



**ANTARES VISION**  
**GROUP** LIFE SCIENCE

**DIAMIND**

**TRACK & TRACE**  
SOLUTIONS RANGE





# GLOBAL LEADERS IN PHARMACEUTICAL TRACEABILITY

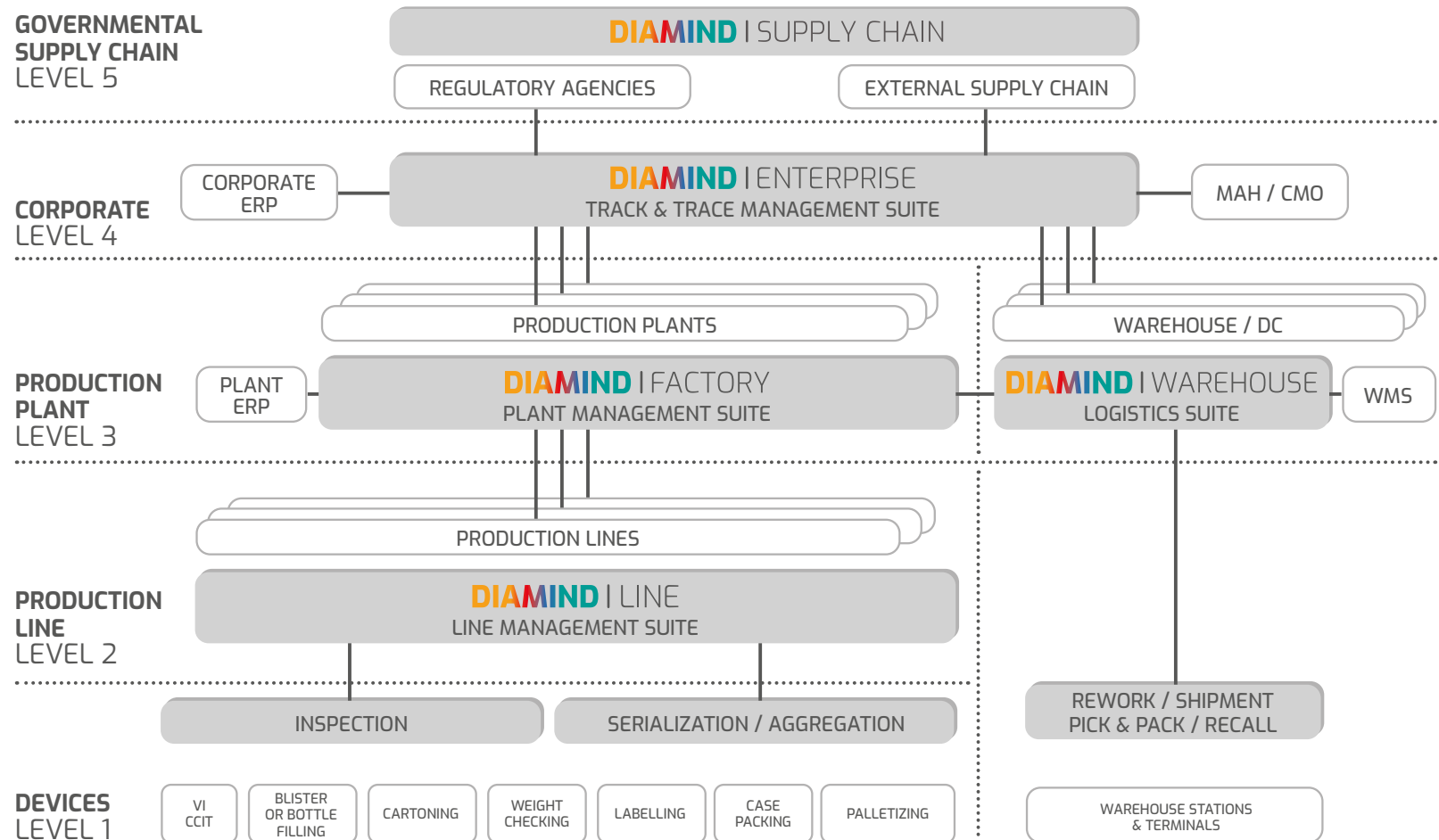
At Antares Vision Group, we provide the world's most complete range of traceability solutions for the pharmaceutical industry.

