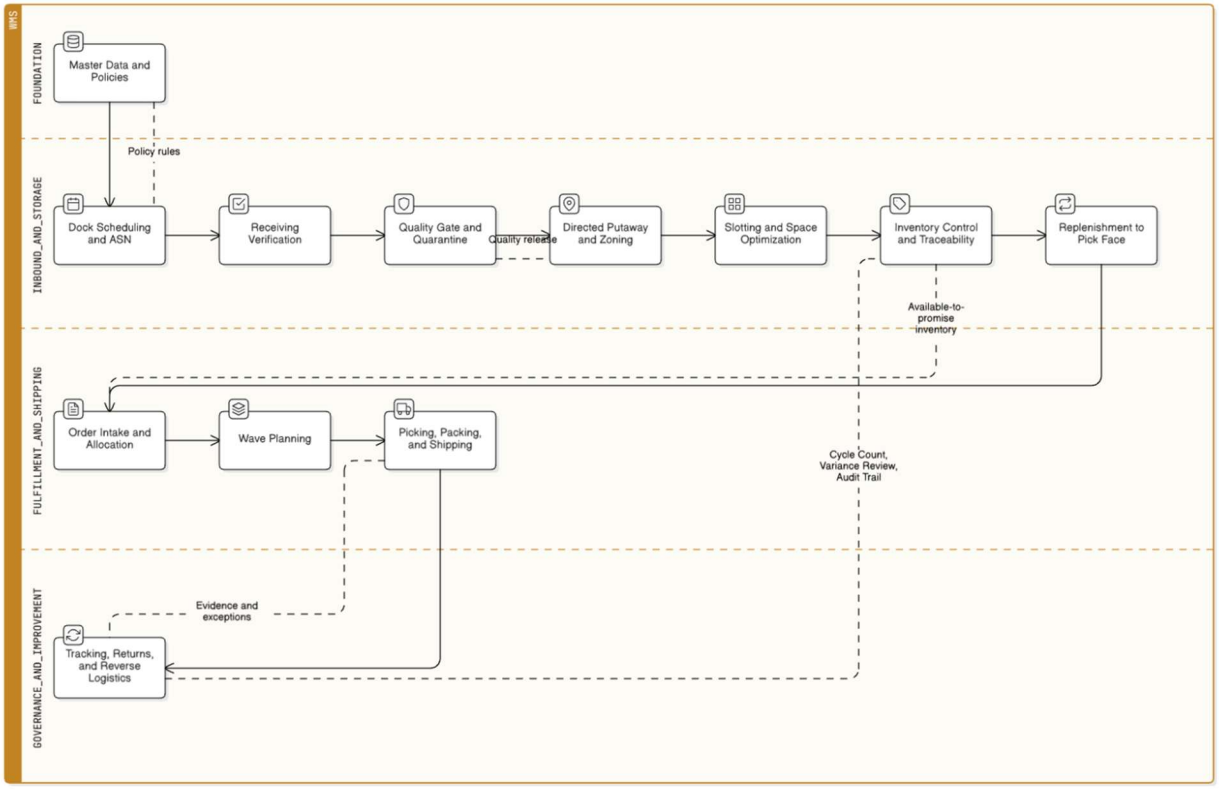
Rayterton Inventory and Warehouse Management System (WMS)

Rayterton WMS helps manufacturing warehouses control inbound, storage, replenishment, picking, packing, and shipping in one execution layer. It improves inventory accuracy and warehouse speed, while keeping shipment performance visible through clear operational KPIs.

About Rayterton WMS

Rayterton WMS is designed for plant warehouses that need consistent inventory accuracy and fast execution. It supports inbound receiving, putaway, storage, replenishment, picking, packing, and shipping with standard controls such as barcode scanning, lot and serial tracking, bin location management, and cycle counting. Warehouse activity is tracked with operational KPIs so teams can monitor workload, productivity, and shipping readiness per site, zone, and shift.

