ATS - Antares Tracking System is the complete software suite to manage track and trace e-Pedigree of drug packages.

ATS has already proven its functionality and efficiency in over 130 plants, fulfilling all the regulations enforced so far (Turkish, Korean, Argentina, China, etc.) and serializing and aggregating over 5 billion SKUs.

Flexibility, scalability and consistency are the key points of ATS: serial numbers can be generated in random, serialized random or incremental, or can imported from external sources (ie. MES, ERP, corporate repositories).

Lines can be easily configured to work according to the different regulations and level of aggregation required by the single work order (ie. non serialized, serialized only, bundle + case + pallet, etc.).

The typical exceptions such as reworking of damaged cartons, partially filled bundles or cases, are managed in an easy and efficient way, thus maximizing line OEE. At line level, the ATS software modules are implemented on real-time hardware platforms that ensure perfect data synchronization with packaging machines even at the highest throughput.

The consistency of the full track and trace data flow and storing is guaranteed in any condition, as the local DB is continuously mirrored to the plant DB and all devices are under UPS: however, should any device fail on the line, the overall batch data is guaranteed at the last consistent data file.

Scalability is intrinsically assured by the modular structure of ATS: new regulations emerging in time can be simply added to the existing structure, minimizing installation and validation times and efforts.

Full warehouse operations are enabled through the WTS - Warehouse Tracking System module, performing efficient decommissioning, recommissioning and shipment operations, seamlessly interacting with the plant managers, repositories and the existing WMS systems.

**nts notification tracking system**

Designed to manage all the notifications to Regulatory Agencies (as Ministry of Health). Based on the ATS CORE MODEL modular structure, this software module can be easily adapted to future requirements and regulations.

**nts iNTerface tracking syStem**

Integrates customer specific business enterprise applications (such as ERP, EPOS SERVER, MES, IMS) into the ATS modules.

**mts line manager**

Designed to control the single production line. After a work order is allocated, MTS accesses the proper production recipe/formats from the site database and configures all the devices on the line, avoiding operators’ intervention and preventing any configuration mistakes.

**cartons and bottles**

A complete range of solutions to support serialization functions. This Print & Check family of standalone modules prints all the fixed and variable data on the cartons by means of inkjet technique and checks the correctness and integrity of the printed data. Additional functions such as labeling modules for the “French vignette” and the “Italian Ballino”, checking and tamper evident sealing are available. Laser printing and RFID technologies are also available on request.

**bundling**

Automatic, semi-automatic and manual stations are available to read all Datamatrix codes of single or multiple layers even in critical conditions as under plastic wrap. The bundle Aggregation Station (above pic) is an automatic machine usually installed at the outlet of the bundler or wrapper machines. Equipped with high-resolution cameras to read all the Datamatrix codes inside the bundle/wrap, the station includes an automatic print & apply module and a control camera to verify correct label application. Not conforming or not readable bundles will be automatically rejected, by a reject station positioned at the end of the station.

**case packing**

Several automatic custom solutions are available to verify the contents of the cases and build the aggregation tree. Solutions range from camera reading codes just before entering the case packer, to high resolution cameras fitted inside the case packer itself, according to space availability and machine layout. A wide range of semi-automatic machines (as the Antares Matrix Station family and the Array (Station) as well as manual machines are available depending on production throughput requirements.

**palletizing and distribution**

All lines the quickest manual packaging operations, performing the reading of several Datamatrix codes at the same time. This system minimizes any source of error that can potentially arise from manual handling of several items together.

**packing station**

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**mobIle termInals**

The WTS user interface has been ported also on selected mobile terminals such as Motorola, based on their large ruggedized display. Using these terminals, remote packing operations may be performed.

**nts NO TificaTiOn**

The heart of the Track & Trace system. Running on a remote Server, the GTS’ main function is to allocate work orders issued by the ERP to the production lines. After the production process is started, GTS receives - in real time - the production data from all the lines, as well as statistics, serialized codes and audit trails and stores them in the Site Database, where they are accessible to the plant ERP. The access to GTS is managed through the security levels required by the 21 CFR part 11 rules.

