MCBA®

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INVENTORY MANAGEMENT
in DIBOL®

Item Master File Print-out

Item Master File Maint.

Issues Receipts & Transfers

Transaction Register

Cycle Count Item Selection

Cycle Count Report

Purchase Order Report

Purchase Trx.

Inventory Management

Physical Count Maint.

Inventory Tag Report

Reordering Advice Report

Inventory Stock Status Report

Usage Exceptions Report

ABC Analysis Report
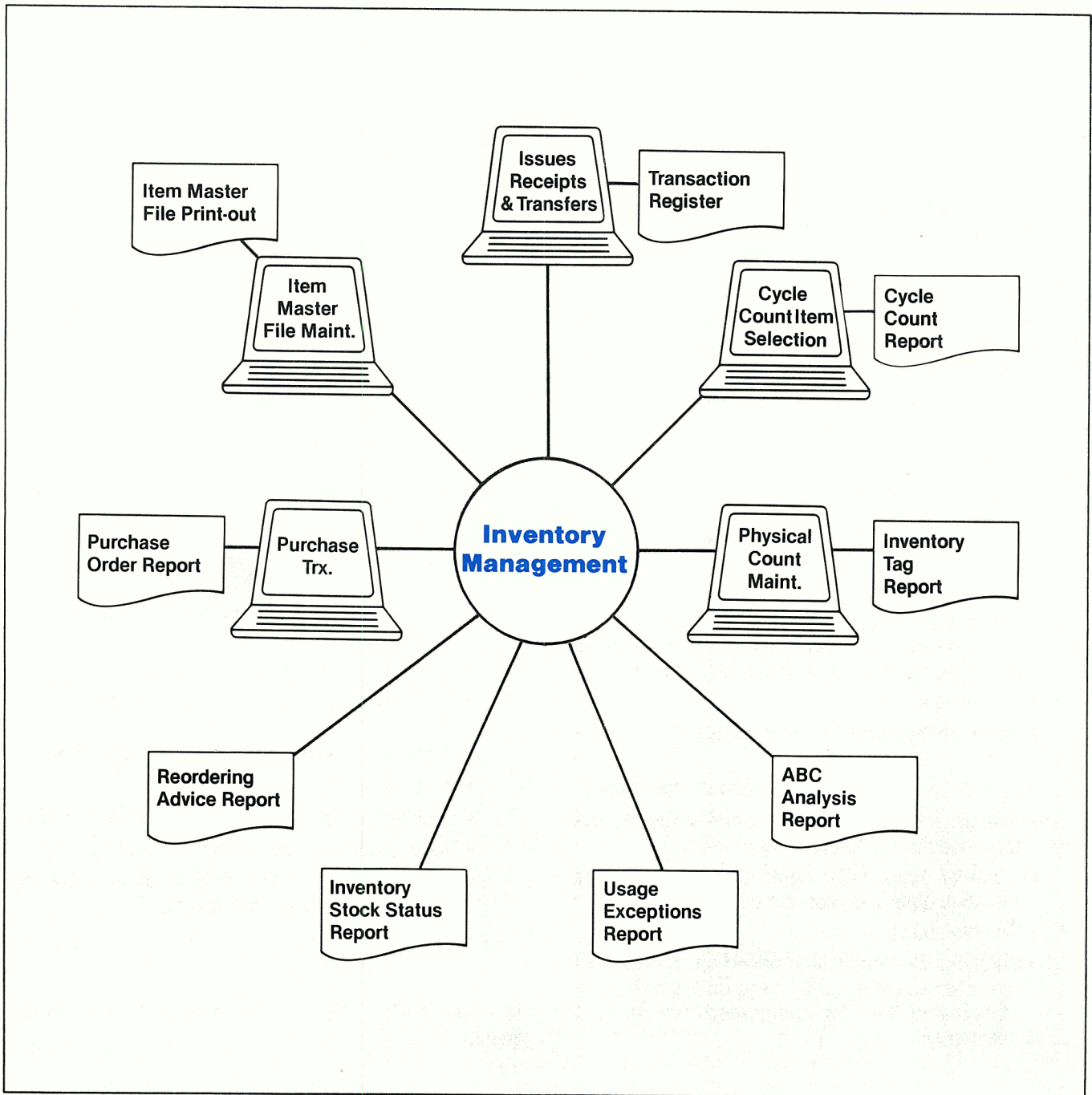
Application Overview

This stand-alone application is a comprehensive Inventory Management tool that is applicable to both Manufacturing and Distribution inventories. It has the following capabilities:

- Allows multiple inventory locations.
- Allows stocked and non-stocked items.
- Allows Purchase Order entry, editing and tracking.
- Prints the *ABC Analysis Report* with optional update.
- Prints the *Usage Exceptions Report* comparing actual to forecast.
- Allows warehouse transfers as well as Issues and Receipts.
- Provides physical inventory tag support and cycle counting support.
- Prints the *Inventory Stock Status Report* and the *Reordering Advice Report.*
- Interfaces to seven other MCBA application packages.
- Security System and multi-company capabilities are supported.

