Supply Chain Solutions

EXECUTIVE OVERVIEW & PLANNING GUIDE

DMS Systems Corp.
POST OFFICE BOX 8049
ROCKY MOUNT, NC 27804
(252) 985-2500
www.dms-systems.com

WELCOME TO DMS SYSTEMS CORP.

We appreciate you taking the time to review our Industry-leading IBM AS/400 Supply Chain Solutions. This Executive Overview and Planning Guide is designed to give you a more detailed review of our System's capabilities than is covered in our website and normal sales brochures.

Our Executive Overview and Planning Guide is structured to provide more detailed System architecture information about the structural design and operation of "key" System application modules than is found in our other sales documents. This Overview Guide covers detailed planning and processing information for the following System application modules:

- Customers
- Order Entry
- Accounts Receivable Processing
- Accounts Receivable Aging
- Inventory Database
- Item / Part Number Assignment
- Kitting / Bill of Materials
- Purchase Forecasting
- Sales Analysis
- Financial Applications
- Reports & Queries
- Optional System Modules
    - *QWIK-ORDER* – Internet e-Business System
    - *QWIK – CAT* – Wrenchead Electronic Cataloging
    - *QWIK – LOOK* – Executive "Dashboard" Business Intelligence
    - *QWIK – SCAN* – Wireless Warehouse Barcoding
    - TIMESOFT – Time & Attendance Tracking
    - DESKMASTER – Word Processing, Calendar, & e-Mail

- Database Conversion Services
- System Planning Considerations

We appreciate your time in reviewing this information and ask that you contact us if you have any areas of interest that are not addressed in this document. You may contact us at Hinfo@dms-systems.comH or (252) 985-2500.

Printed 10/10/2003

GENERAL OVERVIEW

The **DMS DISTRIBUTION/EXPRESS System** is a fully integrated Enterprise System, operating on the IBM iSeries 400 (AS/400) platforms and designed for single and multi-site retail and wholesale distributors, with emphasis on **Auto Parts, Truck Parts,** and **Marine Parts Industries**. Featuring integrated applications from POS/Order Entry to General Ledger, it is Internet-enabled for remote customer ordering, vendor pricing and Purchase Order EDI management, and E-Mail functions. The System also supports electronic forms printing, RF wireless barcoding for shipping, receiving, and Physical counts, interface to UPS and other shipping manifest systems, and offers kits/assembly functions, serial number, core and warranty tracking, and contract and promotional pricing options. Featuring Profit Pro and Triad electronic parts cataloging, exporting to popular PC programs, and its **Qwik-Order** Internet ordering and customer management solution makes DMS Systems an ideal "turnkey" Supply Chain Solution for any modern Distributor.

Base System Modules:

Order Entry and Invoicing
Customer Backorders
Accounts Receivable
Sales Analysis
Purchasing and Receiving
Inventory Management
Kits/Assembly Functions
Electronic Customer Support

Optional System Modules:

- Serial Number Tracking
- Engine Kit Catalog
- PC Load-Pak & Pricing
- Contract & Promotional Pricing
- Engine Kit Catalog
- Multi-branch Management (On-Line)
- Integrated Fax
- Service Work Orders
- Automated UPS Shipping
- Varsity Manifest Shipping
- *Qwik-Cat* Electronic Parts Cataloging
- *Qwik-Look* – Business Intelligence
- *Qwik-Order* - Customer Web Ordering
- *Qwik-Link* - Internet Purchase Orders
- *Qwik-Scan* - Wireless Barcoding Warehouse Management
- Accounts Payable
- General Ledger
- Payroll
- Query/Ad Hoc Report Writer
- Nu-Way EDI Pricing Service
- Timesoft Time & Attendance
- DeskMaster Calendaring, Word Processing & E-Mail

NOTES

CUSTOMERS

The customer number is a 10-character alpha/numeric code. When adding customers to the System, the following areas need to be addressed:

- Account number assignment
- Tax authority/tax table assignment
- Price/cost level assignment
- Exception pricing allowed
- Primary contact/additional contact(s)
- Statement group
- Other user-defined group assignment (marketing, mailing label, territory)

ACCOUNT NUMBER ASSIGNMENT

When assigning customer numbers, some factors to consider include the following:

- Existing customer numbers
- A new numbering scheme
- Length of customer number

If you have an existing numbering system, some of your data entry people are probably familiar with key customers' numbers. If you choose to re-assign customer numbers just because you're changing systems, it may slow data entry initially but will not matter in the long run.

