

Stock Management Methods in SAP: Some distinctive differences between IM, WM, and EWM

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The
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- Our consulting professionals are truly **Business People who know SAP** that bring the right combination of Industry and SAP expertise for your SAP needs.



Professional Staffing



SAP Implementation



Support
Desk



Process
Optimization
Services



SAP Upgrade
Services



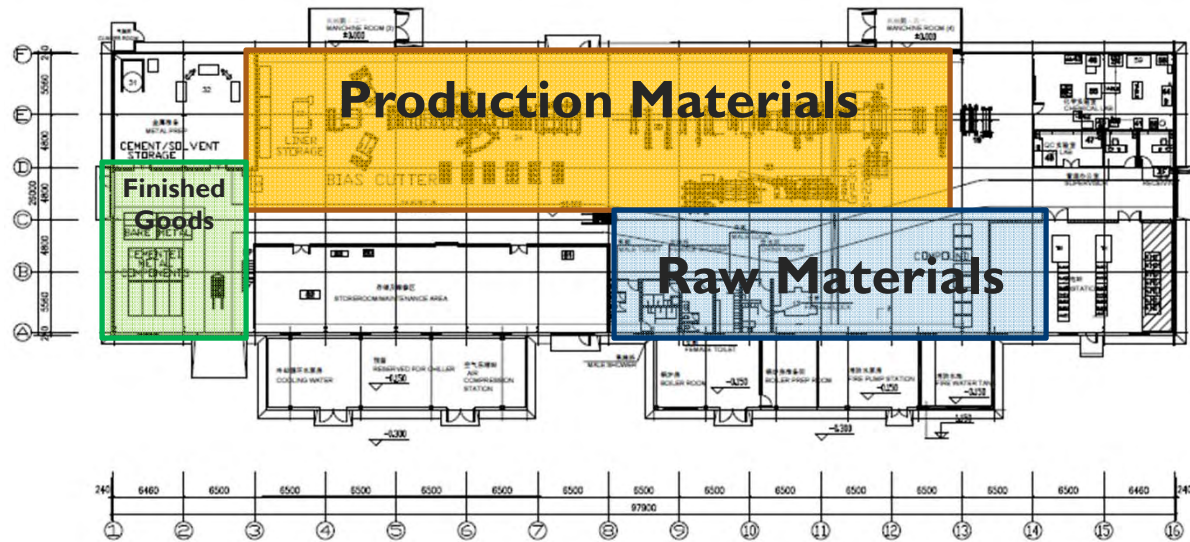
Learning Points

- Identification of available stock management solutions and the core functionality used within each solution.
- Key differentiators between the main stock management solutions:
 - Inventory Management
 - Warehouse Management
 - Extended Warehouse Management
- Guidelines to help determine under which circumstance to use each of the available stock management solutions.

SAP Solutions for Stock Management

- Inventory Management (IM)
- ERP Warehouse Management (WM)
- SCM Extended Warehouse Management (EWM)

Inventory Management (IM)



- Inventory Management tracks the quantity and value of a material as it progresses throughout the location
- Stock is managed by storage locations, which are used to represent logical sections of the site where goods are stored.
- IM provides very limited information about individual lots, such as which materials are stored in specific storage bins.

Inventory Management – Key Features

- Fully Integrated within the Core Modules (MM, PP, SD, FICO)
- Real Time accounting posting
- Manages Special Stocks (sales order stock, consignment stock)
- Simple to use... If it posts, it works!
- No visibility of outstanding picking requests
- Limited reporting on picking accuracy (planned vs. actual)
- IM is well suited for...
 - Small facility with a simplified layout
 - Lower levels of inventory on hand
 - Visual Controls in place to enhance material handling
 - Simplified material handling processes
 - Outsourced warehouse operations
 - Only need visibility of aggregated inventory for the Storage Location

ERP Warehouse Management (WM)

- Warehouse Management (WM) provides flexible, automated support in processing all goods movements and in managing stocks in your warehouse
- Stock is managed at the bin level for exact location of products
- Movement of goods are Point to Point (Dock to Bin, Bin to Supply Area, etc...)
- Capacity and Volume assist with managing space in the warehouse
- Core System processes support
 - Fixed Bin Replenishment
 - Putaway and Picking Strategies
 - Storage Unit Management
 - HAZMAT
 - Inbound Material Processing
 - Internal Movements
 - Outbound Material Processing
 - Physical Inventory