With decades of experience implementing **serialization, aggregation and data management** systems worldwide, we help pharmaceutical manufacturers comply with regulatory requirements while improving supply chain efficiency and product safety.

Our comprehensive Diamind ecosystem offers **modular, scalable solutions** that can be deployed at every level of your operations - from production line to corporate level - developing the most efficient configuration to suit your business case.

# DIAMIND ECOSYSTEM ARCHITECTURE

A comprehensive, web-based architecture designed to address every aspect of pharmaceutical traceability and beyond. This modular platform replaces and expands upon our previous ATS architecture, offering greater flexibility and enhanced capabilities to meet evolving regulatory requirements and to integrate different applications at both line and plant levels. Each component of the Diamind ecosystem can be deployed independently or as part of an integrated solution, allowing you to tailor implementations to your specific needs.



**DIAMIND LINE** / Line software designed to manage a growing range of modules, including high-performance serialization and aggregation, inspection, and line clearance solutions.

**DIAMIND FACTORY** / A scalable software suite designed to coordinate plant-level solutions, from serialization and aggregation to warehouse management and data analysis, across multiple plants and production lines within the manufacturing environment.

**DIAMIND ENTERPRISE** / Corporate (level 4) solution for serial number generation, regulatory compliance, and communication with trade partners and authorities.

**DIAMIND WAREHOUSE** / Specialized solutions for managing the data flow and logistics of serialized products within distribution centers, including reworking activities.

**DIAMIND SUPPLY CHAIN** / Enhanced tracking capabilities **beyond regulatory requirements**, designed to ensure product safety throughout the distribution network.

**DIAMIND** | LINE

# SERIALIZATION SOLUTIONS

Item-level serialization is the first step of the track & trace process within packaging lines.

A unique serial number is printed on each saleable unit, allowing its identification across the production and supply chain as well as regulatory agencies.

To deliver high speed, reliable serialization capabilities on your lines, we offer two deployment approaches.



## STANDALONE SERIALIZATION MODULES

Compact, plug-and-run modules that integrate data printing and verification with additional packaging functions in a space-saving design:

- **Maximum format flexibility from small to XXL-sized cartons and bottles**
- **Multiple printing technologies and combinations**
- **Quick, tool-free product format setup with automatic changeover**
- **Single control panel for all installed devices and functions**

## INTEGRATED FUNCTIONS



### SERIALIZATION

High-throughput printing of serialized data on up to three carton sides, with multiple printing technologies (TIJ, Laser, UV) and combinations to meet your specific needs. High-resolution inspection camera systems ensure accurate data recognition and print quality evaluation.

### TAMPER EVIDENT SEALING

Inline application, configurable for airplane or reverse tuck cartons.



### LABELLING

Labelling head with integrated vision systems for 1D/2D, OCV/OCR, position and integrity control and optional thermal transfer inline printing engine.



### CHECKWEIGHING

Accurate inline item weight verification at infeed with optional dedicated reject system.



## PRINT & CHECK PRODUCT RANGE

	PRODUCTS	TIJ PRINTING ON SIDES	TIJ PRINTING ON TOP	LASER PRINTING ON SIDES	LASER PRINTING ON TOP	CHECKWEIGHER	TAMPER EVIDENT SEALING	LABELLING ON TOP
PRINT & CHECK SP	CARTONS / FLAT CARTONS	■	■	■	■	■	■	■
PRINT & CHECK FLAT CARTON	FLAT CARTONS	■	■	■	■	■	■	■
OMNIVISION STATION	BOTTLES	■	■	■	■	■	■	■
PRINT & CHECK EVO	CARTONS	■	■	■	■	■	■	■
PRINT & CHECK ADVANCED	CARTONS	■	■	■	■	■	■	■
PRINT & CHECK CW	CARTONS	■	■	■	■	■	■	■
PRINT & CHECK 3T S	CARTONS	■	■	■	■	■	■	■
PRINT & CHECK AIO XS	CARTONS	■	■	■	■	■	■	■
PRINT & CHECK FLEX	CARTONS	■	■	■	■	■	■	■

the combination of the machine modules must be approved by Antares Vision and may impact on the production speed. ■ AVAILABLE □ NOT AVAILABLE