The System allows retrieval of customer number through an alphabetic search, using a short search field that you create when you add the customer record. In addition, you can assign the customer to a statement group, a mailing label group, a marketing group or a sales territory group. Therefore, you don't need to rely on the account number to identify the customer type or to sequence the printing of the customer list.

You can keep your existing customer numbers and just continue to add new customer numbers above the existing range by incrementing the number by 1 each time or you can re-number them in a logical manner and continue to add new customers sequentially.

Some other things to keep in mind about customer numbers:

- numbers typically key faster than numbers/letters mixed
- special characters are hard to key and will be stripped out for search purposes anyway
- shorter numbers key faster than longer numbers

If your existing account number is greater than 10 characters, you will need to re-assign account numbers to fit within the System’s field maximum of 10 characters.

TAX AUTHORITY/TAX TABLE

Taxes are identified in the tax authority file for each tax jurisdiction that affects your business operations. The System will support up to six (6) different tax authorities. Up to five (5) different tax rates may be identified for each tax jurisdiction (such as North Carolina State, Nash County, Rocky Mount City). Then tax table codes are set up which combine the applicable taxes for a given customer. For example Tax Table 1 may contain North Carolina sales tax only while Tax Table 3 may contain state sales tax, county tax AND city tax.

The correct Tax Table code is assigned to each customer to identify his tax jurisdiction (this is a required input field when creating the Customer Master record). However, the taxable flag (Y/N) in his customer record determines whether his sales are taxable or not. If the customer is identified as non-taxable, his state and federal tax exempt numbers are required input fields.

Each ITEM also contains a taxable flag that can be set to indicate which of the five (5) tax rates in the tax authority record applies to this item. This provides an item-level basis for charging alternate tax rates.

CUSTOMER SELLING PRICE/COST

Up to nine (9) selling prices and seven (7) costs can be defined for each item. In addition, exception pricing can be established in customer profiles and in promotional pricing options (see other sections for a more detailed discussion).

However, the customer's base selling price level (M1-M9 or C1-C7) and any applicable mark-up or markdown factor is assigned in the customer master record. In this manner, you can sell to a customer at a previously established price level or further refine the pricing at the customer level.

Examples of user-defined price levels are:

- P1 Cost
- P2 Stocking jobber
- P3 Jobber
- P4 Master installer
- P5 Stocking dealer
- P6 Dealer
- P7 Fleet
- P8 User
- P9 List

Examples of costs are:

- C1 Current purchase
- C2 Last receipt
- C3 Last receipt landed
- C4 Average purchase
- C5 Average landed
- C6 Standard purchase
- C7 Standard landed

CUSTOMER ADDRESSES

When a customer is added to the file, the address you create for him is stored in the address file and not in the customer file. This address file is used for all addresses in the System as described below. The customer address is stored as class 'CM' and subclass '99' and is used for all addressing until you add other addresses for the customer using additional reserved or user-assigned subclasses. To understand and use the address file, you need to be familiar with the following elements:

- Address class – customers, suppliers, manufacturers, etc.
- Address subclass – invoice, statement, shipping, etc.
- Contacts – names of people.
- Additional contacts – names of additional people.
- Address groups – User-defined groups may be set-up for address selection

Address classes are defined within the System package as listed below. The subclass is a two-character field that can be defined by the user to meet his needs with the exception of a few "reserved" subclasses that have special uses within the System as follows:

Type	Class	Reserved subclasses
Customers	CM	IA - Inventory address SA - Statement address MO - Walk-in "cash customer" mailing address MA - Mailing address PA - Packing slip address 99 - Default (first record)
Suppliers	SC	MA – Mailing Address PO - Purchase order address RA - Remittance address 99 - Default (first record)
Manufacturer	MC	MA - Mailing address 99 - Default (first record)
Freight carrier	CF	MA - Mailing address RA - Remittance address 99 - Default (first record)
Warehouse locations	LC	MA - Mailing address RA - Remittance address PO - Purchase order address 99 - Default (first record)
Employees	EM	MA - Mailing address 99 - Default (first record)

In each case, '99' is the default subclass assigned to the first type of address record created and is the address record used unless another is defined. For example when looking for a statement address, the System searches first for an SA subclass among the customer addresses in class CM; if it doesn't find a statement address (subclass SA), it will use the default (subclass 99) address on the statement.