ERP Warehouse Management (WWM) w Extension Set 2.0

- Yard Management
 - Appointment scheduling, check in and check out,
 - Assignment of dock doors, loading/unloading activities
- Value Added Services
 - A value-added service (VAS) is an operation performed on materials, which enhances their value, worth, functionality or usefulness. Value-added services include the following:
 - Repacking
 - Labeling
 - Shrink wrapping
- Cross-Docking
 - Management of inbound and outbound movements
 - System-generated Decisions

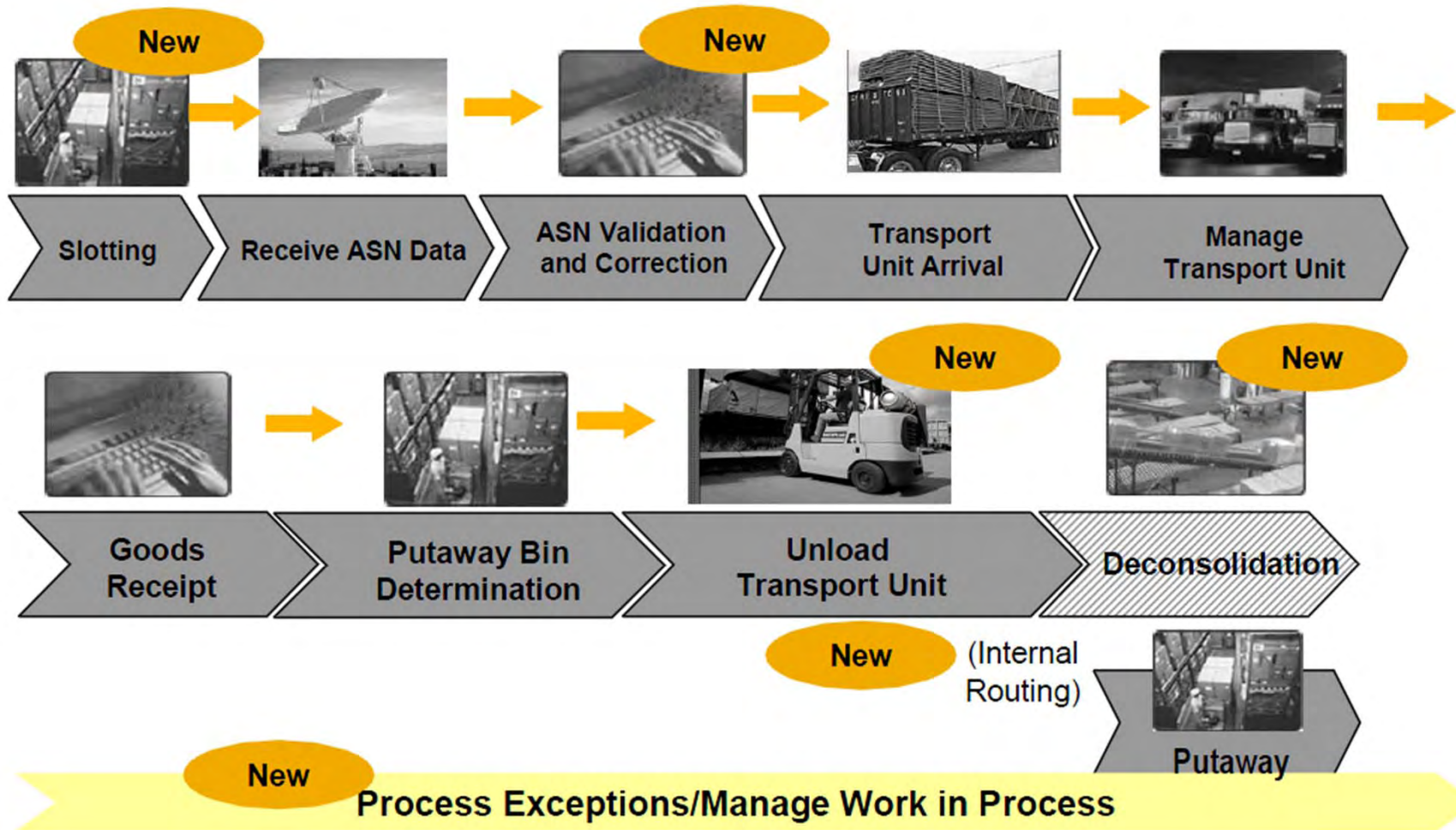
Warehouse Management – Key Features

- Fully Integrated within the Core Modules (MM, PP, SD)
- Manages Special Stocks (sales order stock, consignment stock)
- Maximizes warehouse space with the use of storage capacities
- Provides full visibility into workload for the user community
- Limited reporting on picking accuracy (planned vs. actual)
- Enable the Extension Sets for complete functionality
- WM is well suited for...
 - Small – large facilities
 - Low – Mid level Volume of Picks
 - Facilities with Multiple types of storage (Rack , Bulk, Fixed Bin, etc...)
 - Direct paths for picking and putaway
 - Minimal need for complex Labor and Distance Calculations
 - Production sites that require bin level visibility on the shop floor
 - RF equipment in place to enhance picking and putaway