## OEM INTEGRATION KITS

With more than 25 years of experience, Antares Vision Group can install serialization technology on any carton or bottle packaging line when space for standalone equipment is not available:

- Scalable configurations for any production environment for reduced overall line footprint
- Seamless integration into any new or existing third-party equipment
- Optimized testing, validation, and deployment times

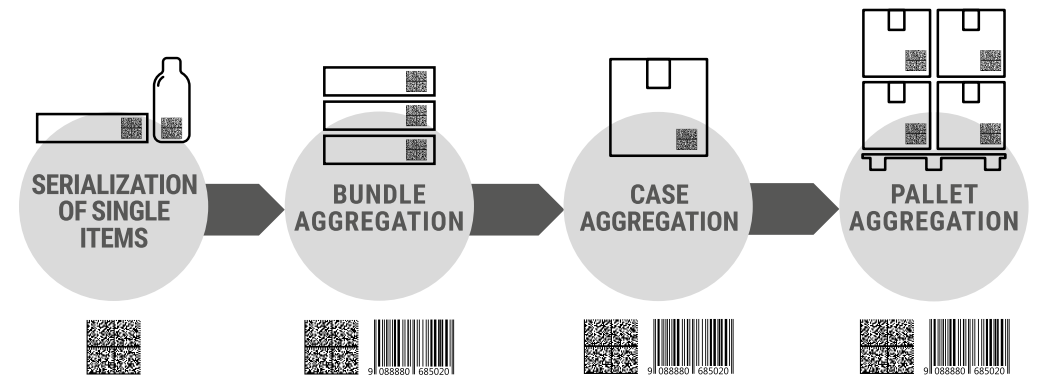


DIAMIND | LINE

# AGGREGATION SOLUTIONS

Aggregation builds parent-child relationships among logistic units (item, bundle, case, pallet) based on the hierarchy of serial numbers. Antares Vision Group offers aggregation solutions for every production workflow.

Our engineering teams can help define the most efficient configuration of aggregation systems both on new equipment and on already existing machines, according to specific line process requirements.



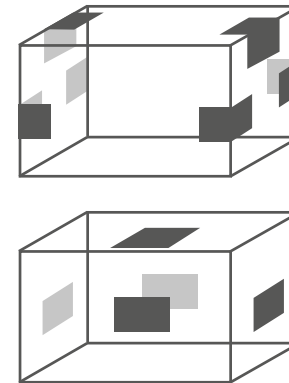


## PRINT & APPLY STATIONS

Standalone modules complete the aggregation process when bundlers or case packers cannot be equipped with onboard print & apply systems. Maximum flexibility is achieved with flat labels or corner labels application systems.

## INTEGRATION ON AUTOMATIC LINES

High-resolution camera systems seamlessly integrated within **bundling** machines and **case packers** to read full layers/rows of serial numbers for 100% aggregation control.



## Aggregation benefits beyond compliance

Implementing aggregation on manufacturing lines enables a higher level of supervision and data integrity across the packaging and logistic process, improves monitoring of line efficiency and contributes to generating added value for supply chain management.

## SEMI-AUTOMATIC AND MANUAL STATIONS

Standalone end-of-line aggregation modules designed to maximise productivity at lower throughput requirements, also serving multiple lines, from bundle creation to case and pallet.



DIAMIND | LINE

# LINE MANAGEMENT SOFTWARE SUITE

Diamind Line collects all software modules designed to manage not only **track & trace line devices** and their functions, but also **inspection systems, smart clearance** and **efficiency monitoring** solutions provided by Antares Vision Group.