If all the communications for an individual customer go to the same address, there is no need for any more than the default record (subclass 99). However, as the need arises, other address types (SUBCLASSES) may be added for that customer.

Other examples of how the address subclass can be used include the following:

Class	User defined Subclass	Used for:
SC - Supplier	RM	Regional manager
CM - Customer	HA	Home address
EM - Employee	SP	Spouse work address

If the customer wants his statements sent to a different address other than the invoice address, this can be handled with an additional address record associated with that customer record.

CONTACTS/ADDITIONAL CONTACTS

The usefulness of each address record can be expanded with use of the ADDITIONAL CONTACTS allowed. Typically, when you create an address record, you record CONTACT NAME, CONTACT TITLE, and POSITION in addition to the company name, address and phone number.

Then, as you find the need to record other contacts (such as the A/R contact, the A/P contact or the Buyer) within the company IN ADDITION to the primary contact, use the address file to establish ADDITIONAL CONTACT records associated with this customer record. From customer maintenance or Order Entry, use F24 to review additional function keys and F14 to inquire on additional contacts. Any existing additional contacts would display on the screen at this point or pressing ENTER would allow you to add an additional contact for this customer record (unlimited number).

An example of how additional contacts can be used in the address file would be the company softball team. Record the name of the team as an Employee (EM) address, the team manager as the primary CONTACT, and each of the players ADDITIONAL CONTACTS. With one related address record, each key contact associated with a single relationship is recorded.

MASTER/SUB ACCOUNTS

When a central billing address is used for several customer accounts, these are typically set up in a Master/Sub relationship. The Master (type 'M') account is the central billing account for all A/R invoices to its associated Sub (type 'S') accounts. The payment typically would be remitted to your company from the one central “Master” location also.

However, any one of several customer accounts (subs) can charge invoices at any of your locations, for inclusion on the one central “Master” statement. The Sub account customer numbers are used in Order Entry and the Master account customer number is used in cash application.

A trial balance can be printed which includes either type 'M' or type 'S' accounts (not both at the same time). In this manner, you can see the transactions and balances associated with each Sub account or for the Master account in total.

The Master account balance will equal the total of its Subs in each aging bucket with the exception of service charge reporting and unapplied cash. Service charges and unapplied cash are posted to the Master account for all its Sub account past due balances. Therefore, the sum of the Sub accounts could be less than the Master account total by the amount of the service charges and unapplied cash.

NON-CUSTOMER RECORDS IN CUSTOMER FILE

There are some situations where it may be beneficial to use customer records for non-customer entities. For example:

- Customer type **"V"**: any **suppliers (vendors)** to whom you could return merchandise would be set up as a type 'V' customer. Then you can relieve inventory at cost, retain a record in A/R of the amount due from supplier, and retain a record of the transaction detail in the invoice history file for later comparison to your supplier credit invoice.

- Customer type **"B"**: any **branch locations** to whom you could transfer inventory (transfers OUT) would be set up as type "B" customers at the price level designated for branch transfers. The benefits are that the branch transfer amount to be reconciled to a receiving report is automatically retained and a record of the transaction detail is retained in the invoice history file.

- Customer type **"T"**: any **Tenders** for whom you track a receivable (such as UPS COD's or Master Card/Visa deposits) are set up as a type 'T' customer. This customer is not available for invoicing but a record is automatically written to the account when a specific tender is used. Thus, you know what entries should clear the bank account for this tender type and when cleared, a manual offset is made to reduce the account balance.

CASH SALES

Cash sales made to "walk-in" customers that you do not wish to offer open account charge privileges. Specific customer name and address information can be captured for mailing and sales analysis purposes. This customer needs to be set up without a credit limit (probably all 9's) and an appropriate default tender (probably cash). The terms code for this customer will probably be 'Due Immediate' instead of one of your normal Accounts Receivable terms codes.

