



WAYAHEAD
SYSTEMS

- 3WS Additional Modules -

3WS has many extra features beyond weighing



50 Sites

15 Countries

Since 1987

Introduction to 3WS extra modules

The 3WS Dispensing module is usually the initial program installed at each site. Many other modules have been developed, which are progressively installed at validated sites.

The additional modules include Raw Material barcode labeling, Manufacturing confirmation, Packaging confirmation, Finished Goods barcode labeling, Lotno Location Management, Material Scheduling, Labour Costing, Interfaces to other MRP/LIMS systems.

Other new modules are under development.

----- LIST OF MODULES -----

DISPENSING	campaign weighing, potency, labeling, counting
BARCODE LABELS	barcoded labels for Lotnos, Orders, Phases, etc
MANUFACTURING	confirms all dispensed items, during mixing
PACKAGING	issue of components, stock returns, re-label
LABOUR COSTING RF Scanning	of all actions, by user, time, job, product
MATERIAL SCHEDULING	from production plan, includes orders
LOTNO LOC MOVEMENT	movements, stocktake, order picking
PLC MANAGEMENT	of bulk dispensing & manufacture
MANUFACTURING EXECUTION	work instructions, sequencing
LABEL CLAIM FINAL PRODUCT	guarantees Mineral & Vitamin quantities
FINISHED GOODS LABELS	barcoded TUN labels for shippers, cartons
INTERFACES	download & uploads between 3WS & SAP
AUTOMATIC AUDIT TRAIL	automatic FDA history of all data changes
SYSTEM VALIDATION	VMP, IQ, OQ, PQ protocol is off-the-shelf

MANUFACTURING VERIFICATION

When dispensing has been completed, the MFG module ensures by bar-code scanning the dispensing labels, that all ingredients dispensed are added to the correct receptacle, such as mixing bin, hopper, vacuum transfer tank.

MFG also guarantees that previously dispensed materials are mixed in the correct process. The Lotno used during Dispensing is rechecked to ensure Lotno Use-By-Date and Lot Status are still OK to use.

MFG can use Radio Frequency (RF) hand-held scanners or PC-based screen functionality, to suit each site's requirements.

BARCODE LABELLING

You can print barcoded labels from the Lotno (Goods Inwards), Dispensing, Packaging, Finished Goods modules.

You can print User ID labels, with barcoded UserID and optionally a barcoded, encrypted Password.

For Location management, you can also print Location barcodes.

Labels can print in non-English characters, as in the label example below.

LOT NO LABEL



FINISHED GOODS SHIPPER



1 9 3 2 3 5 0 3 0 3 0 8 2 3

DISPENSING Check - Scan Lotno barcode



Extra Modules expand on main Dispensing functionality

PLC/Bulk Hopper Control

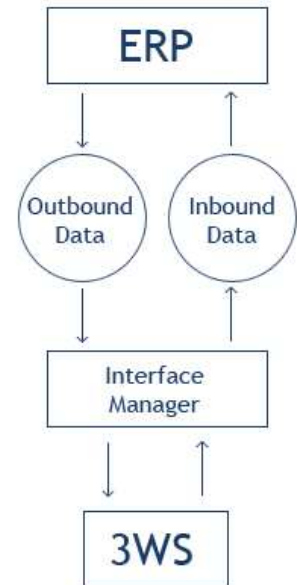
Using scanners, load cells and a PLC system, 3WS can control and verify the dispensing of bulk materials from hoppers or into vacuum transfer systems..

PLC functionality can be initiated and checked by 3WS. All User, date-time, Lot, Tank history can then be recorded for each Work Order of manufactured product.

Interfaces to ERP Systems

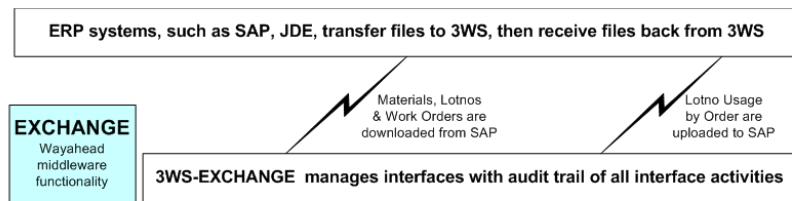
We have developed interfaces to download LotNo details, Work Orders, Material Names, from existing systems, as well as upload actual material usage details back to ERP systems, such as SAP.

The data transferred between 3WS and other systems can be XML data, flat-files or shared database tables.



MODULE FLOWCHART

3WS MODULE FLOWCHART



Flow of most production activities.....

	LOCMGT Manages Lotno location picking and movements	SCHED Lotno scheduling across mfg plan & incomplete orders	DISP Weigh & Dispense activities, includes bag counting	MFG Scan dispensed materials during tipping & mixing	PLC Manage bulk processing tasks by materials	PKG Issues to Orders Returns to Stock and Return labels	FGS / BSM Finished Goods barcode labels & Label Claim check	EBR Complete Electronic Batch Record
BARCODE Barcode labels are available in most modules	✓	✓	✓	✓	✓	✓	✓	✓
MES Work Instructions can be entered by activity in Orders			✓	✓	✓	✓	✓	✓
LABCOST Operator activity can be recorded by date-time	✓	✓	✓	✓	✓	✓	✓	✓

The above three modules are used across many production activities.....

AUDIT Automatic FDA Audit Trail across all 3WS activities	NAME Description	Indicates a 3WS Module
3WS maintains a full regulatory audit trail of all database changes, all user activity, all PLC actions & all interface transactions		

Automatic Data Audit Trail

This module will retain a complete regulatory audit trail of all database changes, across all 3WS modules, including any external program access, even 'hacking'. A copy and enquiry facility is available for local and offsite (ie. FDA) review, which is 21CFR11 compliant.





3WS BENEFITS

- Inventory levels reduced
- Material handling activities reduced
- Operator label printing eliminated
- Clerical data entry eliminated
- Rework management improved
- Potency management improved
- Rejected work orders eliminated
- Material scheduling available, with re-order reports
- Productivity increased across many activities
- Manages Packaging stages
- Manages Manufacturing / Mixing stages
- Manages Lotno / Location movements, stocktake
- RF Scanning of labour costing data, by user, activity, job, time
- Scheduling of future production plan, includes WIP orders
- Barcode labels for Lotno, Weighing, Components, Shippers, etc

QUALITY CONSIDERATIONS:

- Quality Control guaranteed for all processes
- FDA / PICS / GAMP Compliant, fully validated system
- Complete Audit Trail across all modules, viewable offsite
- Production process is enhanced to create an Electronic Batch Record (EBR) automatically, including work instructions



Head Office

2500 Plaza 5

Harborside Financial Center

Jersey City NJ 07311 USA

Phone: +1 (201) 633 4570

Fax: +1 (201) 484 7201

www.WayaheadSystems.com

info@WayaheadSystems.com