End-to-end Operating Story



Platform coverage map

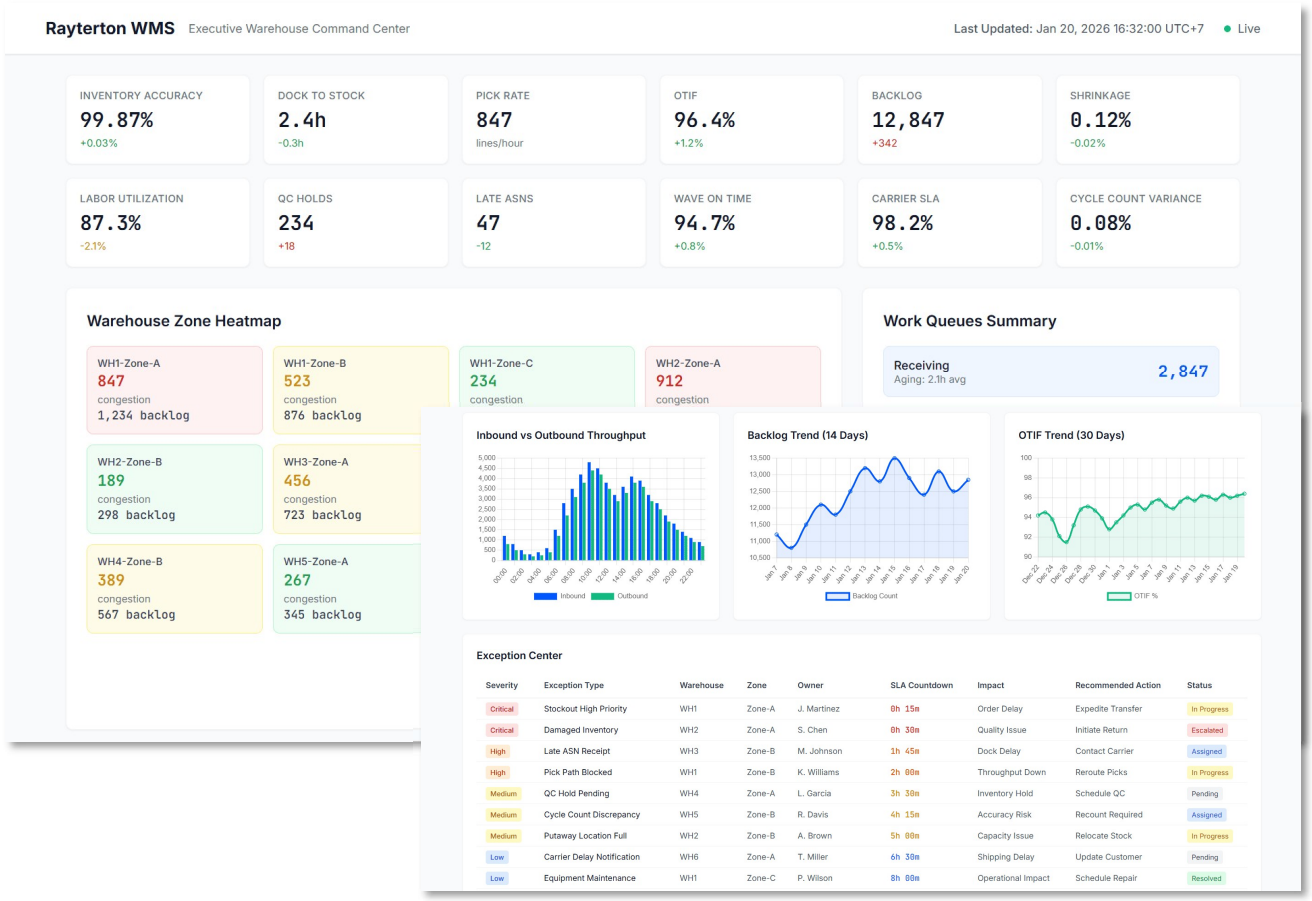
- **Foundation setup and control**: organization and warehouse setup, item and packaging master, policy and rule engine, users, roles, devices.
- **Inventory policies and replenishment**: min-max, reorder points, safety stock, ABC-XYZ, replenishment planning, replenishment execution queue.
- **Inbound and receiving**: appointment and dock scheduling, ASN management, receiving verification, quality hold and inspection, GR posting and ERP sync.
- **Storage optimization**: directed putaway, slotting optimization, location audit and capacity management.
- **Inventory control**: on-hand explorer, traceability, transfer and relocation, controlled adjustments with reason codes and approvals.
- **Cycle count**: planning, execution, variance review, approval, posting.
- **Fulfillment**: order intake, allocation, wave management, picking methods, packing and cartonization, shipping and carrier integration, exception handling.
- **Value added services**: kitting orders, VAS work orders.
- **Reverse logistics**: returns intake, inspection and disposition, reverse putaway or scrap execution.
- **Labor and optimization**: labor standards, productivity metrics, task interleaving.
- **Dashboards and analytics**: operational dashboards, alerts and exception tiles, inventory health analytics.
- **Integration and governance**: ERP, MES, TMS integrations, API monitoring, BI feeds, audit trail explorer, approval workflows, segregation of duties.

Executive Warehouse Command Center

This area supports executives and operations leaders who need fast clarity on inventory health, workload, and service risk. It answers simple questions. What is available now. What is blocked. What is at risk. What must happen next. It links KPIs to drilldowns so teams can move from insight to action quickly.

Core capabilities:

- Real-time Inventory and Operations Control Tower covering on-hand, allocated, reserved, available, backlog, and shipping readiness.
- Operational Alerts and SLA Watchlist for shortage risk, inbound bottlenecks, wave delays, quality holds, capacity overload, and shipping cutoff exposure.
- Exception to action workflows that route issues directly to the responsible queue (receiving, putaway, replenishment, picking, packing, shipping).
- Executive KPI cockpit for OTIF, order cycle time, backlog aging, dock-to-stock, pick productivity, and inventory accuracy trends.



