Logistics

Microsoft Dynamics AX

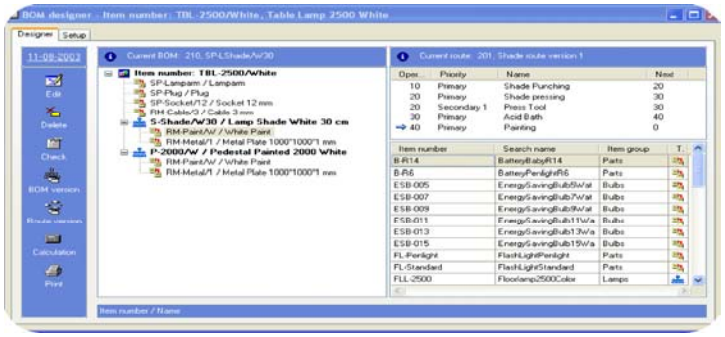
BENEFITS:

- **Optimize inventory levels by matching supply with customer demand.**
- **Improve your inventory management with detailed insight into your inventory and item tracking.**
- **Improve your materials requirements planning with flexible options for managing bills of material.**
- **Create bills of material (BOM) quickly and easily using the graphical BOM designer.**

Logistics in Microsoft Dynamics AX gives you the flexibility to manage inventory and purchasing according to your needs, with functionality to support forecasting, classifying and tracking inventory and the efficient creation and management of bills of material. The solution exchanges information with many other functional areas in the solution including production, master planning, trade, finance and CRM, to help ensure a high degree of synergy between logistics and other key areas of your business.

Optimize inventory levels

Logistics in Microsoft Dynamics AX offers strong forecasting functionality that supports long-term planning, to help you optimize inventory levels. You can create sales and purchase forecasts based on items and time periods and use an unlimited number of forecast models to simulate various future scenarios. To quickly project cash flow, you can transfer item forecasts to the general ledger forecast.



With the graphical BOM designer, you can create a BOM and get an overview of existing BOMs and routes in the one window

Get detailed insight into your inventory

Inventory dimensions are a powerful tool for classifying your inventory according to storage and item characteristics, so that you can get a detailed overview of your inventory whenever you need it. You can track items throughout the system using batch and serial numbers. You can also view documents related to an item using a simple tree-graphic from anywhere in the system. At any time, you have direct access to information telling you where items were used and where they can be found.

Microsoft Dynamics AX

Create bills of material quickly and easily

The graphical BOM designer is a graphical suite used to create and manage BOMs based on Microsoft® drag-and-drop technology. The familiar, user-friendly environment makes it faster and easier to construct BOMs using a graphical tree-structure. The BOM designer displays all levels and components of the BOM, and you can drag and drop relevant items from the inventory table into the BOM.

The BOM designer also displays the route for the current BOM, allowing you to drag and drop items from the BOM into the operations on the route where they are to be consumed. This helps to achieve more accurate lead time calculations when scheduling production in Master Planning in Microsoft Dynamics AX.

Flexible management of bills of material

Logistics in Microsoft Dynamics AX gives you an efficient and flexible means of managing bills of material to ensure you get the most accurate costing and materials requirements information.
Forty BOM levels can be managed effectively and accurate consumption of raw materials can be calculated using formulas specific to each component. Price calculations, using cost price, can be performed for each level of the BOM, giving you accurate and detailed pricing information which is updated throughout the solution. You can create multiple BOM versions to provide maximum flexibility, and you can use the version date of each BOM to control the validity of different versions. Previous BOM versions can be accessed and reused at any time.