 - Simple to Complex material handling processes

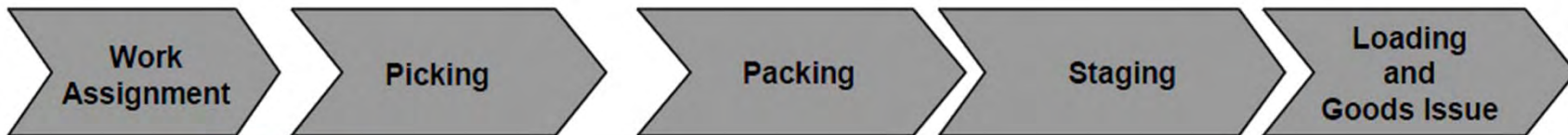
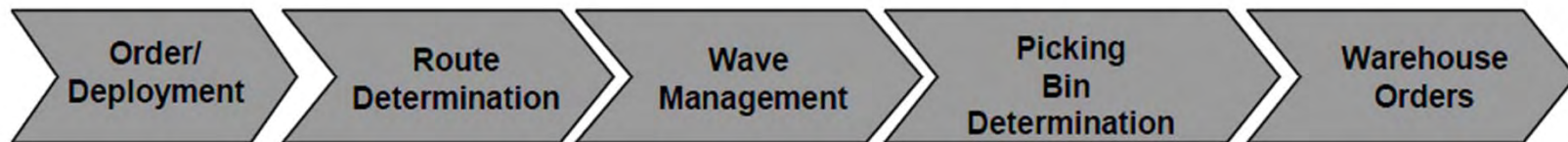
Extended Warehouse Management

- Extended Warehouse Management (EWM) offers flexible, automated support for processing various goods movements and for managing stocks in your warehouse
- EWM gives you the option of mapping your entire warehouse complex in detail in the system, down to storage bin level
- You can always see the total quantity of a product in the warehouse, and also know exactly where a specific product is, at any time, in your warehouse complex
- With EWM, you can optimize the use of various storage bins and stock movements, and can store together stocks from several plants in randomly-managed warehouse

EWM Inbound Processes



EWM Outbound Processes



New

Process Exceptions/Manage Work in Process

EWM Additional Processes



Yard Management

Management and Tracking of Vehicles/ Transportation Units from yard check-in, throughout the yard movements tasks, and yard check-out

New



Quality Inspection Engine

Service oriented Quality Inspection Engine to support the quality processes for warehouse management

New



Environmental Health & Safety

EH&S data and checks used in Product Storage, Shipping Documents and Transportation Routing