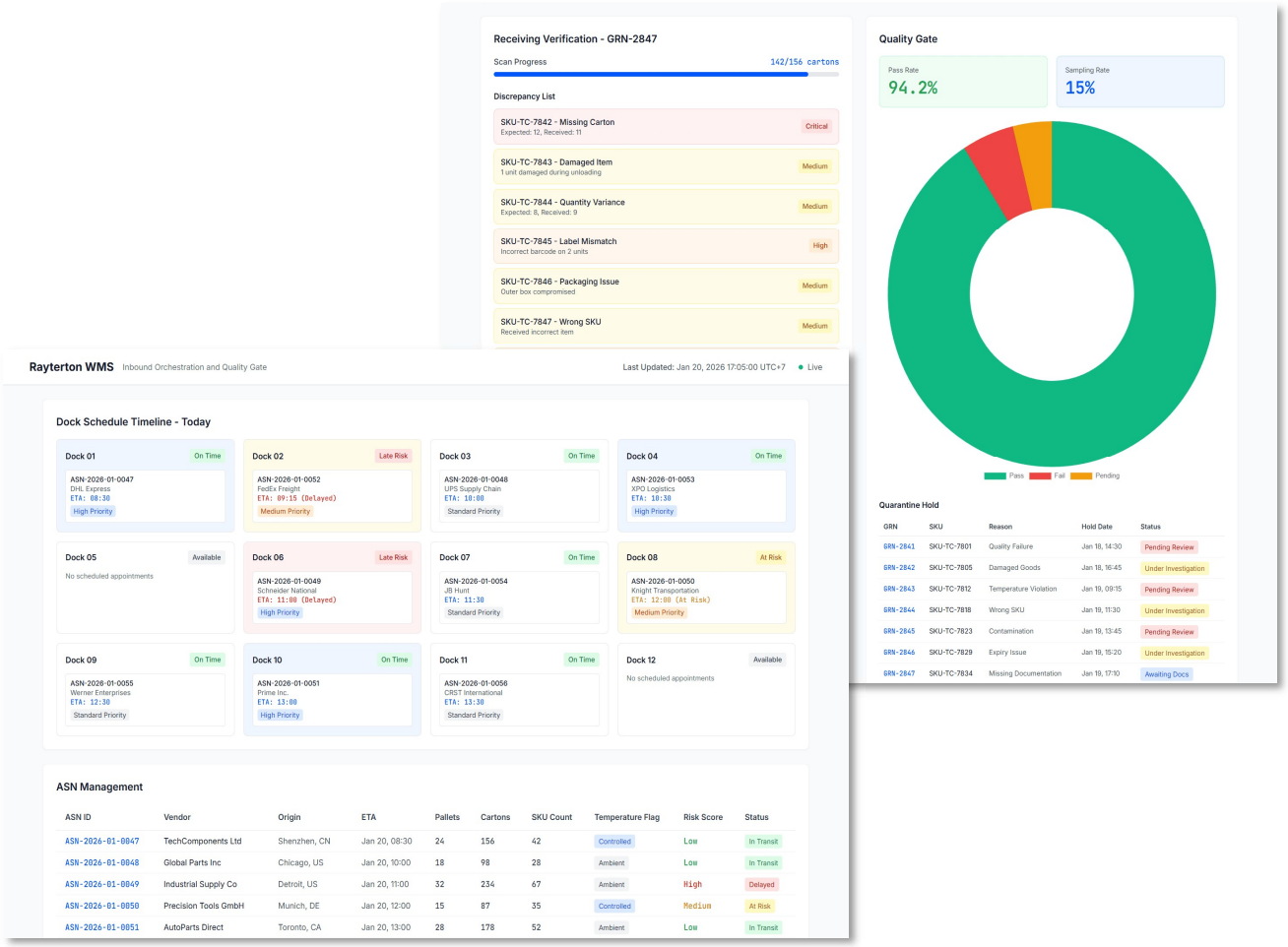
Inbound Excellence and Quality Gate

Inbound must be consistent and controlled. This section treats appointments, documents, scan checks, and quality inspection as required gates. Inventory becomes available only after it is verified and released. This reduces rework, shortages, and fulfillment failures.

Core capabilities:

- Yard, Dock, and Inbound Orchestration with appointment booking, dock assignment, workload balancing, and dwell-time control.
- ASN Management and Compliance Checks to validate documents, expected quantities, packaging, and supplier requirements.
- Receiving and Verification with scan-based receipt, lot and serial capture, damage recording, and discrepancy handling.
- Quality Hold and Inspection Gate with quarantine, sampling, release, reject, RTV, and evidence capture.

- GR Posting and ERP Sync to align financial stock and operational availability without delays.



