

Secure Track & Trace Solutions

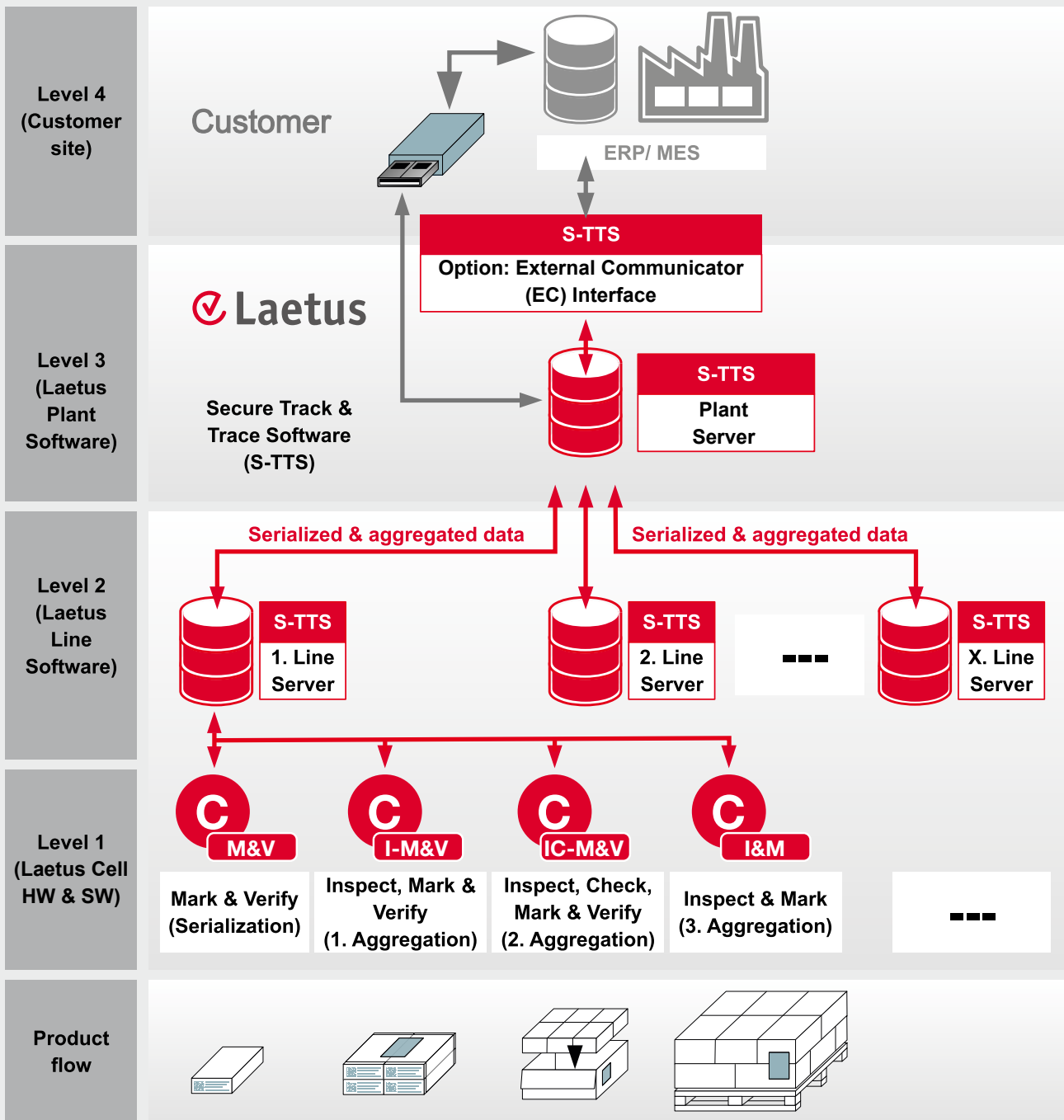
S-TTS



NATIONAL REGULATIONS ACROSS THE GLOBE



The pharmaceutical industry is facing the great challenge of implementing a multitude of national bills to protect against counterfeiting in the international market. These differ not only with regard to the data carriers used, but also in terms of the required data. System requirements therefore look different for Turkey, than, for example, for Brazil, China or the EU. The Laetus Secure Track & Trace Software offers a full range of options to fulfill the individual requirements for seamless product tracking. The modularity of the software architecture guarantees maximum flexibility and investment security. S-TTS is prepared for all requirements and is easy to implement and customize: from checking individual packaging units to multi-level aggregation over the entire line to order picking.