Application Details

Item Master File Maintenance

Complete Item Master File maintenance is provided, allowing: add, change, inquire and delete. The Item Master Record includes:

- Item # (15 alphanumeric characters)
- Item description (30 characters)
- Product category
- User defined code
- Average unit cost
- Last unit cost
- Price (default price for this item)
- Quantity on-hand, quantity allocated, quantity on-order, reorder level, order up-to and bin number by location with multiple locations supported
- Unit weight
- Recommended minimum order quantity—calculated
- Economic order quantity—manually maintained
- Average monthly usage and usage weighting factor—used in the forecasting equation
- Quantity sold, dollar sales and cost of sales month-to-date and year-to-date
- Taxable status
- Safety stock—calculated based on desired customer service level for all items unless MRP is installed and then for designated independent items only

- Two units of measure—stocking (or selling) and purchasing (or manufacturing) with a conversion factor which is used as a multiplier at receipt time.
- Backorder code
- Vendor number—primary for this item; multiple vendors will be allowed when the Purchase Order (P/O) application is installed
- Minimum order from the vendor
- Order multiple
- Stocked—yes or no
- Controlled—yes or no; note: a phantom item is designated by specifying non-stocked and non-controlled
- Purchased or manufactured code
- Inventory class—A, B or C; can be automatically set
- Cycle count code and date last counted
- Buyer/analyst/planner
- Engineering release number and revision number
- Routing release number and revision number
- Route number—allows multiple items to use the same routing (saves disk space)
- Lead time

The *Item Master File Print-Out* may be printed on request.

Inventory Location Control

I/M will support up to 99 locations per item. Each location requires 33 positions in the Item Master File, the fields being quantity on-hand, quantity allocated (to shop orders and/or Customer Orders), quantity on-order (from Purchase Orders, Shop Orders and/or jobs), reorder level and order-up-to-quantity (if this is an order-point item at this location), bin number and location. Inventory transactions include transfers between locations (affecting on-hand values only) as well as issues and receipts. The number of locations is specified at install time and the Item Master File is then generated to support that number of locations. To-date the largest number of locations installed is sixteen. This allows the system to support multiple locations in a manner that minimizes disk storage requirements. The source code is set up for five locations per item but the necessary modifications to increase that are well documented.

I/M is designed to manage and recommend inventory requirements in a workable way for a multi-warehouse inventory situation. The design is for the branch warehouses to be replenished from a central warehouse. Statistical inventory management and forecasting is done for the distribution system as a whole. Branch warehouses are managed on a min-max basis. This way excessive inventory levels are not perpetuated in branch warehouses.

Print Usage Exceptions Report

The inventory *Usage Exceptions Report* shows all items whose actual usage varies from forecasted usage by a percentage entered at run-time. Management can then evaluate which items' forecasting and/or ordering parameters should be changed.

Inventory Transaction Entry & Editing

I/M supplies a very easy-to-use transaction handling function. The transactions handled are issues, receipts and transfers between locations. There are no cumbersome transaction codes to learn—the system knows, depending on how you respond to screen's request for "FROM" and/or "TO" information, if it is an issue, receipt or transfer.

For "issues," old and new available values are shown instead of on-hand values, to discourage issuing any items which are on-hand but are already allocated.

For "receipts," old and new on-hand are shown as well as an option of telling the system if the order is complete or not and what the order number is for these received items. For "Transfers," old and new on-hand is shown for the receiving location while old and new available is shown for the issuing location.

Inventory transactions come from differing sources, so they are batched—thereby allowing a designated person to review/approve a transaction edit list before posting them to the Item Master File. A *Receipts, Transfers,*

Issues report is printed showing all transactions posted.

Purchasing Entry & Editing

For the user who doesn't have MCBA's Purchase Order and Receiving (P/O) application, IM interactively allows the entry of open purchase orders which update the appropriate on-order fields in the Item Master file. The on-order position by item and by vendor is available via CRT inquiry or printed report.

An additional feature is the accumulating of the P.O. weight by P.O. on the entry screen to facilitate building P.O.s to exceed a certain weight to get shipping discounts, save costs, etc.