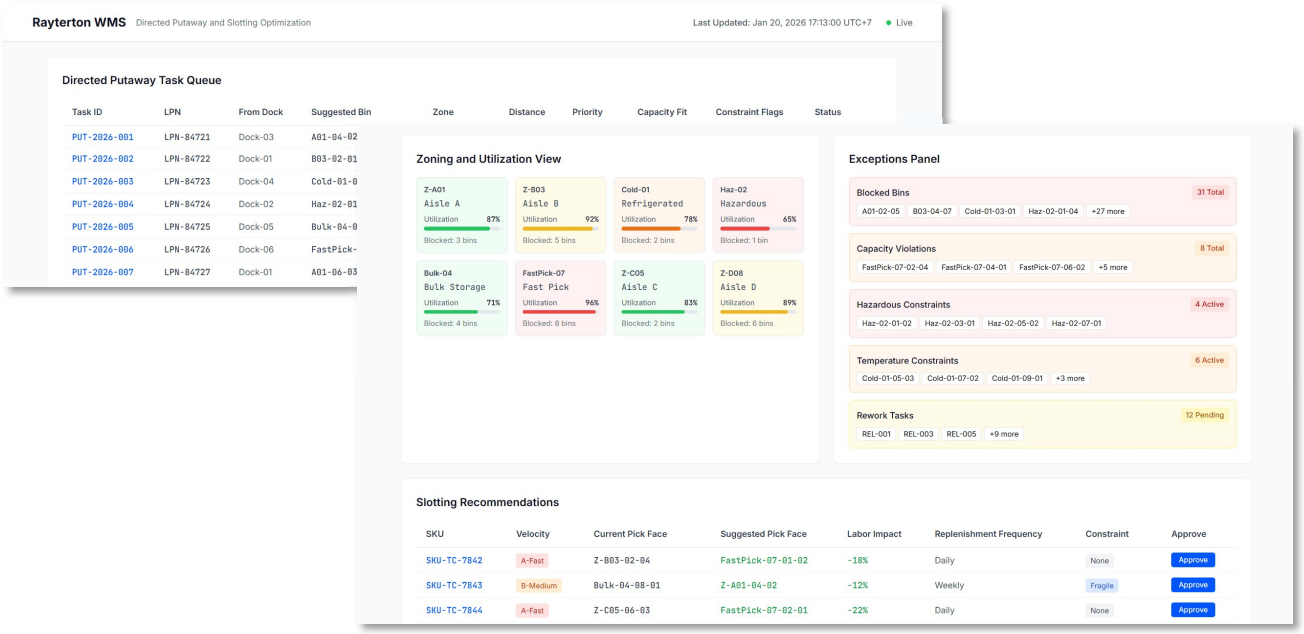
Storage Optimization and Replenishment Engine

Storage performance depends on how fast inventory can be reached without congestion. This area makes movements intentional. Putaway follows rules and constraints. Slotting keeps pick faces efficient. Replenishment is managed as an execution discipline. The goal is speed that stays stable under pressure, with accuracy at scale.

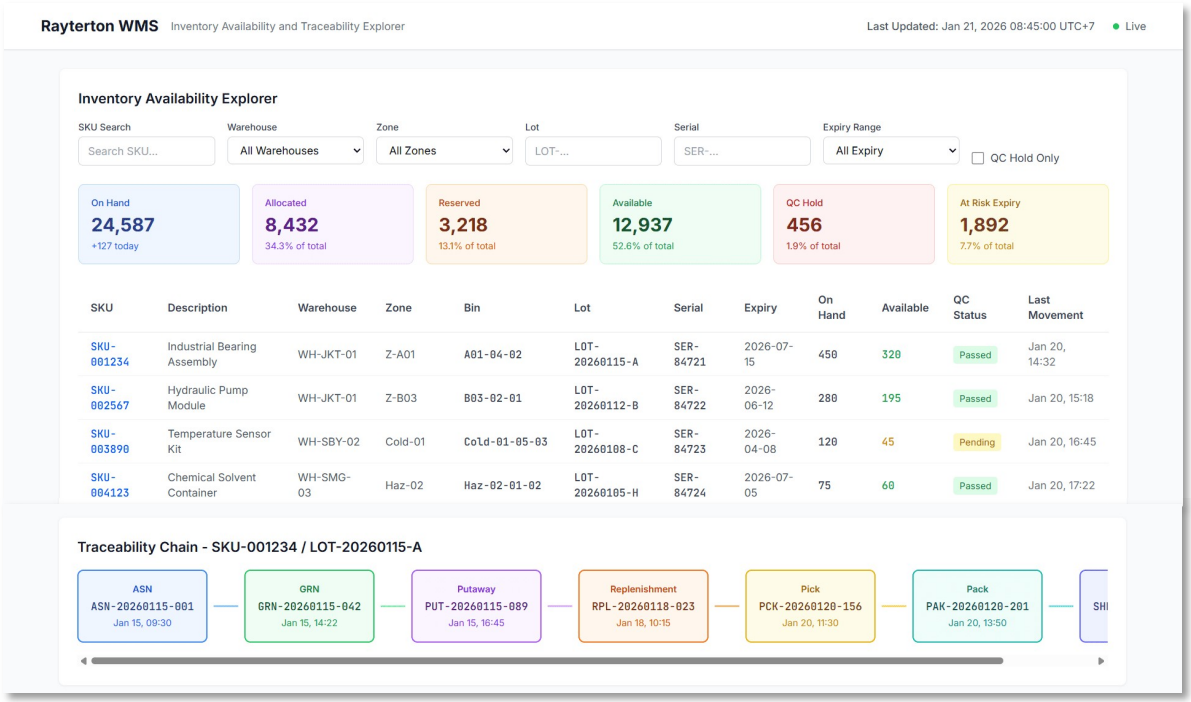
Core capabilities:

- Directed Putaway and Space Utilization based on zone strategies, temperature or hazard constraints, capacity rules, and handling requirements.
- Slotting Optimization to assign fast movers to optimal pick faces and reduce travel time.
- Replenishment Planning using min-max, reorder points, ABC-XYZ policies, and kanban fast-mover strategies.
- Replenishment Execution Queue with task-based moves, exception handling (blocked bin, mismatch), and operational confirmations.

