**Solutions for
Control and Security
in Mining Areas.**

VMII
S E C U R I T Y

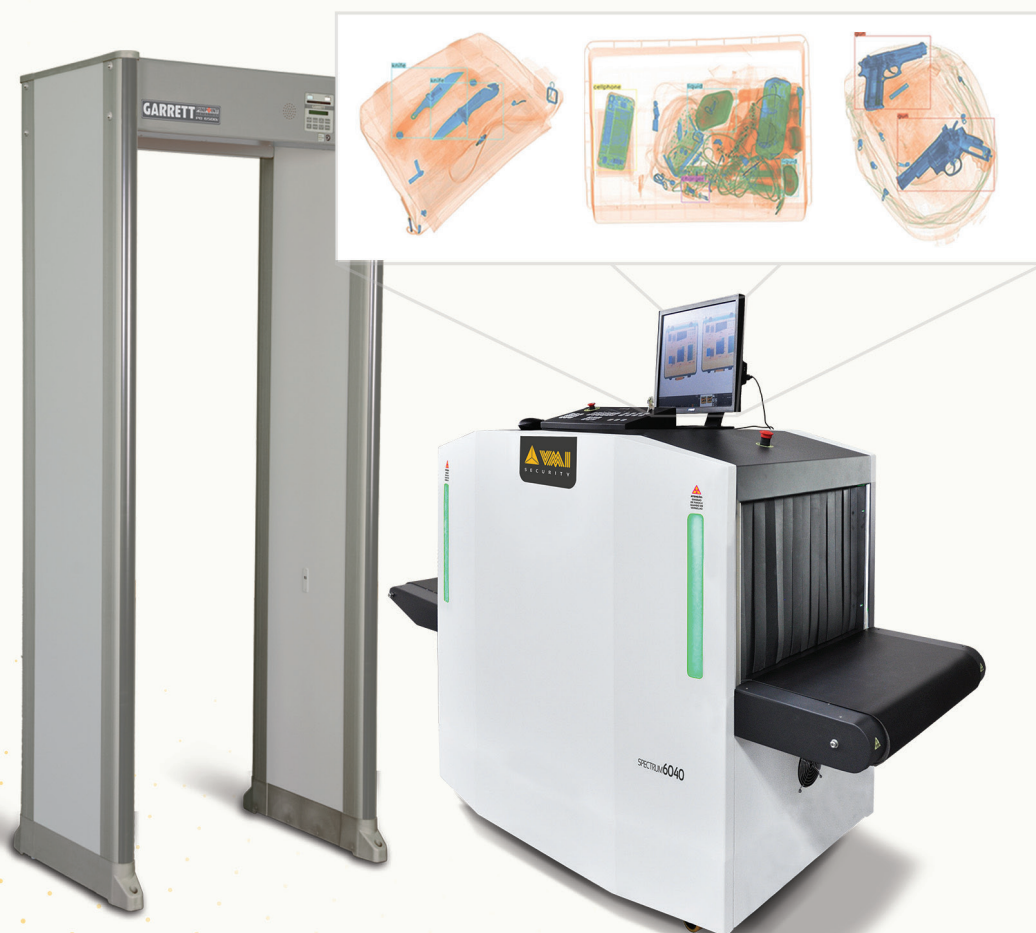WWW.VMISECURITY.COM

More Safety and Control in Mining

In the competitive mining sector, dealing with losses due to theft or misplacement of minerals, gold, and precious stones is a constant challenge. With large-scale operations, even small losses can result in significant damage.

VMI Security offers cutting-edge, non-invasive, fast, and efficient inspection equipment. Our solutions are customized to meet the demanding standards of control, security, and compliance in the mining sector, providing advanced protection and optimized management of operations.

Innovative Solutions from VMI Security

Metal Detector Portal + Scanner with Artificial Intelligence

Our integrated solution ensures unprecedented security and control at the entry and exit points of mining areas. The combination of the Metal Detector Portal with the Spectrum Scanner, equipped with artificial intelligence, creates a smooth and efficient access process. This not only speeds up the entry of employees, suppliers, and visitors, but is also essential in preventing smuggling or theft, offering more accurate and effective inspections.