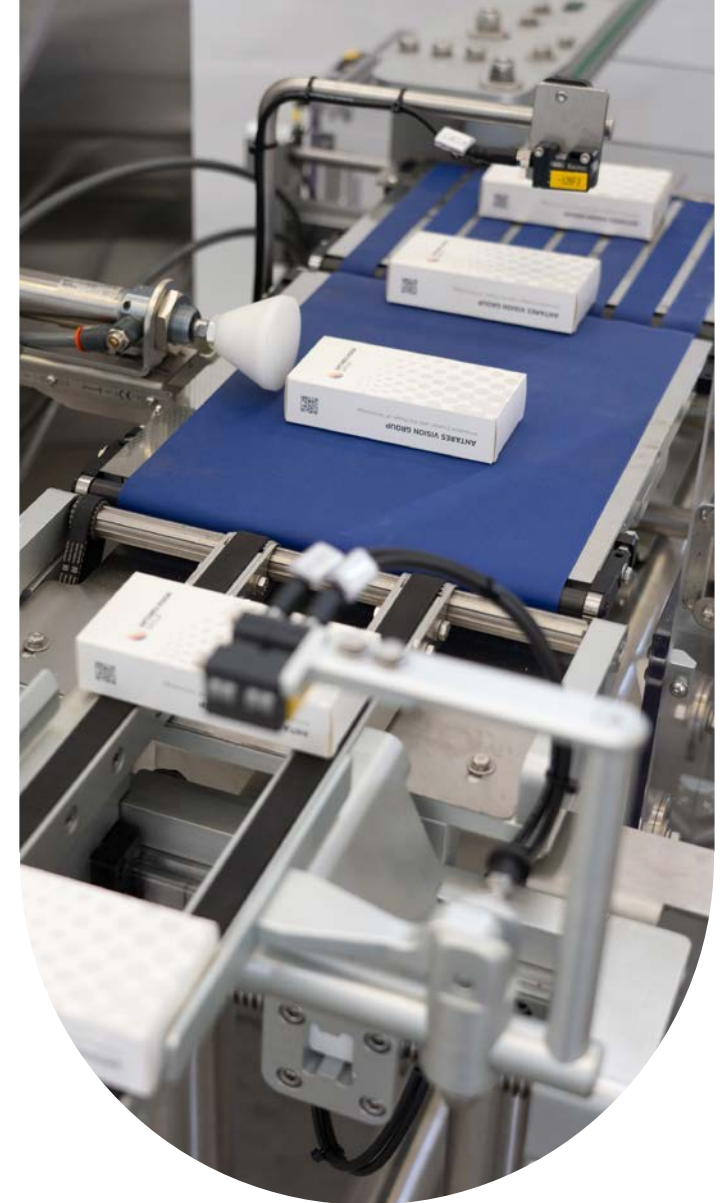
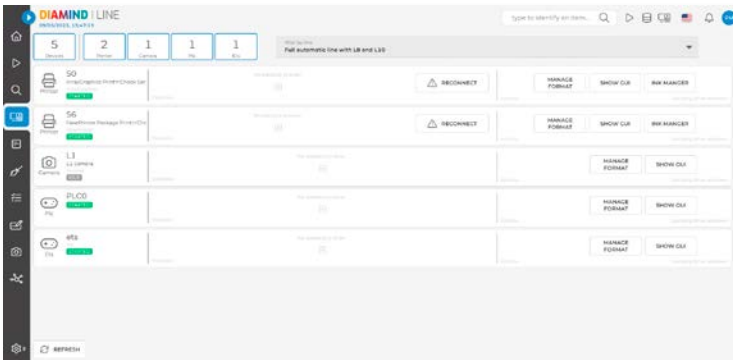
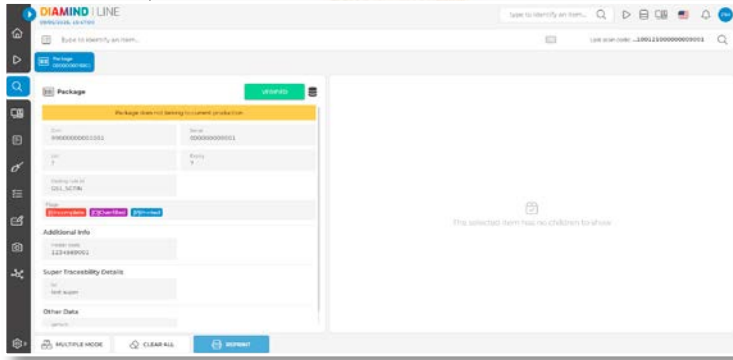
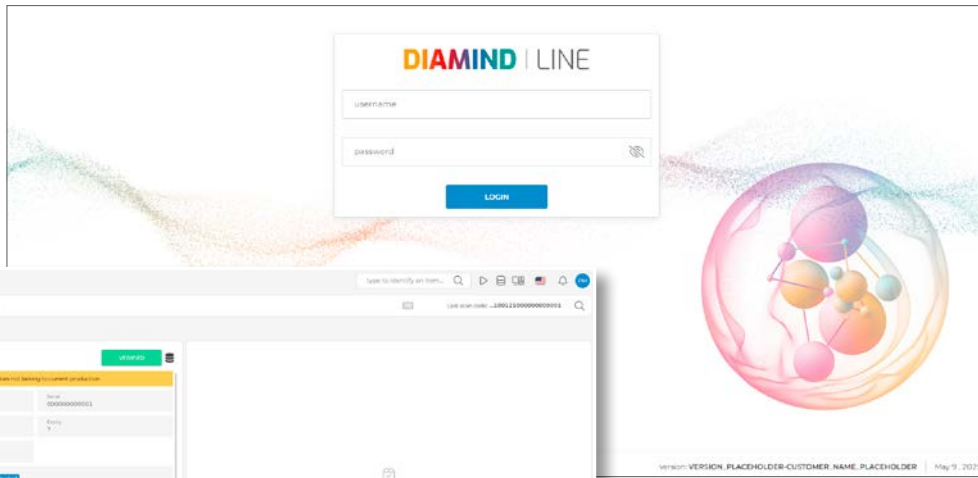
Thanks to its modular and scalable approach, new features and applications can be integrated without impacting the validation of those previously installed, while users operate on a single, intuitive, web-based interface.