- Location Audit and Capacity Management for occupancy control, blocked locations, and storage constraint governance.



Inventory Intelligence and Traceability

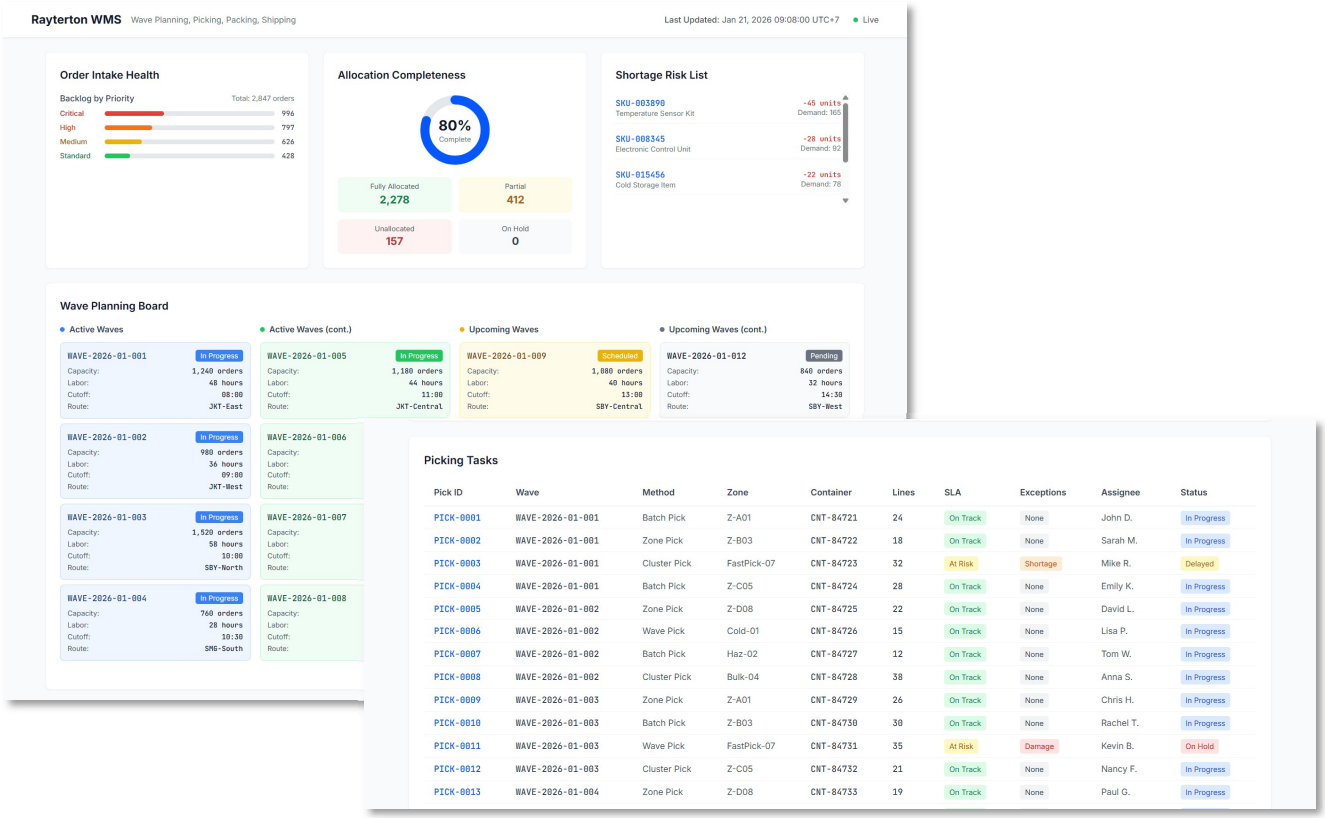


Manufacturing warehouses need accuracy that holds up during daily volatility. This area standardizes inventory control through continuous cycle counting, variance governance, controlled adjustments, and traceability for compliance and recall readiness. It also provides evidence that proves control during audits.

Core capabilities:

- On-hand and Availability Explorer by warehouse, zone, and bin, including allocated, reserved, and available views.
- Inventory Accuracy and Cycle Count Program with ABC policies, blind counting, recount flows, variance review, and supervisor approval.
- Lot, Serial, Expiry, and Genealogy Traceability for forward and backward trace, FEFO enforcement, and recall readiness.
- Stock Adjustments with Reason Codes and Evidence with approvals, audit trail, and ERP sync to protect financial integrity.
- Transfer and Relocation Governance across bins, zones, and warehouses with controlled documentation.

