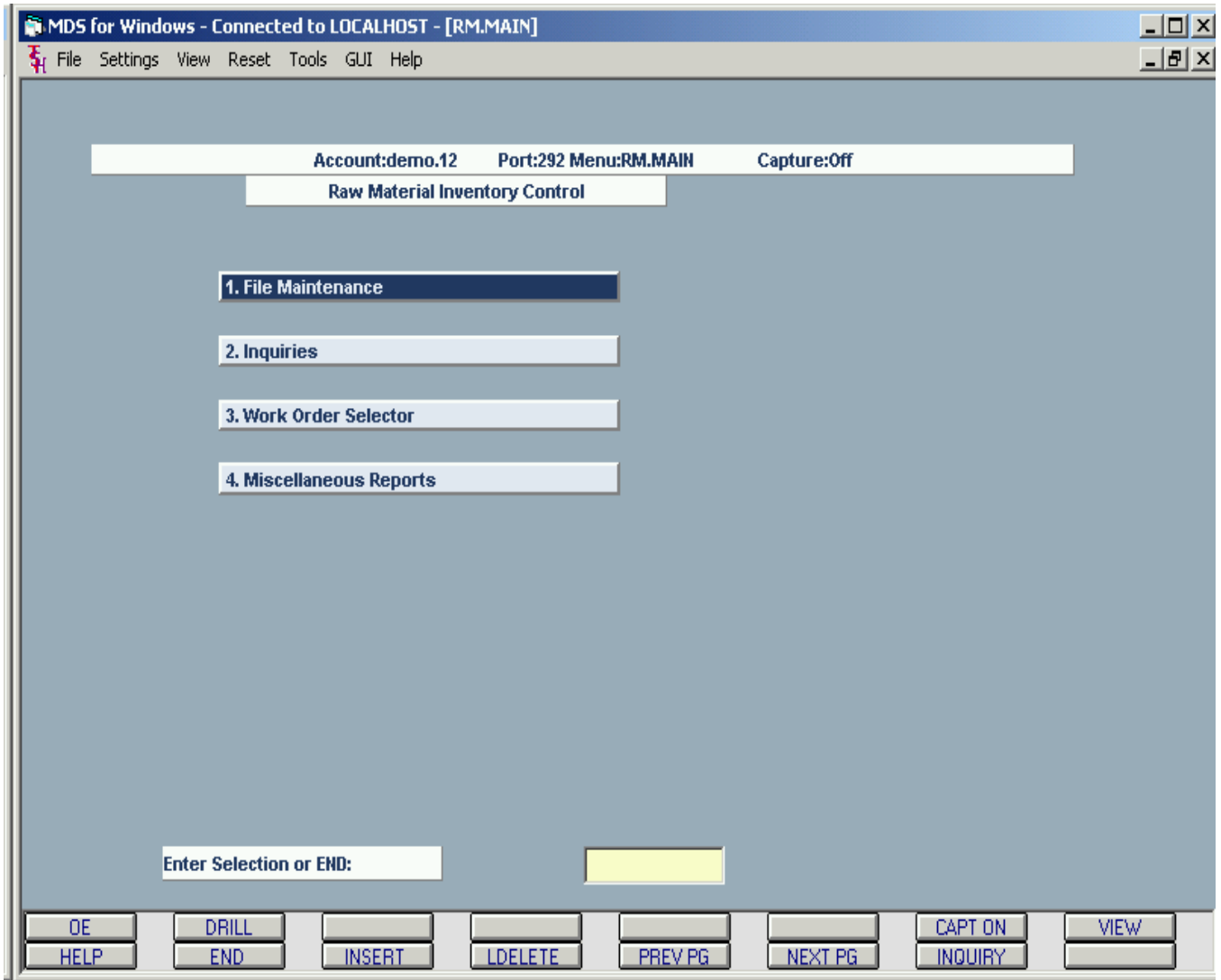


XXI. RAW MATERIALS INVENTORY CONTROL

THE SYSTEMS HOUSE, INC. MASTER DISTRIBUTION SYSTEM PRODUCT DESCRIPTION

RAW MATERIALS INVENTORY CONTROL MENU



XXI. RAW MATERIALS - PRODUCTION MANAGEMENT

A. Module Overview

The MDS production module is designed to track the conversion of raw materials into finished product. Fully interfaced with the remainder of the MDS system, the key features of the system include:

1. The maintenance of a Bill of Materials Master File with full costing and routing capabilities.
2. Entry and Tracking of the Production Work Order.
3. Reporting of Production and update of Finished goods inventory.
4. Inquiry and Reporting

B. Maintenance Procedures Menu

1. Bill of Material Master File

For each manufactured item, a record is maintained in the bill of materials file detailing the raw materials and the quantities used in the manufacturing process. This file is multi-level so that a finished good may act as a component in a higher assembly. The routing steps used in the manufacturing process, are also included in the bill, so that the BOM can be fully costed with regard to material, labor and overhead costs.