A new, streamlined server-client approach allows the configuration of each HMI for visualizing the most relevant functions on the line from any location, improving operations efficiency.



## Key Features

- Core processing speed improved up to 10x, enhancing system responsiveness
- Web-based architecture with central server and flexible client access
- New graphical line configurator for simplified management and setting of parameters
- Parallel workorder management with support for extended workorders (up to 10 million serial numbers)
- Customer-specific software updates reducing validation requirements
- Real-time monitoring of serial number status during production
- Direct remote support activation by operators from the line interface



# PLANT MANAGEMENT SOFTWARE SUITE

Diamind Factory software is the advanced Level 3 solution coordinates plant-level solutions, from serialization and aggregation to warehouse management and data analysis, **across multiple plants and production lines** within the manufacturing environment.

Among its core functions, Diamind Factory can allocate work orders and serials issued by the ERP and other Level 4 systems to production lines. After the production process is started, Diamind Factory receives in real time the production data from all lines, as well as statistics, serialized codes and audit trails and stores them in the site database, where they remain accessible to the plant ERP.

User access to Diamind Factory, as well as to other software modules, is managed through the security levels required by 21 CFR part 11 standards.

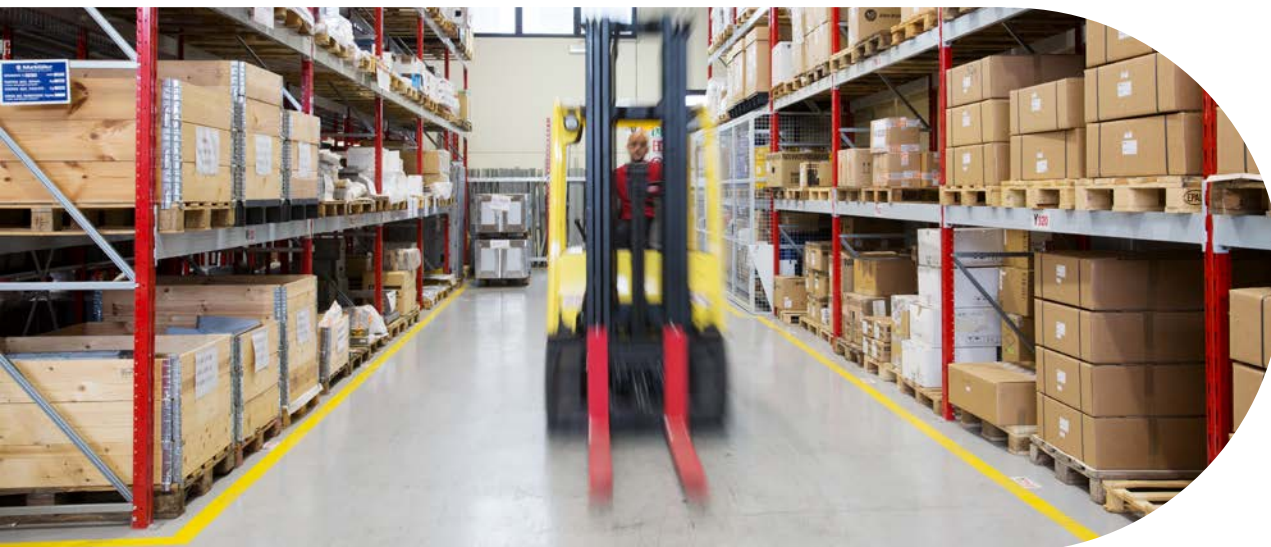


## Key Features

- Centralized recipes, markets, and plant management
- Serialization and aggregation work order management and scheduling
- Warehouse management module for Reworks, Shipments, Receipts and more featuring an adaptive UI optimized for multiple devices
- Analytics and data visualization modules
- Support for the recording and archiving of historical business transactions and serialization events
- Adaptable, multi-protocol interface towards external systems for seamless data exchange
- Support for multi-site operations from a single instance, while guaranteeing data segregation for each site
- Support for multi-industry traceability compliance

## WAREHOUSE AND DISTRIBUTION CENTER SOLUTIONS

Our Diamind Warehouse software and hardware solutions are designed to **manage the data flow and logistics of serialized products** in the warehouse and the distribution center environment. Diamind Warehouse is unique by its lightweight architecture and makes a perfect addition to your legacy WMS that will not specialize in serialized operations. Main functions include reworking activities, shipments and reception/returns of products aggregated on production lines, offering a comprehensive set of tools to monitor KPIs and operational efficiency while **delivering compliance requirements in a single solution and significantly increasing warehouse productivity by eliminating redundant activities.**



### Key Features

- Post-lot reworking, receiving and returns management
- Shipment, picking, and packing operations
- Flexible configuration according to site-specific workflows
- Full integration with ERP, WMS for seamless pick and pack process
- API integration with EPCIS serialization repository avoiding costly duplicated data storage
- Cloud based architecture for central management of multiple warehouses
- Support for both serialized and non-serialized products
- Mobile transactions suite for product movement throughout facilities
- Commission and print serialized labels when needed
- Hardware flexibility supporting major equipment manufacturers
- Comprehensive monitoring and supervising capabilities

# CORPORATE LEVEL 4 COMPLIANCE SOLUTION

Diamind Enterprise is designed to enable **global compliance with no hidden** costs, providing comprehensive management of serialization data at corporate level. A holistic, fully validated, preconfigured and automated platform solution for compliance and connectivity at all levels with your network of manufacturing and trading partners.

Our cloud-based solution eliminates the complexity typically associated with Level 4 serialization systems while keeping **data fully secured in a private space**, and ensuring your organization meets all current and emerging regulatory requirements. Diamind Enterprise combines powerful compliance capabilities with an intuitive interface, allowing pharmaceutical companies to focus on their core business, while keeping serialization duties under control.