Proven Expertise and Efficiency

The adoption of inspection technologies in mining areas is a crucial strategic decision. It is essential that this process is conducted with care and planning, supported by the experience of specialized professionals. VMI Security's solutions have already been implemented in several mines around the world, demonstrating their effectiveness and reliability.
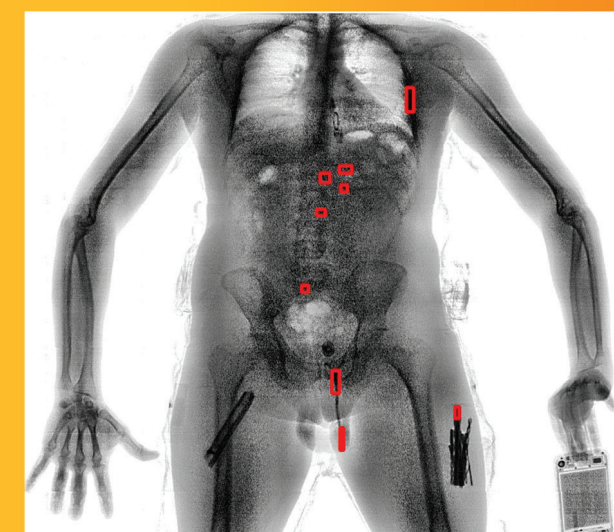
Efficient Checkpoint by VMI Security

CONTINUOUS AND NON-INVASIVE INSPECTION

1. THE INDIVIDUAL PLACES THE OBJECT TO BE INSPECTED BY THE X-RAY SCANNER WITH ARTIFICIAL INTELLIGENCE

2. CONCURRENTLY, THE OWNER OF THE OBJECT PASSES THROUGH THE METAL DETECTOR PORTAL

3. THE DATA FROM BOTH DEVICES ARE SENT FOR JOINT AND NON-INVASIVE ANALYSIS

4. IF APPROVED, THE INDIVIDUAL IS CLEARED TO ENTER IN LESS THAN 4 SECONDS

5. ONLY WHEN AN OCCURRENCE IS IDENTIFIED IS A MANUAL INSPECTION CARRIED OUT

6. IN LESS THAN 20 SECONDS, THE NEXT INDIVIDUAL IS CLEARED TO BEGIN THE INSPECTION PROCESS

Innovation in Full Body Inspection

In addition to inspecting personal items, VMI Security offers market solutions for full body inspections that detect hidden items even in the sole of the shoe. With our advanced X-ray scanners, we identify attempts at smuggling and loss in unusual places within the human body.
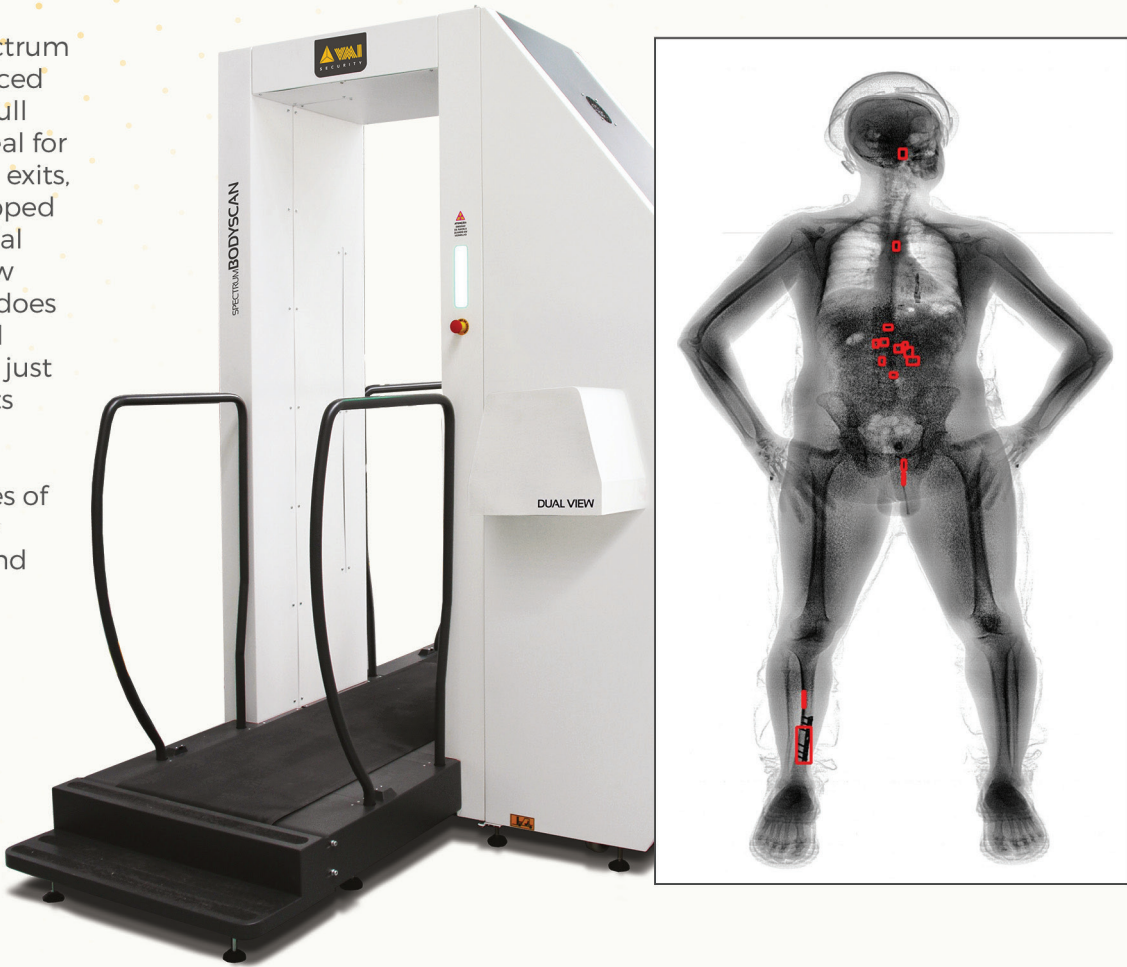
VMI innovates with Bodyscan, a tailor-made solution for the needs of the mining industry. This technology offers a more comprehensive and effective approach in the prevention of theft and smuggling, adapted to the peculiarities of the sector.