2. Labor Cost Center Maintenance

This file contains the costing parameters for direct labor costs in the bill of materials and work order creation program. It contains the cost center description, labor rate (per hour and/or per unit of production)and labor general ledger number.

3. Overhead Cost Center Maintenance

The overhead cost center file contains the costing parameters for overhead costs. In addition to the same costing methodologies used in the direct labor cost center calculations, overhead may also be calculated as a per cent of the direct labor cost.

4. Routing File Maintenance

The Routing File defines each operation that is performed by the manufacturing entity. The operation can be performed in house, at an outside vendor, or both. This file contains the basic descriptive data describing the operation as well as default values that will be used during the creation of the bill, and later the work order. Key is the routing/operation code.

5. Plan File Maintenance

The Plan file can be used to store information about specific manufacturing plans.

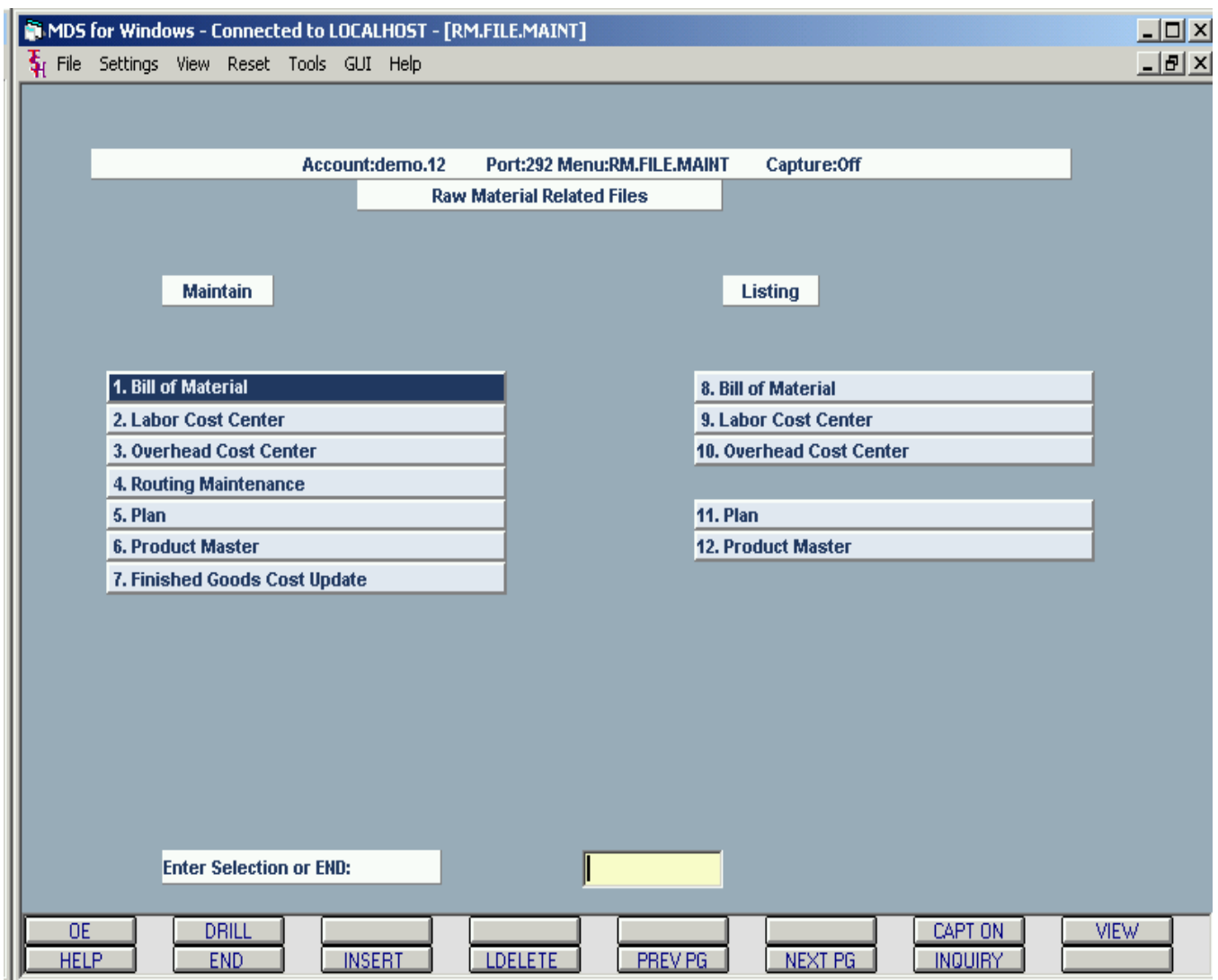
6. Product File

Records are maintained in the product master and product detail files for each raw material used in the manufacturing process. On hand, on order with vendor, planned use in production, as well as month to date and year to date actual usage are maintained

