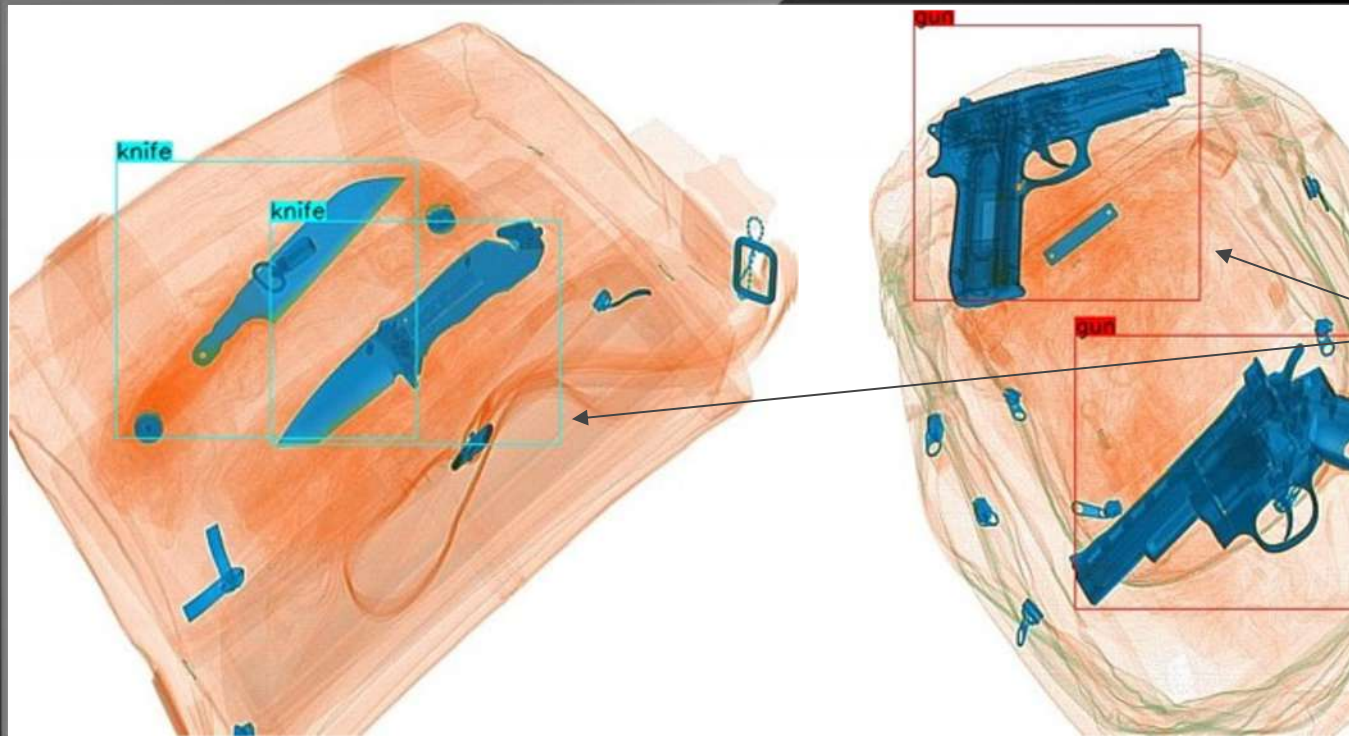
# EXAMPLES OF INFERENCE



Prohibited  
baggage items:

- Flammable liquids
- Aerosols

# EXAMPLES OF INFERENCE



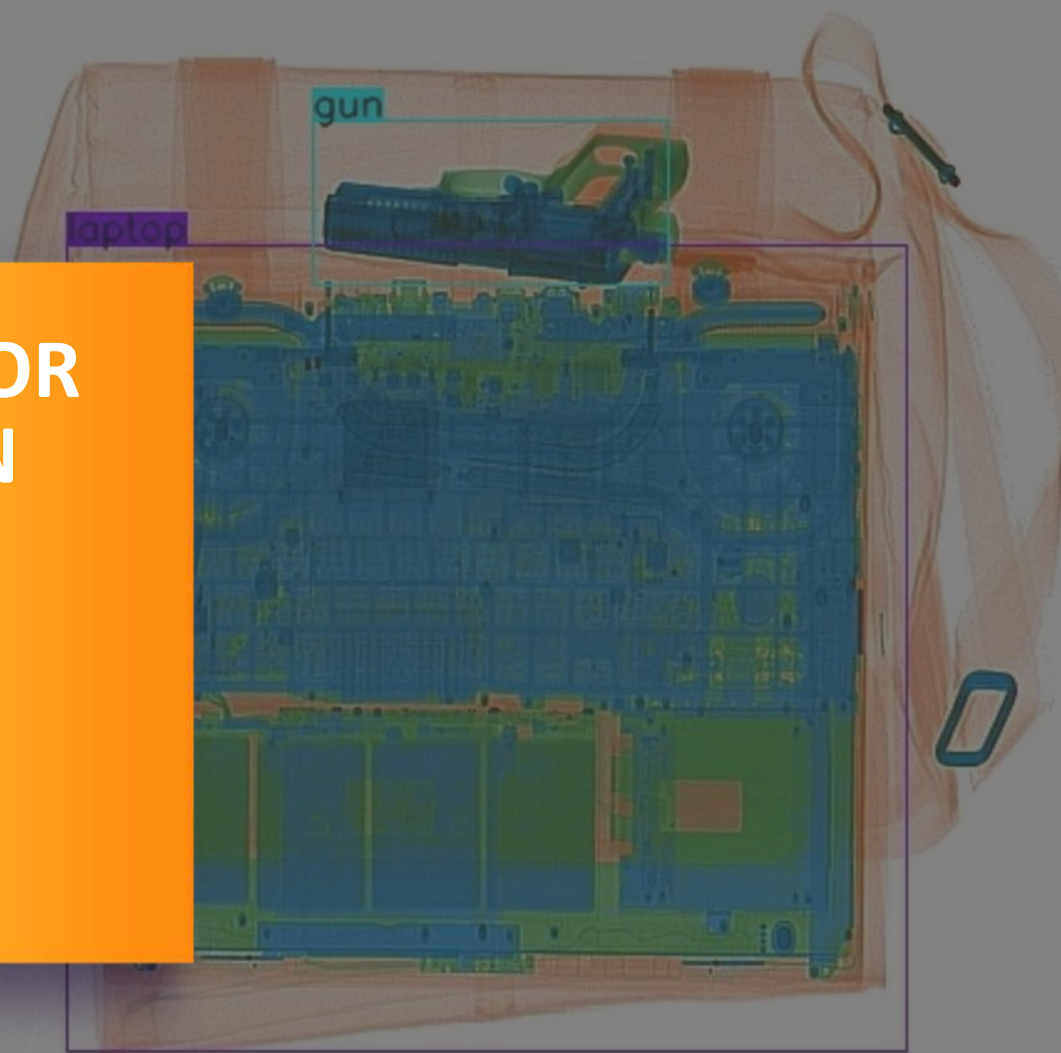
Prohibited  
baggage items:

- 6mm knives
- Firearm

# ADVANTAGES OF AI FOR BAGGAGE INSPECTION

In more complex scenarios, AI can assist:

- **In the inspection speed**, reducing queue time and the need for manual inspection through opening of the baggage
- **In security**, detecting difficult to identify prohibited objects.





# SPECTRUM ATIVA

VMI Security has introduced to the market the Ativa software system. This software option allows the full integration of all Spectrum equipment to a central server. This means that the data held in the systems on the operators and machine performance can be consolidated and managed in a single place.





**VMI SECURITY**  
**INSPECTION CHANNEL**

# SPECTRUM ATIVA



With this pioneering technology offered only by VMI Security, it is now possible for the security management team to get, consolidated performance reports, providing them with the information they need for decision making, higher efficiency and the enhancement of security. Some of the key features of ATIVA:

- Registration of users and multiple users from a single server;
- TIP configuration from a single server;
- Real time performance analysis;
- Management of queues by volume of luggage and passengers (Q factor);
- Equipment status monitoring;
- Centralized reports by user, groups, equipment, time and etc.
- Control Station that can be accessed and controlled by authorized security managers from any place;

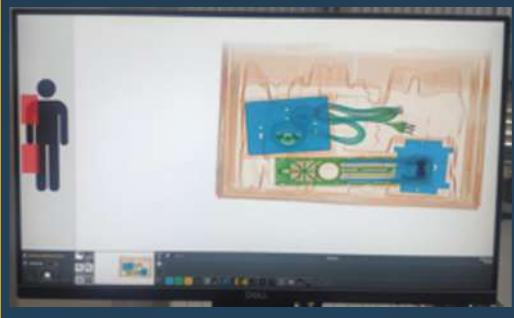
# OTHER TECHNOLOGICAL ADVANTAGES





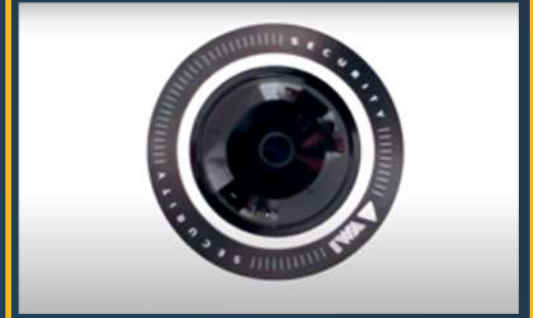
## BIOMETRIC INTEGRATION

A new era is coming to the world of security market. With the development of new types of biometric technology to identify users, VMI can now integrate with them using the “Spectrum Biometric Integration”. Therefore, along with recording the time of the inspection, you can already direct the data to the respective user and record the complete record in the server environment.



## WTMD INTEGRATION

VMI Security has developed the capability to integrate the Spectrum bag scanners (from 5333 to 100100) with the full range of Garrett Walk-Through Metal Detectors (WTMD). This allows a single operator, as shown in the demonstrative video below, to manage both systems through the same screen, reducing floor space and staff costs.



## CAMERA INTEGRATION

The Real-Time Recording option offers instant video recording of the objects inspected during the entire process, from the baggage entrance, placing the bag on the belt, to its exit and removal from the belt. The video images can be directed to the security managers and potentially integrated with the access control systems, Ativa and ONVIF and can be accessed at any time by the security manager or the operator.

*Option comes with 2 built in cameras, 1 monitor and hard disk 1Tb for recording.*



S E C U R I T Y

[WWW.VMISECURITY.COM](http://WWW.VMISECURITY.COM)