LTIMindtree

Supply Chain Visibility, Drug Wastage Reduction leveraging Industry 4.0 for Global Bio-pharma Membrane Manufacturer

Client

Our client is a leading global provider of integrated services, superior delivery technologies and manufacturing solutions for drugs, biologics, cell and gene therapies and consumer health products.

Challenges

- Manual order tracking and reporting processes were time consuming.

- Discrepancies in incident reporting and no real-time alerts to put material back to cold storage environment leading to losses.

- Material handling data visibility was low leading to low accuracy while tracing material.

LTIMindtree Solution

- Cloud-based IoT solution for monitoring and reporting of cumulative excursion time with alerts/ notification for breaches in case of aberrations.

- RFID tags-based tracking of material containers with readers at cold storage facility entry and exits points to monitor In-Out operations.

- Highly accurate material handing data for operations, reporting to customers and statutory requirements.

- Monitoring of specific parameters like temperature, humidity for containers and detection in case of threshold breach.

- Integration of material visibility data with Handheld Terminal (HHT) devices for real-time alerts to shift supervisor for corrective actions and remote troubleshooting.

The solution features resulted in:

Bettervisibility on material.

Automation & Higher accuracy of Time out of Environment (TOE) Calculations.

Reduction in drug wastage.

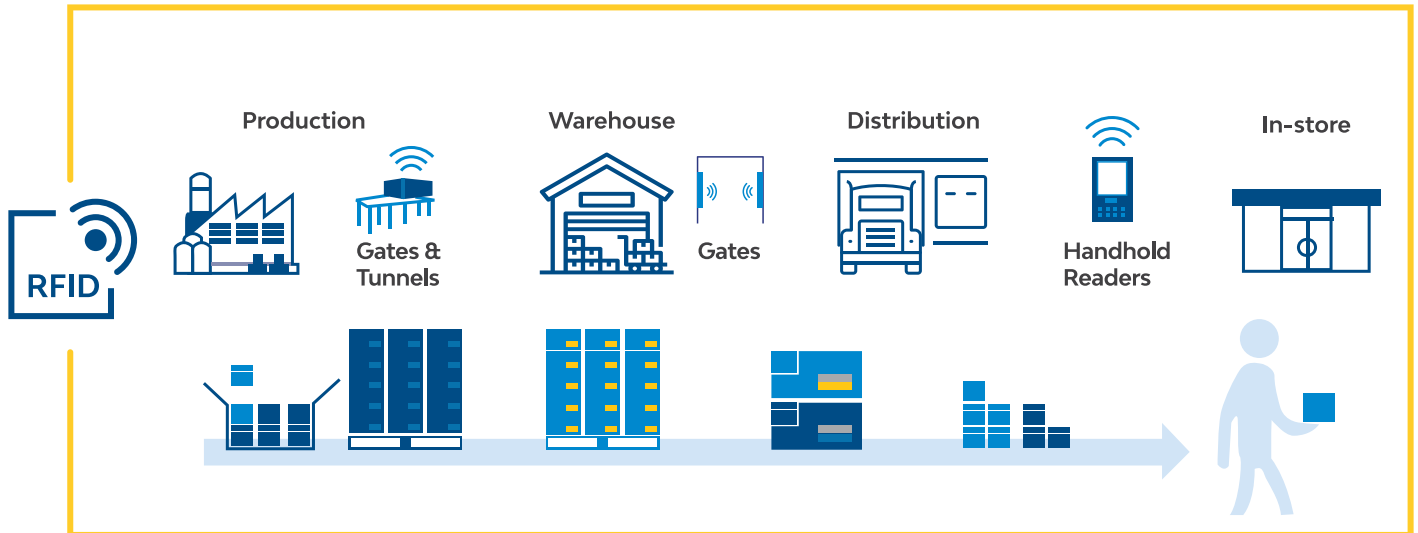Alarms to take corrective action to reduce incidences of TOE exceeding limit.

Better Asset utilization.

Maintain history of excursions for analysis.

LTIMindtree

End to End Asset visibility and authentication

Production | Warehouse | Distribution | In-store
RFID | Gates & Tunnels | Gates | Handhold Readers

- Automated traceability of containers, across all stages of supply chain – right production to processing and shipment.

- Just-in-time shipments and transportation based on actual forecasts.

- Automated allocation of container to trailer / supplier, based on the accurate stage of shipment and the actual requirement.

- Ad-hoc and configurable reporting features for advanced data analysis and report views.

Business Benefits

Increased accuracy of TOE calculations by 60% with container traceability.

25% reduction in losses by avoiding drug wastage with real-time material visibility.

Automated real-time alerts to supervisor for corrective actions.

Automated monitoring of temperature excursion.