XXI. RAW MATERIALS INVENTORY CONTROL

THE SYSTEMS HOUSE, INC. MASTER DISTRIBUTION SYSTEM PRODUCT DESCRIPTION

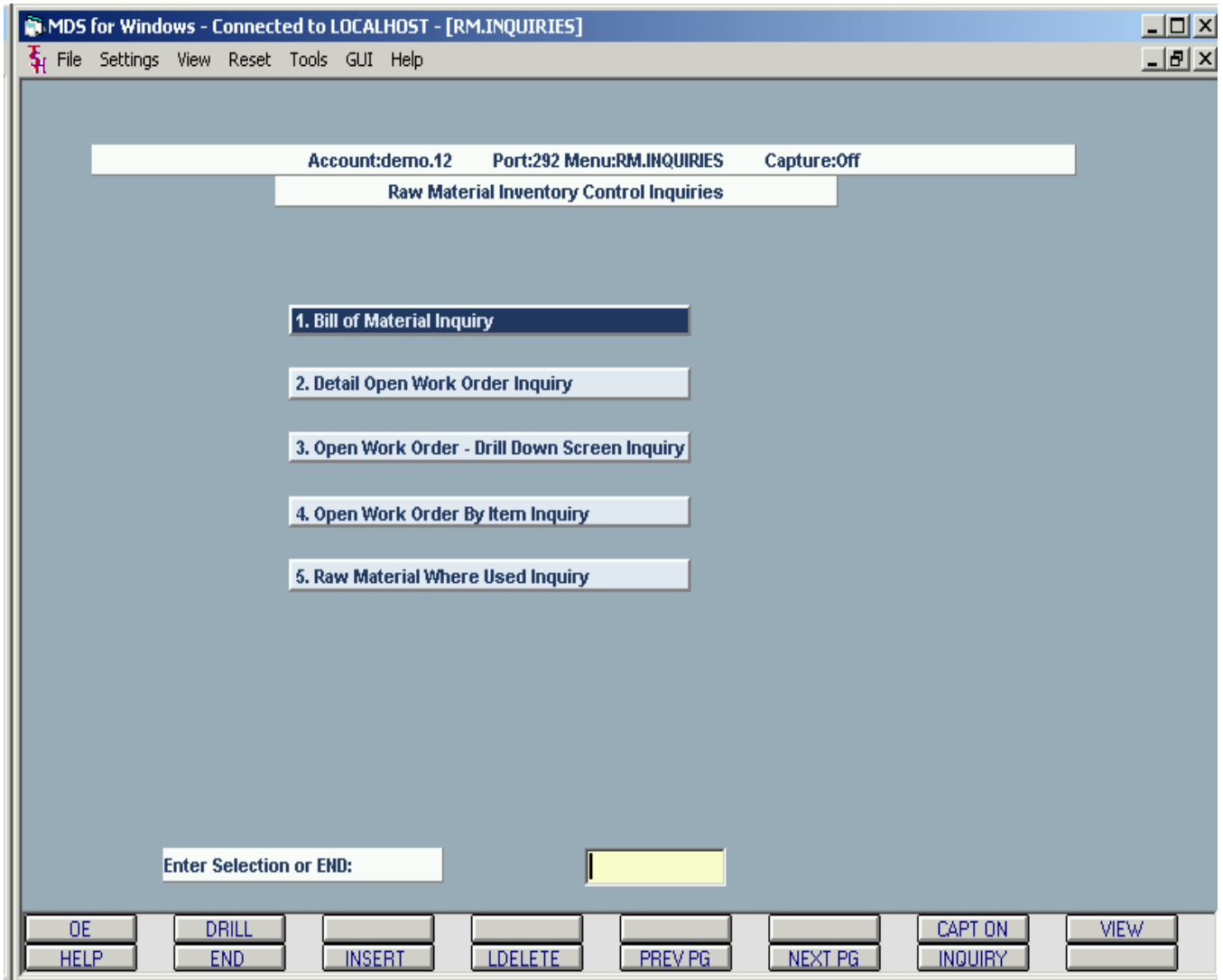
RAW MATERIALS FILE MAINTENANCE MENU



XXI. RAW MATERIALS INVENTORY CONTROL

THE SYSTEMS HOUSE, INC. MASTER DISTRIBUTION SYSTEM PRODUCT DESCRIPTION

RAW MATERIALS INQUIRIES MENU



XXI. RAW MATERIALS - PRODUCTION MANAGEMENT

B. Maintenance Procedures Menu - (continued)

7. Finished Goods Cost Update

