



## Empirica WMS Overview

### What Does Empirica WMS Provide?

- Structured processes for all warehouse activity.
- Full stock management options.
- Cyclic stocktaking and real time PI facilities.
- Multiple real time options, including voice directed picking.
- System automated task scheduling and priority control.
- Integration tools for data exchange with business applications.
- Detailed reporting on stock, location and movement.
- Full third party charging module.
- Complete end to end movement traceability.
- Multiple modular functionality options.
- Multiple modular reporting options.

**Empirica WMS is an advanced warehouse management system with the flexibility to suit any logistics environment. It handles all product and storage types and its format suits single or multi-depot use in own account, shared user or contract logistics activities.**

Empirica WMS has functionality to support high volume warehouses and DC's offering complex handling and valued added services. It provides a complete, supply chain-integrated, real time warehouse solution with excellent visibility, reporting and traceability.

Clear intuitive options are available to handle all key warehouse processes, and manage multiple value added activities. Operations can be performed in real time, using wireless mobile RF technology and via detailed PC based options.

The system provides full stock and location information, real time warehouse activity data, and a detailed movement history. Web based report options give remote access to real time management data, including performance KPI's. Integrated tools allow easy creation of interfaces with other solutions and third party charge and invoice facilities are standard.



# Process Overview



## Goods Receiving

The Empirica WMS receiving process has a pre-receipt (ASN) option for recording information in advance of goods arrival. Detail may be entered manually via keyboard or captured electronically from other systems. Once information is entered, advance labels, (e.g. for pallets) and check sheets can be printed for use when goods arrive. Data entered can then be accessed automatically at the receipt stage.

A simple one stage receipt option can be used if preferred. This is available via PC or mobile device, and will handle the whole process of recording detail, generating locations and issuing putaway instructions. However, where pre-receipt is used, any data entered can be amended to reflect differences between advance information and actual receipt. A report is available to highlight discrepancies.

Once receipt information has been entered Empirica WMS automatically selects putaway locations based on pre-defined rules. These rules offer great flexibility to determine where product is placed, with factors like location of existing product and pick face, exclusion, preference and ABC analysis. Manual selection of locations can also be used. Options are provided at receipt to generate putaway labels, lists and receipt notes.

The system also provides a booking diary to make forward vehicle bookings. This allows entry of haulier and consignment detail, automatically selects an available booking slot and generates a unique booking reference. The diary can be formatted to operational needs and offers the flexibility to amend and move bookings. It also allows time recording of key actions for KPI analysis, such as arrival, start and finish offload and departure.

Working Solutions for Logistics



## Wireless RF Options

Empirica WMS RF provides the means to perform all receipt and putaway tasks using mobile wireless device. These options allow receipt and putaway to be done as separate tasks or as a combined single process.

### Receipts

Both pre-advised and blind receipts can be handled. Any relevant reference can be entered to identify pre-advised (PO/ASN) detail. The user can then process each product, amending received quantities if required. The device screen can be configured to suit operational or customer needs, with a range of data capture fields available. Functionality is available to deal with a range of receiving scenarios. These include features to handle automatic QC receipt, receipts from production, full or partial receipts, multiple purchase order receipts, non stock held products and cross-docking.

### Putaway

When using a mobile wireless device the user selects the putaway option from the menu to be given a choice of pallets or items awaiting putaway. These can be put away in any order, and once identified by scan or keyboard entry, a location is advised. If a system-selected location is unsuitable, users can request an alternative or raise a movement problem for supervisor attention. The system provides options to confirm putaway by single key stroke or location check digit scan. Once confirmed, product and location information are updated in real time.





### Wireless RF Options

Empirica WMS provides options to handle all picking activity using mobile wireless device. Voice directed picking is available via a module integrated with the market leading Vocollect® product.



### Full pallet, Case & Item Picking

Orders for picking can be system allocated or user selected. Multiple validation options can be used including scanning location, product and serial number. Users are directed to pick locations which they validate before picking the system advised product and quantity. On confirming product pick, destination location (marshalling bay etc) is advised.



The case/item pick option allows use of identifiable pick media (pallet, tote, cage) to group and identify items for despatch tracking. Pickers can select their preferred pick sequence and identify next lines to pick. Where quantity exceeds a single media, users can advise when full and start a new one as required.

### Voice Based Picking

Voice solutions require that the voice dialogue is closely aligned with operational process to deliver the true benefits of 'hands and eyes free' operation. Empirica WMS is regularly implemented with Voice and can be rapidly configured for effective use in any pick operation.



### Replenishment

Pick face replenishment options include automated replenishment for individual pick faces by stock trigger level and shift based 'batch' type replenishment. For mixed case storage a consolidated replenishment facility is also provided.

## Order Picking and Despatch

**Empirica WMS offers speed and flexibility to manage the despatch process based around two main methods of pick and despatch planning. It provides many 'real time' options including picking, sorting, replenishment, marshalling moves, vehicle loading and despatch confirmation. Behind the simple user processes flexible parameters are available to reflect multiple operating needs.**

The despatch process begins at the sales order stage. Order detail can be entered manually into the system or captured electronically from another source. The WMS does not allocate stock at the point of order entry, and the order file can contain any number of orders for future delivery dates. Once entered, there is full visibility of orders throughout the process.

Two main options are available to select and group orders for picking. These are 'wave' and 'load' picking. Wave picking is a concise process typically used to pick orders together based on the same criteria (date, product, outlet etc). Load picking is a traditional process for grouping deliveries by load. It provides features to assist with load planning and preparation, as well as despatch validation via a vehicle loading process.

Despatch documentation is available to complete the picking process, and includes delivery notes and despatch labels. For fulfilment type operation there is also a packing desk module. Typically used in conjunction with wave picking, this allows orders delivered into the packing area to be identified and packed, with supporting documentation or labels produced by the system. A direct interface to a carrier labelling system for producing despatch notes is also an option.





### Stocktaking

Empirica WMS has a full stock-take feature available as a real time wireless option. This allows stock counts to be done on an ongoing basis, regardless of movements in progress. Stock counts can be verified by supervisor at PC level, and the system allows recounts as necessary before adjustment of final count figures. Real time PI allows stock counts triggered by pick frequency or expected balance to be done within the picking process.



### Stock Management

Empirica WMS has simple options for stock management available via PC or wireless device. These include stock (quantity) adjustment, status change, internal and external movement, housekeeping and (for 3PL operation) customer ownership transfer. All movements are fully audited and retained within the movement history.

### Reporting

Empirica WMS offers detailed core reporting options giving clear, concise data on stock and location, orders, receipt and despatch. Typical reports include general stock enquiry, stock flow, movement transactions, stock in picking, stock age, and batch recall. Further options are available within complementary modules to cover areas such as remote web reporting access, warehouse KPI's, real time 'dashboard' analysis and a labour targeting and planning tool.

### Movement History

Empirica WMS has a comprehensive historical audit trail which identifies transactions to single item level, and provides extensive criteria for defining search queries. The history option provides facilities to archive data, and restore when required.

### Third party Invoicing

A module is provided for third party charging and invoicing. Charge types including RH&D, rental, picking and ad hoc charges can be set at system, customer and product level. The module includes banded rates, extra charges and sundry invoicing. A printable invoice and movement summary, together with invoicing audit trail are included.

### ERP Integration

Empirica WMS has an in-built integration module for rapid creation of data exchange between the WMS and external IT applications. The module schedules and manages interface messages, provides error diagnostics and holds a full transmission audit.