**nts PLanT MANAGER**

The complete solution to provide shipments in the warehouse area or distribution center. WTS allows re-aggregation and decodification of containers, by means of automatic or manual devices.

When products are shipped, the module interacts with company WMS to keep the history of the packages in compliance with the recommendations of the Regulatory Agencies (as Ministry of Health, etc.).

**solutions spanning from automatic aggregation to semi-automatic machines**

Strategically based, we offer development and operations support to give a real business value, by means of a qualified technical service from cost effective locations around the world.

**nts prOducTiOn liNES**

Designed to control the single production line. After a work order is allocated, MTS accesses the proper production recipe/formats from the site database and configures all the devices on the line, avoiding operators’ intervention and preventing any configuration mistakes.

**nts AUTOMATIC AGGREGATION**

Different solutions, applying both for palletizing and distribution, are available to fit the required throughput. Automatic pallet creation may be performed by the integration and synchronization with the palletizing robot. The Manual Station (above pic) is designed for manual aggregation of bundles and cases. Based on a PC station with a 2D handheld reader and a desktop printer, its stainless steel structure holding the bundles and cases can be rotated in order to adapt to the preferred working position of any operator.

**nts semi-AUTOMATIC AGGREGATION**

• integration of full RFID serialization and aggregation technologies available on request

• local support with a worldwide presence with 6 company subsidiaries and 27 sales & service partnered companies
The evolving scenario of regulations toward track & trace requires today's packaging operations to be adaptable and flexible in order to guarantee investments in time and therefore minimizing the Total Cost of Ownership.

Antares Vision - leader in track & trace applications for the pharmaceutical industry - responds to this market request with ATS CORE, third generation of the renowned Antares Tracking System.

ATS CORE creates a new track and trace concept: it is capable to cope with all national rules and all customer’s requests.

Its innovative power is inherent in its software architecture, made by a main central and unvarying body called CORE, and pluggable tailor-made interfaces called DOMAINS.

The central CORE is complemented with various customized DOMAINS. The CORE and the DOMAINS are independently integrated.

That means that options, function and line devices can be changed, updated and increased just upgrading, adding or changing the plugged DOMAIN elements, without any need to re-validate the CORE.

ATS CORE permits tailor-made systems for significant savings in time and money.

**ADVANTAGES**

**THIS REVOLUTIONARY SOFTWARE ARCHITECTURE ASSURES:**

- total flexibility for specific requirements
- reduced costs and less time for customizations:
- separate validations for every new integrated domain
- future expandability with new functions or components with no need to re-validate all the system

**ANY REGULATION CAN BE EASILY ADDRESSED IN A SPECIFIC DOMAIN**

- Support for GS1 Rules, Chinese Rules and any requirement from different Countries.
- This flexibility allows, for instance, the CORE to be freely integrated with various local domains as new regulations emerge: when a new features (as a notification interface with Regulatory Agencies) have to be added or changed, its modular structure allows to easily fulfill this task.

**ANY PROCEDURE AND WORKING RULE CAN BE EASILY CHANGED OR ADDED**

- The aggregation item hierarchy (carton, bundle, case, pallet) can be changed by the rules of the Domain (for instance, cartons to case aggregation).
- New aggregation levels (e.g. blisters) can be introduced by a Domain.

**EASY INTEGRATION WITH ALL EXISTING OR NEW DEVICES**

- Additional devices (cameras, printers, RFID, UV, etc.) can be integrated in the Domain.
- The behavior of each device can be easily changed or extended.

**BETTER USERS EXPERIENCE**

- Easy and intuitive user interface, quick training.
- GUI completely redesigned with Metro interface style.
- Customizable Reports (for Work Order, Serial, Audit Trail, etc.).

**EASY INTEGRATION WITH ANY CUSTOMER’S ERP, WMS, MES AND EPCIS SERVER**

- ATS supports all IT technologies, as SAP A/R OER, Axway, IBM InfoSphere, IBM WebSphere.