Based on the unit cost maintained in the product master file for components and the quantity stored in the bill of material file, plus the direct labor, indirect labor and manufacturing overhead costs stored in the bill of materials file, the system calculates the current cost of manufacture for any end item. This new cost is then updated to the product master file.

C. Raw Materials Work Order Inquiries

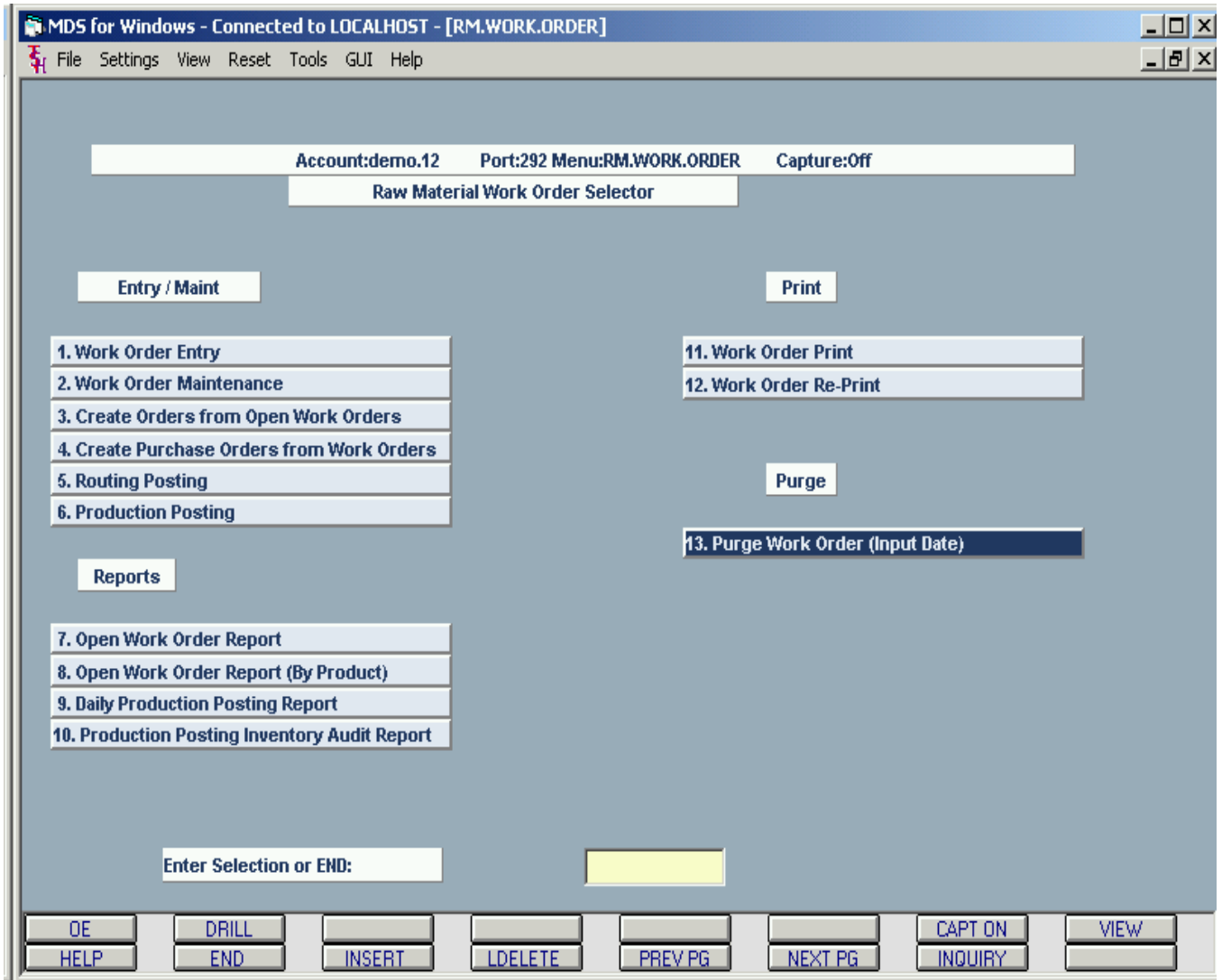
The inquiries provide current status information on the portions of the raw materials inventory control module data base. The following inquiries are provided:

1. **Bill of Material Stock Status Inquiry** - This inquiry lists all required components for a Bill, and shows the availability of the components, and therefore how many can be produced based upon the least available component.
2. **Detail Open Work Order Inquiry** - This inquiry shows the status of a specific work order. This inquiry also provides access to the drill down inquiry which shows the status of each component of a given line.
3. **Open Work Order - Drill Down Screen Inquiry** - This inquiry shows the status of a specific line on a work order. This inquiry is accessible from the detail open work order inquiry.
4. **Open Work Order By Item Inquiry** - This inquiry details the status of all open work orders for a specific manufactured item.
5. **Raw Material Where Used Inquiry** - This inquiry shows all bills that contain a given item as a component.

XXI. RAW MATERIALS INVENTORY CONTROL

THE SYSTEMS HOUSE, INC. MASTER DISTRIBUTION SYSTEM PRODUCT DESCRIPTION

RAW MATERIALS WORK ORDER MENU



XXI. RAW MATERIALS - PRODUCTION MANAGEMENT

D. Work Order Procedures Menu

1. Work Order Entry and Maintenance

The work order process enters the requirements for manufactured goods into the system. Using the Bill of Materials for the product previously created, the system allocates the raw materials via the MDS system. The production steps identified in the BOM, are also tracked within the work order.

- A. Off-site vendors stocking inventories are treated as separate warehouses. The raw materials are pulled from the vendor inventory (identified in the BOM), and the finished goods are posted to the inventory of the warehouse identified on the work order. Processing provided by the vendor is identified in the routing section of the BOM. An MDS purchase order will be generated so that the outside vendor costs can be accounted for, and the vendor's invoice can be matched and paid.
- B. The routing steps may be modified for this order only as well. The routing schedule will enable the system to track at which step in the manufacturing process (Routing) the order is at, and track movement of WIP from step to step.
- C. Inventory may be in several states:
 - Available in one or more of the MDS warehouses.
 - Not available, and must be ordered via the purchasing module
 - Inventory may be supplied by the third party doing the manufacturing, or
 - The raw materials may be at a vendor -- the vendor will be set up as a warehouse.

3. Creation of Pick Orders and Purchase Orders from Work Orders

- A. The creation of the MDS orders and Purchase orders from the work order are in a batch mode. The MDS system is used to update inventory (including inventory at a lot/location level) and create the necessary shipping papers. After the work order has been completed, a proof listing can be run and then the MDS order and Purchase orders created.
- B. A work order can be entered regardless of the inventory status. The work order interface will create an MDS order for all component items by warehouse in a backorder status. The MDS Backorder system is used to release the MDS order as soon as inventory is available. Thus if there is sufficient stock at the time of work order entry, then the Backorder is released immediately. Items with insufficient availability will be allocated by the Backorder module when merchandise become available, either through purchasing, transfers, or manufacturing receipt.
- C. The Work Order entry program will create multiple Order records and corresponding releases (one for each warehouse or Vendor, if the Work Order components come from different warehouses).

XXI. RAW MATERIALS - PRODUCTION MANAGEMENT

5. Routing Posting

This procedure provides the ability to record the movement of the work order between one processing step to another. This enables the system to track at which step in the manufacturing process (Routing) the order line item is at. The routing information is stored in the work order file.

Note: Routing is optional. Production Posting will allow the Work Order to be completed whether or not Routing has been entered.

