





FOOD



# DIAMIND POWERING PRODUCTS AND SUPPLY CHAINS



Connecting physical products with digital identities, **DIAMIND runs at the line, factory, warehouse, enterprise, and supply chain levels**, and guarantees product **quality** (inspection systems and equipment) and end-to-end **traceability** (from raw materials to production, from distribution to the consumer and back) through **integrated and cloud data management**.



LINE FACTORY WAREHOUSE ENTERPRISE SUPPLY CHAIN

Antares Vision Group is the technology partner enabling digitalization from product to supply chain through traceability, quality inspection and integrated data management, connecting safety and quality, sustainability and efficiency to build trust



LEAK CHECKWEIGHER METAL X-RAY SEAL DETECTOR A LABEL CASE BAG IN BOX SHRINKWRAPPER FULL CASE HANDLING CODE **SERIALIZATION** AGGREGATION **TRACK & TRACE SOFTWARE RETURNABLE ASSETS** 

LABORATORY ANALYZERS

Inspection



Inspection systems and machines for packaging and production lines to control the quality of products, packaging, containers, and labelling ALL-IN-ONE - ONE MACHINE, MANY INSPECTIONS



## **ALL-IN-ONE SOLUTION** FOR YOUR PRODUCTS QUALITY AND SAFETY



ALL-IN-ONE | Configuration example



## **DIAMIND** LINE

## **IN-LINE LEAK DETECTION**

An innovative application of IR spectroscopy to detect in-line holes and micro-holes in packages by checking for CO<sub>2</sub> leakage (for MAP products), alcohol or a specific flavour.



WORK EXAMPLE BAGS



WORK EXAMPLE TRAYS

# AUTOMATION AUDIAUV

## **INSPECTIONS**

 LEAK DETECTION ESCAPING GAS DETECTION

MARKET

BAGS TRAYS MAP Products MAP Products

#### PHYSICAL CONTAMINATION DETECTION X-RAY

Our inspection technology uses X-rays to identify foreign bodies of different densities. It generates a grayscale image of the product and the software, through a multi-algorithm analysis, highlights any contaminants.





**DIAMIND** LINE

**EJECTION SYSTEMS** PNEUMATIC CYLINDER EJECTOR, AIR BLAST, FLAP



EASY-TO-OPEN DOORS TOTAL ACCESS TO THE INSPECTION AREA

## INSPECTIONS

PRESENCE OF METAL

• GLASS STONES

HIGH-DENSITY

PLASTIC

BONES

## MARKET





## **DIAMIND** LINE

## SEAL INSPECTION

In-line sealing area inspection to detect the presence of products and physical contaminants. Available for transparent or coloured film and packaging through hyperspectral or artificial vision technologies.



ABLE TO INSPECT TRAYS WITH PLASTIC COVER ALREADY APPLIED



ACQUISITION EXAMPLE AND REAL DEFECTIVE PRODUCT



## LABEL AND CODE INSPECTION

## **DIAMIND** LINE

Inspection to check the quality of labels (alignment, positioning, items or brand, languages, etc.), codes (expired data, lot number, barcode, DataMatrix, QR code) and the correlation between single products and secondary packaging.





**ACQUISITION EXAMPLE** LABEL INSP.



**ACQUISITION EXAMPLE** CODE READING

INSPECTIONS	MARKET	
PRESENCE MATCHING POSITIONING		
<ul><li>INTEGRITY</li><li>CODE READING</li></ul>	BAGS	TRAYS





MARKET



## **DIAMIND** | LINE

CHECKWEIGHER )

The checkweigher is a high-precision measuring instrument designed to check the weight of individual moving products.



WEIGHING MODULE



**EJECTION SYSTEMS:** PNEUMATIC CYLINDER EJECTOR, AIR BLAST, FLAP





## **DIAMIND** | LINE

By detecting the presence of metal contamination, our metal detectors for food provide effective protection against ferrous and non-ferrous metals (aluminium, stainless steel, etc.).









## **DIAMIND** | LINE

Track & Trace

Track and trace equipment for digital identity management through serialization and aggregation on production lines

## Lifetime Traceability with Track and Trace

- Turnkey solutions with multi-function serialization modules, aggregation technologies, and flexible software suites.
- Engineered to ensure compliance with all serialization and aggregation requirements for production, warehouse, distribution, and the corporate environment.
- By assigning a unique digital identity to each saleable item, Diamind Line track & trace offers multiple advantages.