## Key Features

- Serial number generation and allocation
- Regulatory compliance across multiple markets
- Communication with trade partners and regulatory authorities
- Cloud-based, single-tenant environment with full control over your system and data
- Multi-language support for global operations
- Consolidated compliance information for easy accessibility

## Complete solution, transparent investment

Diamind Enterprise delivers exceptional value through a transparent subscription model:

- **All-inclusive global support** within the subscription, providing 24/7 technical and consulting assistance with no additional fees
- **Comprehensive validation package** included in the subscription, reducing implementation time and validation costs
- **Seamless integration of new regulations** as they emerge, keeping your operations compliant in evolving markets
- **No forced upgrades**, giving you full control over your system update schedule and validation timing
- **Fixed fee structure** with predictable costs, eliminating budget surprises and enabling accurate long-term planning



## Streamlining your serialized operations

Both Market Authorization Holders (MAH) and Contract Manufacturing Organizations (CMO) face unique challenges when implementing serialization solutions. Diamind Enterprise addresses these specific needs with specific capabilities that enhance operational efficiency and connectivity, while reducing complexity and validation overhead.

- **Simple connection architecture** allows rapid onboarding of new clients without complex IT projects
- **Centralized connection point** for clients using multiple manufacturing sites, eliminating redundant integrations
- **No revalidation required** for line and Level 3 systems when adding new clients, significantly reducing validation costs and time-to-market
- **Effortless support for new regulations and file exchange formats** as markets evolve, keeping you ahead of compliance requirements
- **Global support team plus local branches** ensuring responsive assistance wherever you operate



**DIAMIND** | SUPPLY CHAIN

# TRACEABILITY BEYOND COMPLIANCE

Diamind Supply Chain extends traceability beyond regulatory requirements, to provide enhanced **product security**, real-time visibility and business intelligence.

## Key Features

- Cold chain monitoring for temperature-sensitive medications
- High-value drug distribution tracking
- Error handling and transaction monitoring
- Returnable asset management
- Collaboration portal
- End-to-end visibility throughout the supply chain



# GLOBAL SOLUTIONS, LOCAL SUPPORT

Antares Vision Group solutions are delivered and supported both centrally and locally. Our **dedicated service teams** operate 24/7 for optimized response times, cost-effectiveness, and flexibility in all service and maintenance activities, with support from a network of qualified partners worldwide.

Our comprehensive service approach includes:

- **REMOTE ASSISTANCE**
- **ON-SITE SERVICE**
- **SOFTWARE MAINTENANCE**
- **SPARE PARTS**
- **CONSULTING**
- **TRAINING**

Our global/local support model ensures **business continuity** at customer facilities while providing expert guidance during implementation, migrations, and ongoing daily operations of our mission-critical traceability solutions.



# Key Benefits

- **FLEXIBILITY:** a modular architecture that can be implemented incrementally or as a complete solution
- **COMPLETENESS:** a comprehensive, full stack of solutions covering every aspect of pharmaceutical traceability
- **COMPATIBILITY:** each solution can integrate with third-party systems at various levels
- **EXPERIENCE:** Antares Vision Group is the most experienced provider of pharmaceutical traceability solutions with thousands of installations worldwide
- **INNOVATION:** a team committed to continuous development and improvement, to meet evolving regulatory requirements and industry needs

## DIFFERENT STAKEHOLDERS, ONE ECOSYSTEM

### FOR PHARMACEUTICAL MANUFACTURERS

Our complete Diamind ecosystem provides full stack support from Level 1 to Level 4 and end-to-end traceability: from global compliance to serialization and aggregation level, warehouse operations and reporting.

### FOR CONTRACT MANUFACTURING ORGANIZATIONS (CMOs)

Our Diamind Line and Diamind Factory solutions enable efficient serialization, aggregation and data exchange with brand owners.

### FOR MARKET AUTHORIZATION HOLDERS (MAHs)

Our Diamind Enterprise solutions can handle serial number management at scale and drive collaboration with external CMO networks efficiently.



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