6. Production Posting

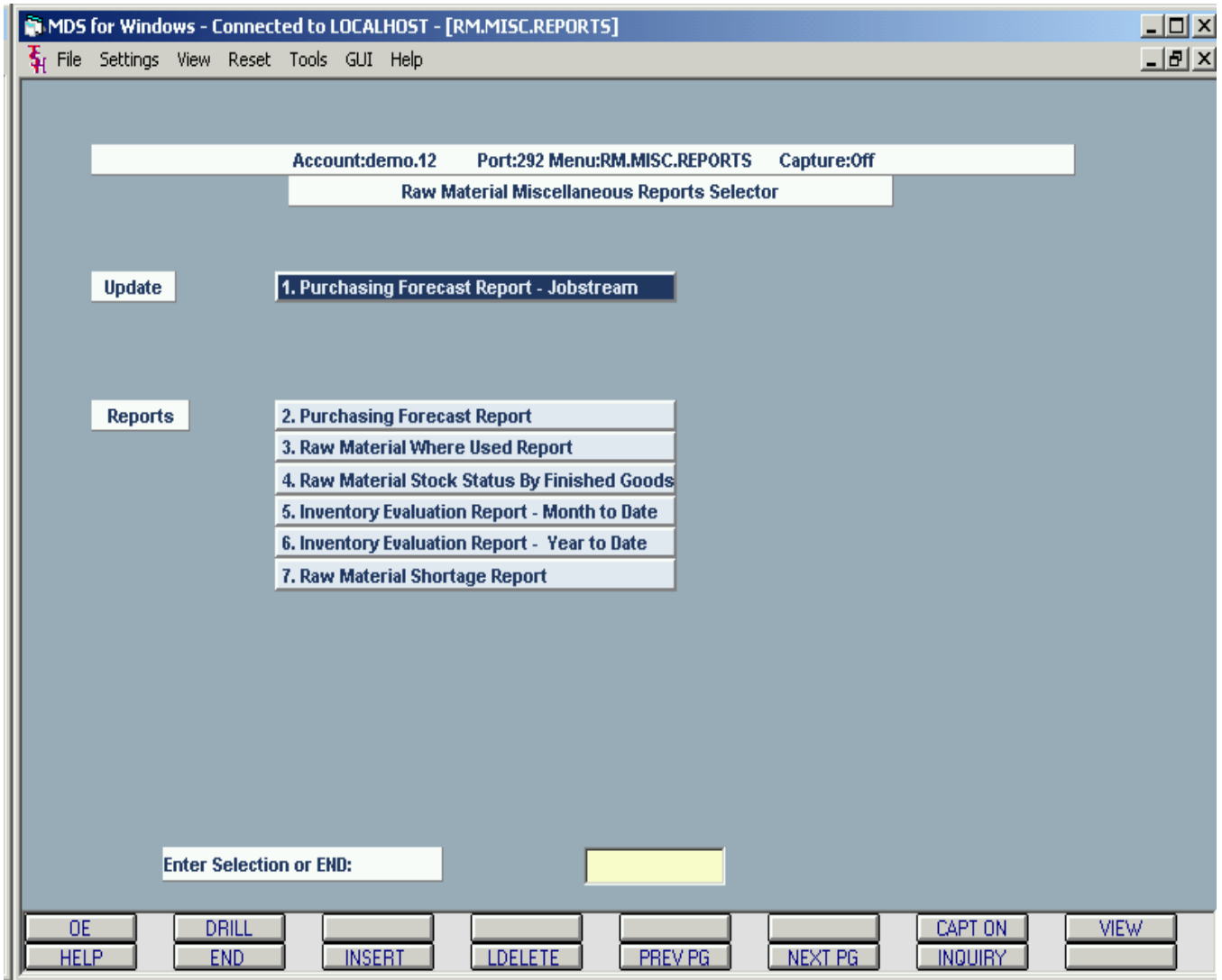
When the work order is completed, (partially or completely), the manufacturing results are recorded through the Production Posting procedure. As a result, all inventories are updated (on hand of the finished product and the raw materials), and the appropriate inventory audit records are created. The work order files are updated by this procedure as well. The following functions are performed by this program:

- A. This procedure records the manufactured product as the receipt of inventory. The value of the produced item is recalculated in this program.
- B. The On Hand is updated in the Product Files. If warehouse locations are in use, the location where the finished good is stored is displayed, with override allowed. The location and lot files are updated. If the item maintained at a lot number level, then the lot number must be entered.
- C. If an outside vendor is involved, the PO previously created is marked as received so that the vendor's payable can be approved for payment.
- D. Upon entry of the quantities produced any other work orders or customer orders can be released for shipment via the backorder allocation module. The system will generate picking documents for any open order in a backorder status. Allocation of product is controlled by the backorder allocation procedure. The priority code assigned can be a unique code established for the Work Order process.
- E. As this procedure is designed to record what actually happened, the operator will be allowed to change:
 1. The quantities actually produced.
 2. Record the components used (in the event a substitution is made).
 3. Confirm the quantity used and wasted of the component.

XXI. RAW MATERIALS INVENTORY CONTROL

THE SYSTEMS HOUSE, INC. MASTER DISTRIBUTION SYSTEM PRODUCT DESCRIPTION

RAW MATERIALS MISCELLANEOUS REPORTS MENU



XXI. RAW MATERIALS INVENTORY CONTROL

E. Raw Materials Work Order Reports

The following reports are available from the raw material system include:

A. On the Work Order Menu

7. Open Work Order Report
8. Open Work Order Report (By Product)
9. Daily Production Posting Report
10. Production Posting Inventory Audit Report