For the user who doesn't have MCBA's Shop Floor Control (SFC), the purchasing entry & editing facility could be used to keep track of open shop orders. To do this the user just establishes one vendor number for "in-house" Purchase Orders, i.e. shop orders. This could be a powerful tool for a small manufacturer.

Display Stock Status Inquiry

The quantity on-hand, quantity allocated (to Shop Orders and/or Customer Orders), quantity on-order from Purchase Orders, Shop Orders and/or Jobs) and the reorder level are shown by location by item. If no location is entered, the sum for all locations of each of the aforementioned fields (except the reorder level) is shown.

Print Stock Status Report

The following fields are printed: product category, quantity on-hand, quantity allocated to Shop Orders and/or Customer Orders, quantity on-order from Purchase Orders, Shop Orders and/or Jobs, reorder level, average cost, value of inventory, backorder code, if the item should be reordered, if the item is out-of-stock or is OK. The select criteria allows you to select one, some or all items in one or all locations.

Print ABC Analysis Report

This report shows calculated dollarized usage of all items in the Item Master file and ABC ranks those items. "A" items represent a high proportion of inventory value, "C" items represent a low proportion and "B" items are in between. The user can specify what constitutes high/low at run-time. The ABC analysis compares the current ABC rankings with the newly calculated ones and then gives the user the *option* of dynamically updating the Inventory Class field for each item with the newly calculated "A," "B" or "C" ranking.

Print Cycle Count Report

This report is a turnaround document used in performing cycle counting (a mini physical inventory count). It is done mainly to verify inventory count accuracy more frequently and locate sources of error sooner.

The cycle counting module assists the user to physically count various items in inventory at different frequencies.

Each item may be assigned one of ten cycle count codes.

External to the system, the user may establish what each cycle count code means, e.g. 1 = weekly, 2 = monthly, 3 = Engines, etc.

The select criteria for the Cycle Count report allows the user at run-time to choose items (1) last counted on or before a user entered date, and/or (2) with a user-entered cycle count code and/or (3) with zero or negative on-hand.

Print Reordering Advice Report

The *Reordering Advice Report* can be selected by item, by location or by vendor. The user is also allowed to specify (at run-time) either a percent or a number to be added to the normal reorder level for all items for that specific selection run. "Availability" normally is on-hand plus on-order less allocated; however, the user is allowed to specify if on-order will or will not be included this run. This will help remove any doubt about the availability of items if the need is near-term and scheduled receipts are not. Lastly, the user can select items that are manufactured, purchased or both.

Physical Count Entry & Editing

Supports Physical Tag inventory. The user can add, change or delete count transactions keyed by tag number.

It is common for firms to precede the actual physical counting of inventory with the placement of pre-numbered blank tags in each bin to be counted. Each counter then writes the item number and the actual count on the tag for each bin counted. These tags are submitted to be entered with the other counters' tags. The object is to account for all tags (i.e. all inventory).

An edit list can be printed anytime for one, some or all transactions. When all tags are reconciled, the user can post the transactions which updates the on-hand fields in the Item Master file.

Special Functions

The Special Functions of I/M allow the user to (1) clear item month-to-date fields and recalculate several averaged fields, (2) clear item month-to-date fields only, (3) clear item year-to-date fields or (4) LIFO inventory evaluation & cost roll over.

Interfaces to Eight Other Application Packages in MCBA's Manufacturing System.

Inventory Management is a standalone package. However, it can interface with eight other manufacturing packages, namely:

- Bill of Material Processor (BOMP)
- Customer Order Processing (COP)
- Shop Floor Control (SFC)
- Standard Product Costing (SPC)
- Standard Product Routing (SPR)
- Purchase Order/Receiving (PO)
- Base Material Requirements Planning (BMRP)
- Full Material Requirements Planning (FMRP)

Security

The security system allows up to 200 passwords and provides access restrictions to the file level and the application level by company.

Multiple Companies

Multiple company support comes with up to eight (8) companies supported. Most users do not have that many but they still find this feature very useful for test files and/or for operator training.

Record Size

Item Master record . . . . 512 characters
for five locations, five prices and one vendor.
- Add 33 for each additional location
  (max = 99 locations)
- Add 10 for each additional price
  (max = 42 prices)
- Multiple vendors are supported by MCBA's P/O application.

Inventory Transaction record . . . . 110 characters
Purchase Order record . . . . 90 characters
Inventory Tag record . . . . 41 characters

Run-Time Size

Approximate disk space requirements for I/M run-time/object modules is 711 KB.