New



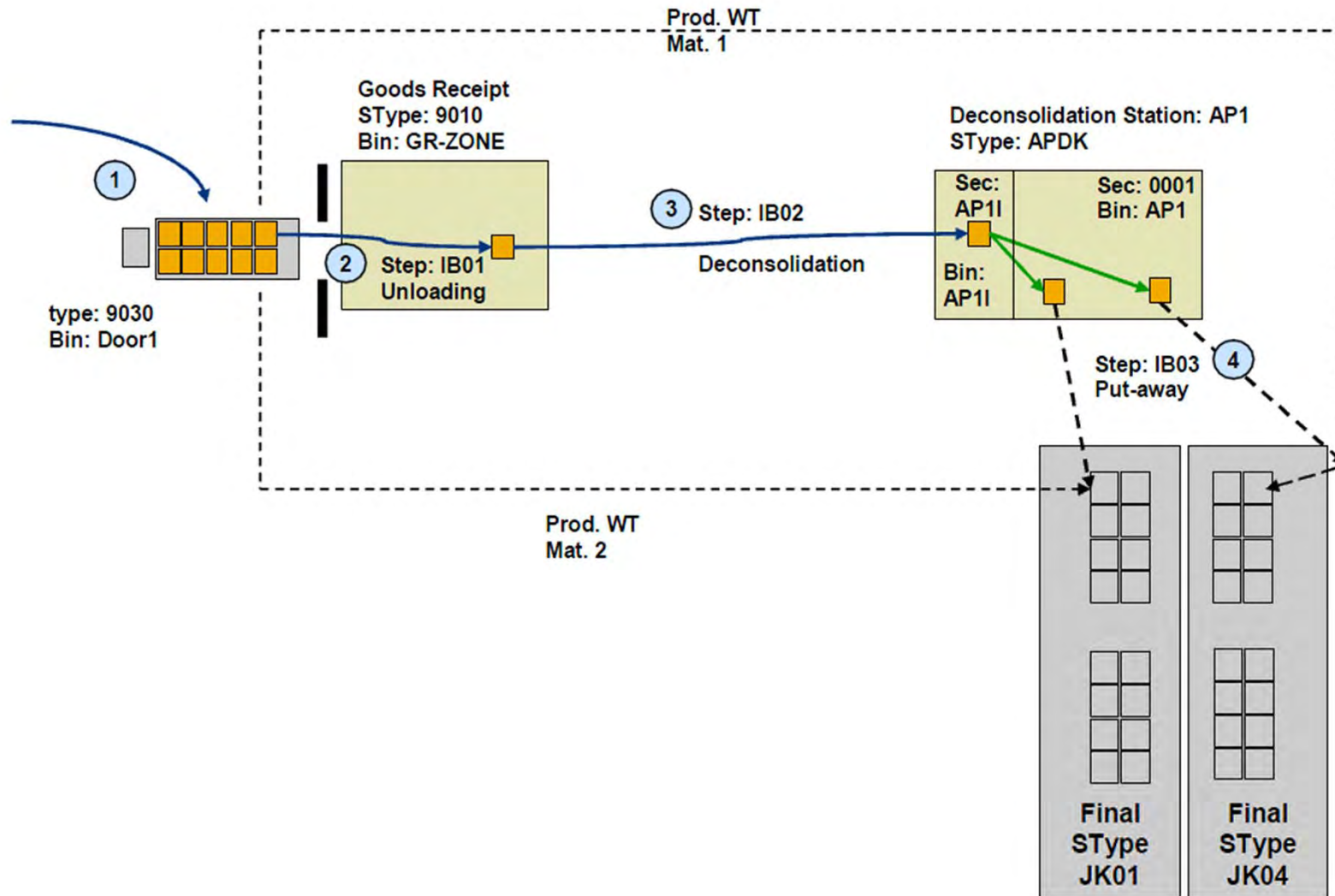
Foreign Trade/ Bonded Warehouse

Customs management
SPL Screening
Re-exports
Duty unpaid returns

New

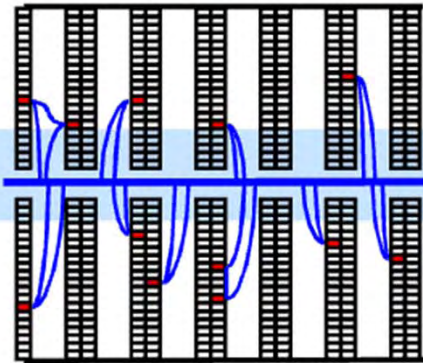
Process Exceptions/Manage Work in Process