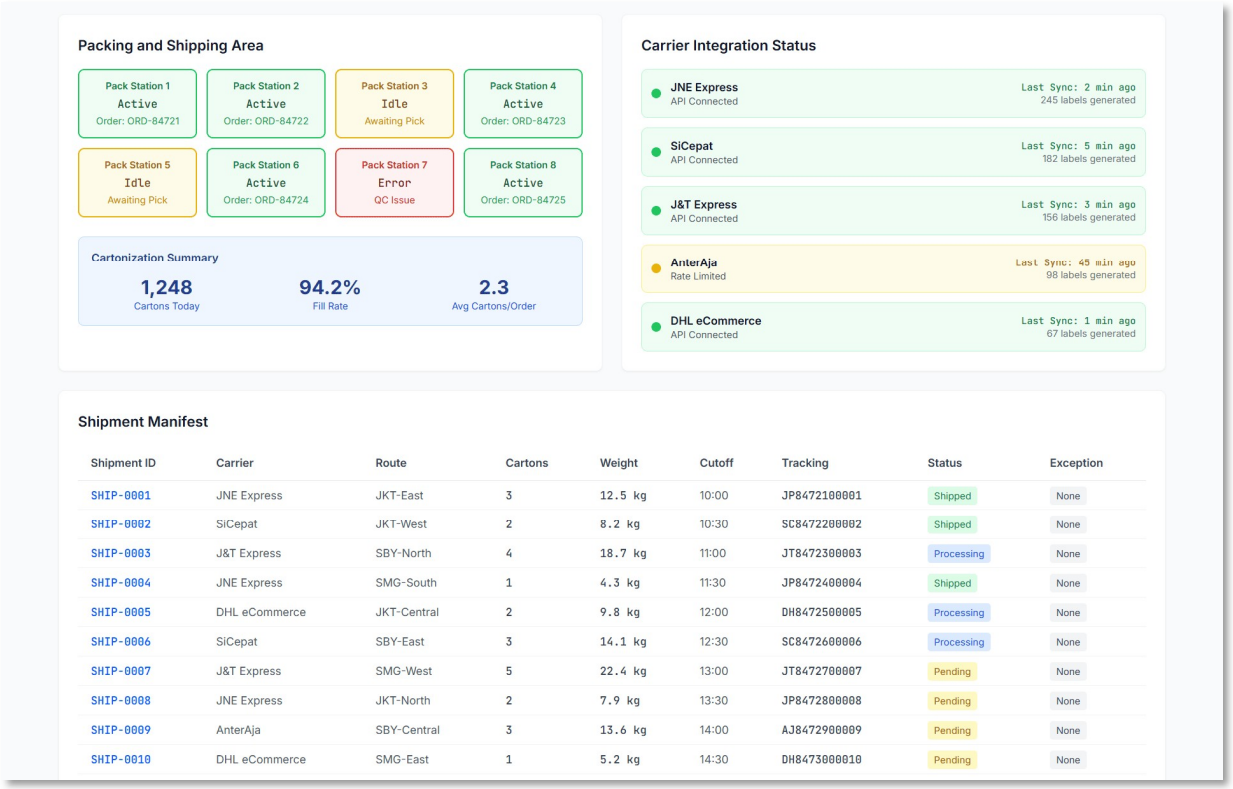
Fulfillment Precision and Shipping Ready



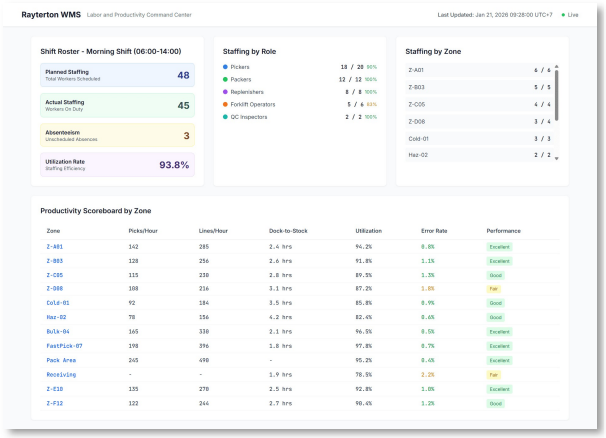
Shipping performance depends on details. Allocation rules, wave design, picking discipline, packing checks, and carrier readiness all matter. This area makes fulfillment predictable. Orders move through controlled stages with scan validation and clear exception handling. It supports multiple picking methods and shipping integrations to improve dispatch reliability and OTIF performance.