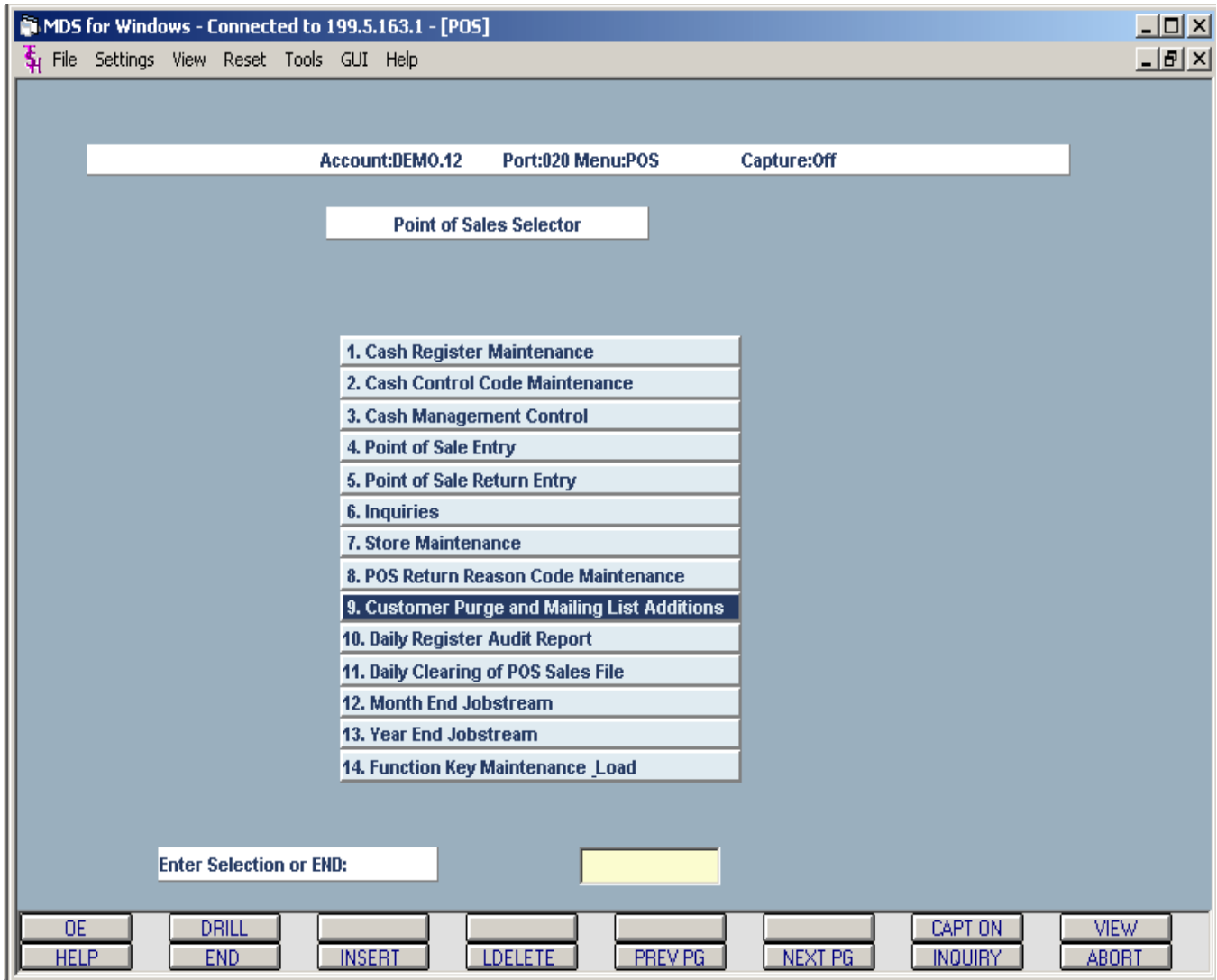
B. On the Miscellaneous Reports Menu

2. Purchasing Forecast Report
3. Raw Material Where Used Report
4. Raw Material Stock Status By Finished Goods Report
5. Inventory Evaluation Report - Month to Date
6. Inventory Evaluation Report - Year to Date
7. Raw Material Shortage Report

XXII. POINT OF SALE

THE SYSTEMS HOUSE, INC. MASTER DISTRIBUTION SYSTEM PRODUCT DESCRIPTION

POINT OF SALE MENU



XXII. POINT OF SALE

The MDS Point of Sale Module (POS) provides an in store “cash register” supporting all the functions required in a retail environment. In addition to the retail requirements, the system allows both cash as well as accounts receivable charge customers to be processed by the module; provides for the entry and/or control over customer deposits; tracks any backorders generated; and provides a complete audit receipt for the customer and audit trails for store management. The module is fully interfaced with the other MDS modules such as order entry, backorder allocation, accounts receivable and general ledger.

1. Cash Register Maintenance Functions

The system is designed to operate using ordinary PC’s with an attached printer, keyboard with credit card reader, and an attached cash drawer to complete the register configuration. Bar code reading equipment and customer display devices may be added to the POS register as well. Procedures are provided to define each register on the system and whether it has an attached salve printer or is using a spooled printer. A second program is provided to allow the user to define the allowable payment codes; i.e., cash, check, store coupon, credit cards, etc.

2. Cash Management Procedures

a. Open

An opening procedure is provided to establish the opening cash drawer balances.

b. Z Readout

Under the appropriate password control, a readout of the current cash balances in the drawer is available on the screen and in hard copy format.

c. Closeout

The closeout procedure prints the accumulated control balances for reconciliation to the actual amounts in the cash drawer. A recap by payment method is provided.

3. Pos Entry

A single entry procedure is designed to process the various types of transactions handled by the store. Although a single entry procedure from the operator’s point of view, the program is actually composed of two separate programs to handle the following differing situations:

- a. Entry of a new customer order resulting in an invoice for merchandise taken, and backorder records for items ordered but not taken.
- b. Recording of the sale of items previously ordered and now taken. Two possibilities exist:
 1. The backorders were previously released using backorder allocation or specific order release, and a picking document has been produced; or
 2. The backorders were not previously released. In this case the program will automatically establish the “release” record, assuming all open lines are to be released. The operator can then specify which lines and/or quantities have not been shipped.

XXII. POINT OF SALE

3. Pos Entry (continued)

The customer may be either an exiting charge customer on file, or a walk-in cash customer. If it is an exiting customer, full lookup capability is provided so that the correct customer number can be identified. Normal credit checking rules also apply. If a cash customer, the name, address and telephone number of the customer is recorded initially on the customer file, and later transferred to the mailing list file after the order is complete.

The total amount due is computed and displayed for the operator. The payment method and amount is entered and the change amount is displayed. In the case of payment by credit card, the card number is entered and validated for format and coding, and the expiration date and authorization code are recorded as well.

A store receipt is produced documenting the sale for the customer and showing a reconciliation of sales, deposits, cash and/or credit cards tendered.

4. On-line Inquiries

In addition to the standard MDS inquiries which are available as part of the POS entry procedure, the following POS inquiries are available. Hard copy (via the slave printer) or on-screen display are available.

- a. Sales Summary by Store
- b. Sales Summary by Product Type (department)
- c. Sales Summary by Store by Product Type
- d. Sales Summary by Salesman

5. Audit Reports

Detailed and summary audit trail reports are available for sales generated via the POS module.

6. Credit Card Manifest

A universal card manifest is provided by the system for submission of back charges to the paying bank.