EWM – Process Oriented Putaway

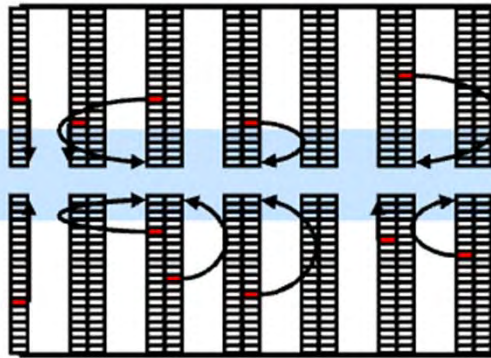


EWM – Rearrangement

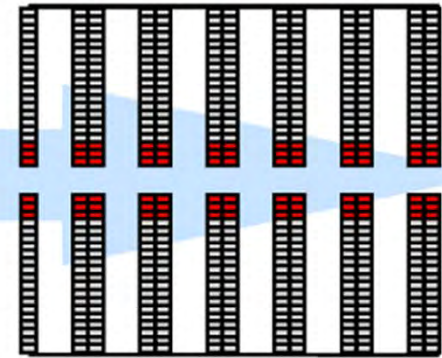
Pick Order
before Optimization



Rearrangement
Execution



,'Golden Zone'
for Fast Movers



EWM additional processes support

Inbound and Outbound Processes

- Yard Management
- Expected Goods Received (ASN)
- Unloading and Deconsolidation
- Cross Docking / Transportation Cross Docking
- Pick from Goods Received and Push Deployment
- Kit to Stock / Kit to Order
- Wave Management
- Value Added Services

Optimized Internal Processes

- Slotting and Rearrangement
- Staging for Production Supply
- Process and Layout Storage Control
- Warehouse Monitoring
- Graphical Warehouse Layout

Enhanced Cross Processes

- Supply Chain Analytics
- Labor and Resource Management
- Material Flow System
- Auto ID / RFID / Radio Frequency Framework
- Managing Handling Units
- Serial Number Support

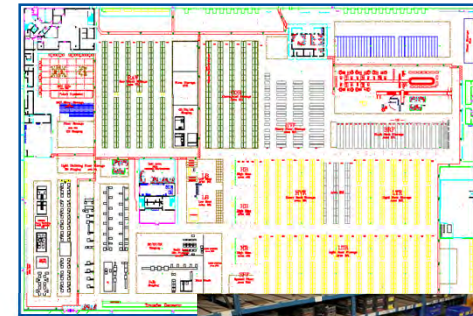
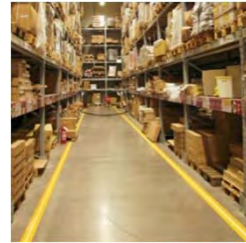
Extended Warehouse Management – Key Features

- Complete Functionality to support all major warehousing functions
- Master Data is completely separate from ERP
- Recommended to be deployed on a separate Infrastructure
- Future direction for warehouse management enhancements for SAP
- EWM is well suited for...
 - Small ~ large facilities
 - High Volume of Picks
 - High Volume of Cross Docking Opportunities
 - Complex picking and putaway requirements
 - Need for Labor Management
 - High volume of Value Added Service tasks
 - High level of integration with material handling and flow systems
 - Stackers
 - Conveyor Systems

A few points to consider?

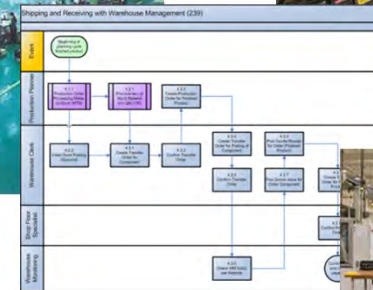
■ Site Layout

- Overall size of the site
- Travel Distance
- Configuration of racking and storage areas
- Flow of material



■ Business Processes / Services

- Production and/or Distribution
- Value Added Services
- Cross Docking



■ Physical Attributes of the layout and products

- Visual Controls
- Material Handling Equipment
- Product Labeling



Final Thoughts

- Gain a full understanding of each of the stock management solutions as you document your requirements
- Map your business process completely before deciding
- Make your selection based on your business need

Thank you for participating.