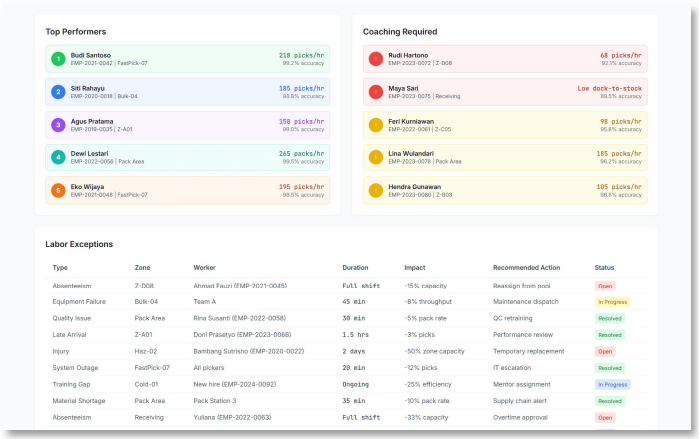
Core capabilities:

- Order Intake and Allocation integrated with ERP, including priority rules, promised dates, and shortage detection.
- Wave Management with release logic by carrier, zone, cutoff times, and workload balancing.
- Flexible Picking Methods including batch, zone, cluster, pick-to-cart, and route optimization.
- Packing Station and Cartonization with scan verification, carton suggestion, label printing, and exception handling.
- Shipping and Carrier Integration for manifest, load planning, tracking numbers, dispatch confirmation, and TMS alignment.
- Global Labeling Standard (SSCC Logistics Label) to support interoperable logistics unit identification and track-and-trace.