Over Three Decades of Innovation in X-rays

With over 35 years of expertise, VMI Security leads in security innovations for mining.

The highlight of our solutions is the Spectrum Bodyscan, an advanced security system for full body inspection. Ideal for mine entrances and exits, the Bodyscan, equipped with optional artificial intelligence, uses low doses of X-rays and does not require a special installation room. In just 10 seconds, it detects hidden metals and precious stones, including in the soles of shoes, setting a new standard in safety and efficiency.
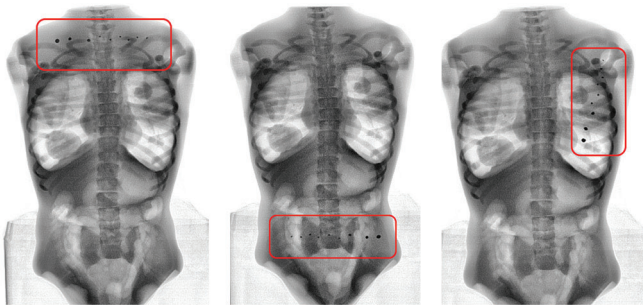
Quality Test for Full Body Inspection

STAGE 1. PREPARATION

Samples of precious metals of different sizes and weights were prepared. Then, these samples were attached to a mannequin simulating the human body, which then underwent an inspection process in the Bodyscan.

STAGE 2. INSPECTION

During the inspection process in the Bodyscan, 100% of the samples were successfully identified in different positions on the inspected mannequin.

Versatile Scanners for Object Inspection

Our portfolio includes X-ray scanners for all needs, with different tunnel sizes. Producing high-quality images, these devices can be equipped with Artificial Intelligence software. In conjunction with the Bodyscan or the Metal Detector Portal, they form an integrated security system, enhancing the efficiency of access control in mines.

SPECTRUM **6575 DV**

SPECTRUM **100100 HDV**

SPECTRUM **5536**

SPECTRUM **6040 DV**

SPECTRUM **5333**

SPECTRUM **6040 M**

Color Differentiation Technology for Enhanced Analysis

VMI Security's color differentiation system optimizes item identification, facilitating the detection of potential thefts or losses. With distinct colors for different materials, this feature allows for quick identification and analysis of suspicious objects, enhancing the effectiveness of inspections and reinforcing security in mining areas.

How do we automatically discriminate materials?

With the most powerful generator in its class, our X-ray equipment has high image quality and automatically discriminates between organic, inorganic, and mixed materials by color.

Color	Materials	Examples
(orange)	Organic	Hydrogen, Carbon, Nitrogen, Oxygen (plastic, paper, water, wood, food, clothing, and some explosives)
(green)	Mixed	Aluminum, Sodium, Chlorine, Salt, others
(blue)	Inorganic	Gold, Iron, Nickel, Copper, Silver, others.
(black)	Low penetration region	High-density and thick materials.