FLEXIBLE LEVELS FOR YOUR TRACK & TRACE SUCCESS

The growing complexity of the packaging process places high demands on the Track & Trace system. Although stand-alone units can still be used when it comes to simple serialization, the requirements for the implementation of several lines are more complex. To connect to an existing superordinate business IT system, a network architecture with a centralized approach is needed in order to enable central order management and the exchange of serial data.

With the flexible Secure Track & Trace Solutions (S-TTS) modules, it is possible to map centralized network architectures connected to customer systems, as well as solutions with less complex architectures. The S-TTS modular approach therefore offers the best possible implementation of individual requirements.

The **Plant Level** is the main control center of the S-TTS software architecture. It hosts the central user management and the main database, which manages the master data and the audit trail. These can be synchronized with the customer's IT system using a configurable interface as required.

The **Plant Level** also manages the orders for all packaging and shipping processes. The configuration of the individual lines also takes place on this level. This means that further aggregation cells within a line or extra production lines can be added to the S-TTS.

Plant Level central data management:

- Product information such as GTIN, product description, material number, etc.
- Parameter configuration set
- User management
- Complete process data from batch production to shipment
- Manually created or automatically received order data
- Preparation and sending of data to the respective production line
- Report creation
- Audit trail
- CFR 21 Part 11

Advanced options at Plant Level:

- Laetus External Communicator (EC)
Data exchange with existing IT systems (ERP/MES) via the configurable interface
Datasets to be exchanged are:
 - Product details (GTIN, material number, SSCC, etc.)
 - Serial numbers
 - Order details
 - Shipment details
- Integrated USC (unique serial code) engine
- Active directory
To connect S-TTS to the customer user management
- Manual import of serial numbers
Serial numbers for specific markets, such as China, can be manually imported into the system using the Laetus USC Import Manager.
- Export and import data between S-TTS systems
The export/import system tool transfers all master data from one S-TTS system to another, for example from a test or validation system to the production system.
- Warehouse
The warehouse option carries out order picking using shipping orders.



The **Line Level** lies under the Plant Level in the S-TTS hierarchy. It receives all production-related data from the Plant Level. The data is temporarily stored on the Line Level, so that no permanent data exchange with the Plant Level is necessary. Every production line has a Line Level and can process the respective orders independently.

During the handling of a packaging order, the Line Level sends all necessary data to the cells configured for this order, and synchronizes these along the packaging route.

Line Level: Line-specific data management

- Management and organization of the Track & Trace process of a production line including the multi-level aggregation
- Preparation and sending of the data to the individual S-TTS cell control units
- Ensuring integrity via real-time exchange of the serial number reference lists between the individual cells
- Exchange of production-related data with S-TTS Plant Control – also possible during batch production
- Supporting manual processes, such as line reworking, taking quality samples and manual aggregation

Cell Level is the lowest level in the S-TTS network hierarchy. Every cell represents a packaging step. The cells are independent modules which are configured in series to reflect the production flow of a packaging line. Systems can therefore be implemented across multiple levels of aggregation.

The cell receives all function-related data from the Line Level and processes this data by, for example, printing the serial number on a folding box and verifying it with a camera system. The cell delivers the results back to the Line Level for data management.

Whether folding boxes or bottles, from bundle and/or case aggregation to pallet aggregation, the system can be customized for the respective production line. Depending on the packaging order, individual cells can be hidden.

Cell Level: Pre-defined cell types for flexible configuration

- Integration of individual devices (cameras, code readers, printers, Mark & Verify units and machines)
- Guarantees the prevention of "double code" thanks to secure code verification
- Existing, verified interfaces for standard printers
- 100% inline code quality control (grading) according to ANSI/ISO
- Supports validation through the use of standardized modules
- Receipt and management of serial numbers and batch-related data from the Line Level
- Sending of serial numbers and batch-related data to the respective printers and camera systems
- Sending the serial numbers used and batch-related data to the Line Level
- Prevention of mixing with external products by comparing the recorded serial numbers to the reference list of the upstream cell





TRACK & TRACE ACADEMY

The Track & Trace Academy is a unique competence center for training, knowledge acquisition and exchange regarding anti-counterfeiting. Laetus brings experts from different areas together and creates the ideal conditions for the professional exchange of ideas and successful training. Professional instructors impart their comprehensive expertise in individual training programs.

- Wide selection of training, workshops and seminars
- Equipped with a Track & Trace demo line with serialization and multi-level aggregation
- State-of-the-art training rooms with equipment focused on Track & Trace
- Also accessible for other Track & Trace solution partners

www.trackandtraceacademy.de

SERVICES

A worldwide service network is available 24 hours a day.

Laetus supports the customer-specific global SLA (Service Level Agreement), to specify the extent of services. Standard service packages are also available.

www.laetus.com/services



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