Workforce, Automation, and Ecosystem

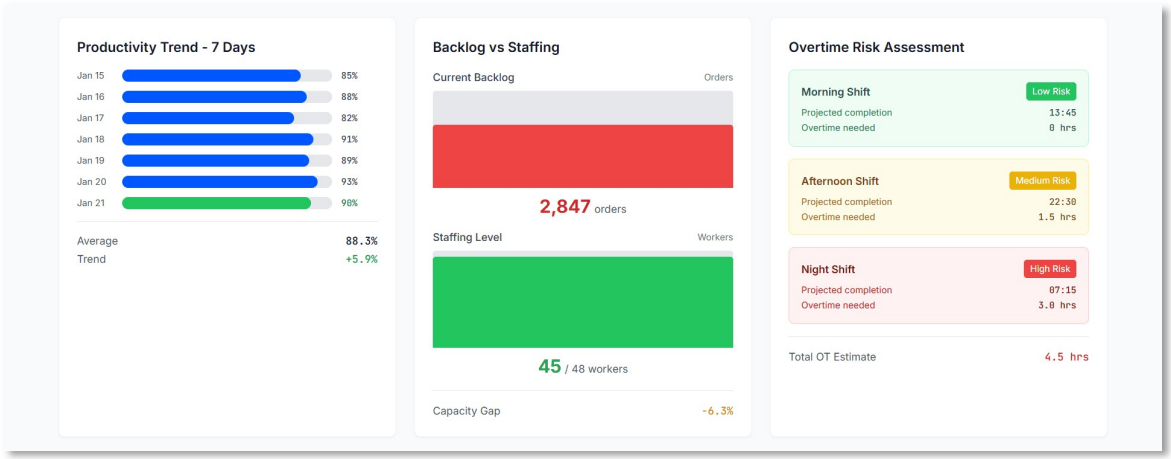


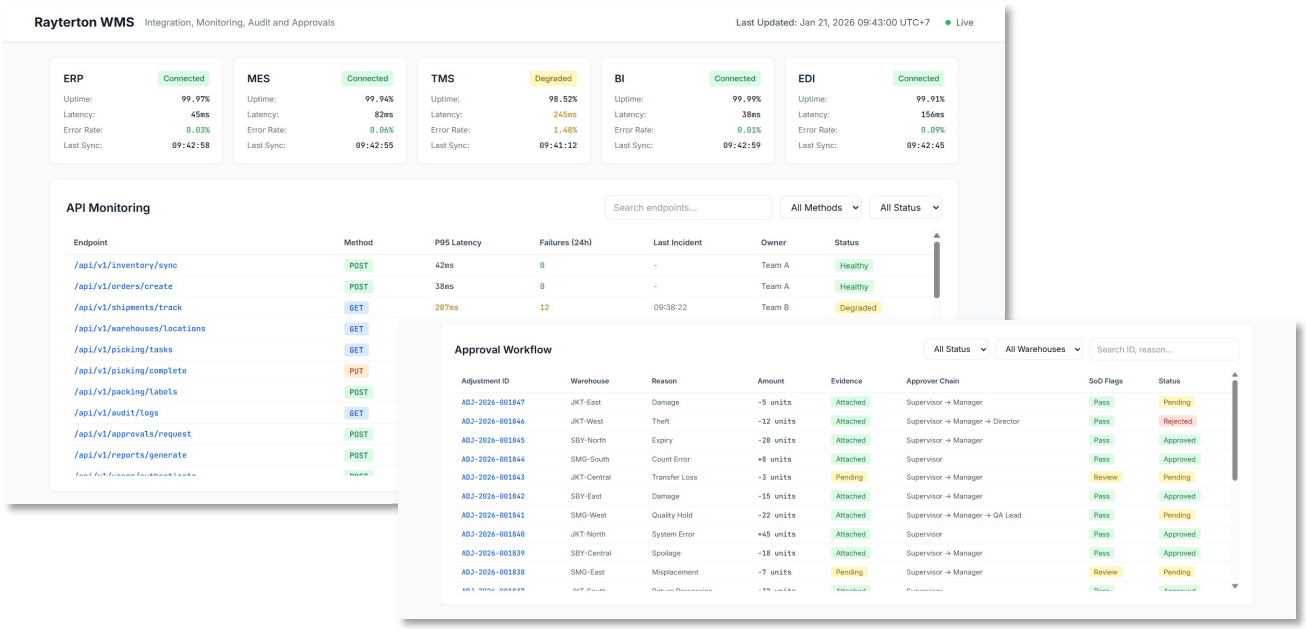


A WMS must support execution, workforce control, and integration reliability. This area adds labor visibility, task optimization, automation readiness for RF and robotics, integration monitoring, and governance controls. It helps warehouses scale volume while keeping discipline and audit evidence.

Core capabilities:

- Labor Performance and Productivity Management with labor standards, productivity metrics, capacity visibility, and bottleneck detection.
- Task Interleaving and Travel Optimization to reduce wasted movements and maximize throughput per shift.
- Automation and Execution Hub supporting RF execution, robotics readiness, orchestration patterns, and consistent scan discipline.
- Integration, API Monitoring, and BI Data Feeds for ERP, MES, TMS, event logging, retry queues, and analytics enablement.
- Governance, Security, and Audit Readiness including role-based access, segregation of duties, approvals, audit trails, and access logs.





Glossary of terms & abbreviations

- **ABC-XYZ** = Inventory classification policies used for replenishment planning, often ranking items by value (ABC) and demand variability (XYZ).
- **API** = Application Programming Interface. monitored endpoints used to ensure connectivity between the WMS and external systems like ERP or TMS.
- **ASN** = Advanced Shipment Notice. A document used in inbound orchestration to validate expected quantities, packaging, and supplier compliance before arrival.
- **BI** = Business Intelligence. Data feeds and integrations that export WMS data for external analytics and reporting.
- **Cycle Count** = An inventory control method involving continuous counting, variance review, and approval to ensure accuracy without full shutdowns.
- **ERP** = Enterprise Resource Planning. The core business system integrated with the WMS to sync master data, orders, and financial stock positions (GR posting).
- **FEFO** = First Expired, First Out. A rotation strategy and traceability logic used to prioritize picking items with the earliest expiration dates.
- **GR** = Goods Receipt. The action of verifying and posting received inventory, which triggers updates to the ERP for financial alignment.
- **KPI** = Key Performance Indicator. Metrics used to measure operational success, such as dock-to-stock time, pick rate, and inventory accuracy.
- **MES** = Manufacturing Execution System. A production system integrated with the WMS to coordinate raw material supply and finished goods storage.

- **NCR** = Non-Conformance Report. A record created during quality inspections to document damaged goods or discrepancies (referenced in UI actions).
- **OTIF** = On-Time In-Full. A primary fulfillment metric measuring the percentage of orders shipped on schedule and with complete quantities.
- **RF** = Radio Frequency. Refers to the handheld scanning technology and automation readiness used for executing warehouse tasks.
- **RTV** = Return to Vendor. A disposition action taken during quality control when received inventory is rejected or quarantined.
- **SKU** = Stock Keeping Unit. The unique identifier for a product, including its specific profile for lot, serial, and expiry tracking.
- **SLA** = Service Level Agreement. Time-based targets monitored via the Operational Alerts Watchlist to prevent delays in receiving or shipping.
- **SSCC** = Serial Shipping Container Code. A global labeling standard used for identifying logistics units to ensure interoperability and track-and-trace.
- **TMS** = Transportation Management System. An external system integrated with the WMS for carrier selection, load planning, and tracking.
- **VAS** = Value Added Services. Special operations performed in the warehouse, such as kitting orders and work orders, beyond standard fulfillment.
- **WMS** = Warehouse Management System. The core Rayterton platform that controls inbound, storage, replenishment, picking, packing, and shipping execution.

Validate Your WMS at Production Scale

Share your product roadmap, distribution Share your plant footprint, warehouse layout, SKU profile (lot, serial, expiry), inbound patterns, and service-level targets. Rayterton will configure a manufacturing-grade WMS blueprint aligned to your operational policies, then deliver a control-tower demo with realistic transaction volumes, exception scenarios, and audit-ready evidence trails so leadership can validate throughput impact, OTIF performance, and compliance posture before rollout.

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About Rayterton

Established in 2003, Rayterton delivers comprehensive Best Fit Software Solutions, server and hardware products, and technology services to a wide range of industries and organizations. Our core expertise lies in Business Process Improvement (BPI), IT Infrastructure, and IT Management.

At Rayterton, we are committed to empowering our clients by enhancing their business operations through tailored IT and management solutions. We combine innovation, experience, and client collaboration to ensure long-term success and digital transformation.

Our Competitive Strengths

100% Risk Free	**Best fit to client requirements**	**Easy to customize**	**Software ownership**	**No Change Request (CR) fees during maintenance**

For more information, visit rayterton.com