

# WMS 101

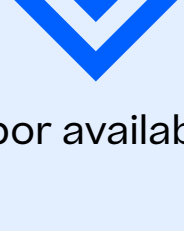
A journey through a warehouse as seen by its end-to-end orchestrator: the warehouse management system (WMS)

## What is a WMS and what does it do?

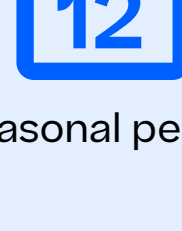
All modern warehouses, and their operations, will be affected by:



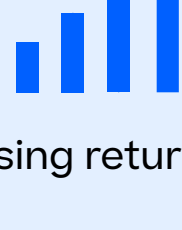
Customer expectations



Labor availability



Seasonal peaks



Increasing return rates



Stringent service level agreements

To answer these challenges, optimization of warehouses and distribution centers (DCs) has become a necessity. But as traditional supply chain solutions are often siloed, complex and hard to implement, new technologies are needed to increase warehouse speed, agility and peak efficiency.

**A warehouse management system (WMS) is the heart of a DC.** It's software that uses real-time data to ensure goods, people and processes move in the most efficient and cost-effective way. It facilitates many warehouse activities and provides full visibility end to end.

## Inbound

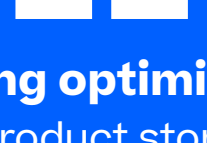
Goods entering a warehouse are either purchase orders, resupplies, transfers or returns. In most cases, the WMS is sent inbound communication (in the form of a purchase order, advanced ship notice or return material authorization) from an enterprise resource planning (ERP) system before products arrive at the warehouse. The WMS then uses logic to create receipt/load appointments, or reserve docks, doors and staging areas in advance.

To ensure inbound shipments are processed efficiently and stored in the optimal place within the DC, the WMS manages the following processes:



### Quality control

Tailored quality inspections with custom questionnaires, focused pass/fail criteria and conditional activities.



### Slotting optimization

Efficient product storage based on product handling characteristics, with picking execution optimization by minimizing travel paths.



### Putaway

Products put away to assigned location, or through initiated cross-dock move to a staging area or outbound dock door.

## End-to-end visibility and optimization

A WMS connects and tracks all processes and aspects related to the movement of goods through the warehouse. Through real-time combined data, the WMS guides action towards high-priority customer orders, purchase order receipts, and billing events, based on user-defined criteria and workflows.

### Labor engagement

Improve staff morale by:

- Benchmarking performance and inspiring staff with realistic expectations
- Increasing visibility of your staff's productivity levels to optimize your operations
- Predicting workforce requirements based on past data and projected work volumes

This boosts productivity, engages staff and makes sure KPIs are met.

### Data & reporting

Real-time visibility and actionable data allow you to:

- Create, manage and view KPI dashboards
- Analyze ad-hoc business intelligence using pivots
- Accurately measure operations performance
- Make informed decisions from past trends and real-time metrics

Supply chain data is also interchangeable with other external data sources, such as ERPs.

### Accurate inventory management

Through real-time visibility and replenishment logic, WMS drives efficient stock management to avoid missing inventory or overloading. This improves inventory accuracy and ensures inventory by location is most efficiently balanced.

### Space optimization

Maximize the use of your warehouse space with:

- Directed stock rotation
- Intelligent picking directives
- Automatic consolidation
- Cross-docking

The system also directs and optimizes put-away based on accurate, real-time information on bin utilization.

### Resource scheduling

External carriers and vendors can log into the WMS portal to schedule a date, time and dock door for deliveries or outbound orders, based on predefined parameters. This improves efficiency, throughput and asset utilization.

## Outbound

The WMS executes every aspect of outbound fulfillment. After retrieving from order receipt through picking and packing, the system then provides the necessary documents for shipping.



### Picking and packing

Picking rules can be fully configured, including specific parameters determined by the customer – such as mass and size. Integrated shipping functionality eliminates fixed packing stations and shipment paperwork, reduces costly manual errors, and increases shipment reliability. Wave picking – consolidation of multiple sales orders into "waves" – is also able to be picked at once for significant time savings.



### Kitting

Import sets and kits directly from ERPs and track their entire flow through the warehouse, with detailed definition of kit's parameters, and configuration of obligatory and optional kit items and the items' sequence. The kitting function also allows you to create "dynamic kits" – kits with the same identification number, but different content.



### Shipping

Through a multi-carrier rating engine, you can automatically select the cheapest carrier, mode and service level against your delivery timeframes. This reduces shipping costs, allows shipment tracking, and hits valuable key performance metrics – all whilst maintaining complete shipping compliance and meeting customers' expectations.

## Why a WMS?



### Optimized operations

Improves inventory accuracy, efficiency and responsiveness.



### Turnover reduction

Manage labor and workforce scheduling for better resource allocation.



### Process digitization

Complete digitization provides real-time data for improved visibility and planning.



### Drive productivity

Empower your workforce to maximize business results through increased mobility, analytics and information exchange, while eliminating the need for non-value-added activities such as manual checking and shipment audits.



### Seamless integration

Achieve end-to-end processes and time-to-value reduction by integrating the WMS with other supply chain applications (yard management, labor management, transportation management), host ERP, automated material handling equipment (MHE) and other complementary IT systems.



### Exceed customer expectations

Improve order accuracy and on-time shipments with reduced cycle times, stock outs and backorders.

## Why Körber?



### Proven results

Our clients consistently achieve increased productivity of up to 50%.



### Cloud deployment

Leverage advanced cloud technology to ensure business continuity and uptime, and security and scalability to support seasonality and growth.



### Configurable solution

A flexible, future proof solution which supports customer-specific processes without requiring source code customizations.

WMS solutions can improve your warehouse operations, end-to-end.

[Find out more](#)



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