#### **Benefits**

- Meet regulations and compliance
- Fight counterfeiting
- Deter parallel and grey markets
- Guarantee product quality and originality
- Increase customer engagement
- · Empower recall operations
- Optimize production efficiency
- Ensure the transparency of the supply chain
- Facilitate sustainability



## **DIAMIND** | FACTORY

## **DIAMIND** | WAREHOUSE

The software suite that manages the entire production site: monitoring and optimizing processes; enhancing production efficiency, and quality; improving planning and factory maintenance; and facilitating sustainability

#### Lead your digital transformation in the production process

Take smarter, data-driven decisions to increase profit and steer growth

#### Benefits

- Control of the entire production process
- · Identify bottlenecks in the production process
- · Facilitate a continuous improvement process by measuring your OEE
- Report critical parameter deviations and stoppages with automatic notifications
- · Perform statistical analysis to suggest corrective actions in real time
- · Facilitate root-cause analysis for performance and quality issues
- Support the lean manufacturing processes by analyzing production and supplier quality
- Optimize production scheduling
- Improve preventive maintenance, Introduce predictive and prescriptive maintenance
- Measure your carbon footprint
- Empower your factory intelligence utilizing AI



The software suite that manages the movement of goods, including receiving, shipping, and tracking of materials, products, and stock in the warehouse

#### A complete warehouse management solution for businesses of all sizes.

Add product traceability and serialization information to existing WMS and inventory management systems

#### **Benefits**

#### Serialization rework

Rework activities on serialized products coming form third-party traceability solutions; can be integrated into existing ERP systems.

#### **Operational efficiency**

Real-time asset tracking ensures that your business runs on time and on budget. Capturing digital data about asset utilization, customers' needs, and seasonal trends allows you to identify risks and formulate better strategies to accommodate sudden spikes in demand.

- > 100% visibility of assets
- 25% decrease in lost or stolen assets
- > 20% decrease in assets needed to support current production levels
- > Improved cycle times and asset utilization

#### Shipment/receive management

System integrates with current WMS to manage shipments and arrivals quickly and easily

#### Storage condition monitoring

Integrates with environmental monitoring systems and continues DIAMIND's traceability chain, ensuring storage conditions/requirements are maintained along the entire supply chain



## **DIAMIND** | ENTERPRISE

The software suite for regulatory compliance management at the enterprise level, including track and trace management of serialized and non-serialized products and assets

#### An integrated solution for end-to-end traceability

## **Benefits**

- · Manage traceability and serialization at the enterprise level
- · Comply with global traceability and reporting regulations
- · Track raw materials used in manufacturing process
- Optimize recall management and investigations with high-quality, granular data that can be accessed instantaneously
- Mobile Traceability app tracks any batch, movement, and handler and can be used to add critical tracking events (CTEs) and key data elements (KDEs) at any location

The software suite that enables end-to-end supply chain visibility and management, from raw materials through trading partners all the way to the end user

## End-to-end supply chain digitalization

#### **Benefits**

- End-to-end supply chain digitalization and data enables safe product journeys across the supply chain
- Trace everything in your supply chain forward and backward, from raw materials to finished goods
- IoT-enabled monitoring to see products in real time and collect unit-level data about 12+ environmental conditions
- Comply with regulations requiring traceability, serialization, and modernization
- Meet consumer demand for demonstrable product provenance, product information, and sustainability
- · Seamless interoperability with all your trading partners
- Track the returnable asset across the supply chain, minimizing losses and improving sustainability



























## **31** COMPANY SITES

ITALY (7) (Global Headquarters) FRANCE (2) SPAIN (1) GERMANY (2) **UK** (1) **IRELAND** (1) CROATIA (1) SERBIA (1) RUSSIA (1) INDIA (1) ASIA PACIFIC (1) CHINA (1) SOUTH KOREA (1) THAILAND (1) BRAZIL (1) **ARGENTINA** (1) MEXICO (1) **USA** (6) [Incl. CANADA]





## Experience the power of TRUSTPARENCY®

Antares Vision Group is the technology partner in digitalization for companies, institutions and governments, guaranteeing safety and quality, sustainability and efficiency of products and supply chains to build trust. It provides a unique and integrated ecosystem of technologies including software and hardware to guarantee product quality (inspection systems and equipment) and end to end traceability (from raw materials to production, from distribution to the consumer), through connected data management, applying artificial intelligence and blockchain .

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