FEATURES

Forecasting	• Create sales and purchase forecasts • Use item and period allocation keys to allocate forecasts to individual items and time periods • Consolidate sales and purchase forecasts into one inventory forecast
Item dimensions	• Characterize single item by using up to three item dimensions: configuration, size and color • Rename the size and color dimensions to suit your purpose • Maintain valid combinations of item dimensions - can be allocated manually or automatically • Specify the number of item dimensions used per group of items • Set up specific prices and discounts per item dimension combination
Storage dimensions	• Describe storage by using warehouse, pallets and locations • Track items using the serial and batch number dimensions
Advanced on-hand tracking	• Get overview of current on-hand inventory per warehouse • Drill down to current on-hand situation by any item or storage dimension or combination of these • Tools for tracking batch and serial numbers throughout the system
Quarantine management	• Set aside items in quarantine using quarantine orders, either manually or automatically when receiving items • Look up quarantine inventory at any stage in the quality control process
ABC analysis	• Calculate ABC analysis using user defined limits • Calculate the ABC analysis based on: revenue, cost value, margin, and carrying costs
Bills of material (BOM) Management	• Multi level BOMs • Version and Date control of multiple BOMs • Approval routing • Formulas for calculation of variable or constant consumption • Supports phantom BOMs • Variance configurator • Allowances for scrap can be made in the consumption calculation • Where used feature • BOM explosion for materials planning and pricing calculation on all BOM levels • Dependent BOM versions
Placement and storage	• Specify different location and storage policies at both the warehouse level and the item level • Specify warehouse locations on five levels: warehouse, aisle, rack, shelf and bin • RFID facilitates accuracy
Graphical BOM designer	• Graphical suite for designing BOMs and gaining insight into existing BOMs • Based on Microsoft drag-and-drop interface technology • All levels and sub levels of the BOM are visible in a graphical tree structure • Drag and drop items from the inventory table to the BOM • Drag and drop items from the BOM to the route operations • Circulation check to control which functions can be performed on certain BOMs • System alerts notify when a BOM is active and should not be modified
Inventory dimensions	Eight different dimensions to specify exact location of items in inventory Identification of: • physical location: warehouse and location* • physical location: warehouse, location and pallets • item origin: serial number and batch number • characteristics: configuration, color and size

Barcode support	• Maintain multiple barcodes per item • Read and write the following four different types of bar codes: EAN128/UCC128, Code 39, Interleaved 2 of 5, Code 128
Serial and batch number control	• Stamp a single item or a group of items with a unique number for tracking
Random-location storage	• Determine the storage location based on rules regarding size, volume and height • Allocate storage based on priority of picking locations first and then buffer locations
Arrival journals	• Use for item registration • Make items available on-hand in inventory immediately after posting of arrival journal • Have the option of either manual or automatic suggestion of arrival and output locations according to storage and item setup
Warehouse locations	• Specify warehouse locations on five levels: warehouse, aisle, rack, shelf and bin
Pick & shipments	• Drill down output orders to possible pick locations through the shipment journal • Send out electronically advanced shipping notification (ASN) to the receiver • Specify that shipments are sales order specific or customer specific • Include shipments for multiple orders per customer
Output orders	• Release order picking sales order ensures you have stock on hand to multiple orders • Derive output orders from sales order lines or production order lines • Generate output orders as requisitions to warehouse • Define shipments so that they result in the creation of optimized picking routes
Different pallet types	• Create pallet transports from the following order types: input, output or refill orders • Allocate prioritization to order types • Consider different pallet types corresponding to different sizes when selecting locations • RFID registers the pallets, inventory items and controls them throughout the supply chain
RFID & bar-coding	• Read and write the following five different types of bar codes: EAN128/UCC128, Code 39, Interleaved 2 of 5, Code 128. • Read and write to RIFD-EPC tags • RFID registers pallets and inventory items and controls them throughout the supply chain • Print pallet label, location label and bill of lading labels containing bar codes
Quarantine management	• Specify quarantine requirements at the item level • Automatically send and lock quarantine items pending inspection to the quarantine warehouse

**This functionality is included in the Standard Warehouse Management module. All other functionality listed on this data sheet is included in the Advanced Warehouse Management module.*

For more information about Microsoft Dynamics AX, visit:
www.microsoft.com/dynamics/ax.

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