If you want to track cash sales separately at different locations, set up a unique cash customer number for use at each location. If you have categories of cash sales (for example, cash taxable) you may also need multiple cash and cash non-taxable customers in order to simplify use of alternate price levels.

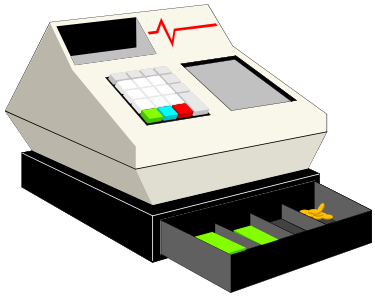
You may also need to create multiple cash customers in order to provide default tenders, limits on tender types (e.g. COD only), and gross margin limits.

NOTES

ORDER ENTRY

Order Entry is used to create open orders, invoices or credit memos. To better understand Order Entry processing you need to understand the following:

- Order Entry control records
- Order Entry screens
- Order/ticket/invoice numbers
- Order Entry transaction codes
- Order Entry terms codes
- Order Entry tender types
- Order Entry release codes
- Order Entry release functions
- Order Entry document types
- Document environment subsystem
- Order Entry document printing



Each of these is discussed in more detail in the following sections.

ORDER ENTRY CONTROL RECORDS

While the number and use of Order Entry screens are fixed by the software, much of the specific functionality of these screens is user-driven. Specifically, you can determine with control records:

- which fields are displayed or non-displayed
- whether fields are cleared for the next order or not

Where applicable, as we discuss the topics below, we'll indicate where control records can be used.

ORDER ENTRY SELECTIONS

There are three (3) main Order Entry selections used to process an order with three (3) additional options for input as follows:

- Initial screen
- Detail screen
- Tender screen
  - Header input/edit option
  - Freight input/edit option
  - Labor input/edit option

The initial screen and detail screen require input to create an order. In a point-of-sale situation, typically the tender screen is also required to invoice an order. In a pick ticket environment, the tender screen may also appear if the customer is past due or over his credit limit. The remaining screens are triggered automatically or chosen by the operator with command keys.

Initial screen. The initial screen contains identifying information for the order such as customer number, location, department and person keying the order. You have the option in a control

record to determine which fields to display or non-display and which fields to clear for the next order. For example, you can let all the information from the first order default to the next order or clear the "keyed-by" field to require each person to key their own ID. These specifications are user-driven through control records.

The minimum requirement is to key valid data into all displayed fields for the first pass and then let them default to the same values for the second pass, requiring only the customer number to be changed with each entry.

Other factors influence how this screen works, such as some customer master flags. If the customer is on **"Hold" for Order Entry**, the order is blocked and can't go any further. If the customer is set up to **warn for over credit limit or past due**, a warning message displays but can be overridden by the operator. If the customer is set up to **require a PO#**, an additional input field displays and blocks further progress until a purchase order number is keyed. The existence of contract pricing, an override invoice address, or a redisplay flag in the customer master can also cause this screen to be redisplayed.

Detail screen. The detail screen is used to add items to the order. Control records determine what the default transaction code is, when to deliver a gross margin warning, what fields are available for input (both initially and in review mode) and what price levels display on the screen.

One line per item displays, showing the selling price to this customer, the order quantity and ship quantity, the part number and one additional reference price level for the item. A command key will cause the screen to 'unfold' and display additional information lines for each item, which includes up to 60 characters of description and any applicable supercession or core value info.

Other item level functions that can be performed on this screen include:

- Override price/cost factor: Price and cost discount/markup factor are derived based on information in the item file, customer file and any special pricing files you've established. However, the operator may override both price and cost at time of Order Entry if you have defined these values as input fields in a control record.

- Change transaction code: Transaction codes determine inventory impact, effect on demand and whether the transaction is an invoice or a credit. The default code is assigned for each location, but can be overridden as needed by the operator.

- Add line item message: If additional description or instructions of any sort are needed for an item, a line item message can be added to the order and designated to print just on the pick ticket, the invoice or both.

- Change description: The 20-character primary item description is pulled from the item master record; however, if you have designated description as an input-capable field the operator can override the description of an item for a specific invoice.

- Delete an item from the order: Any item can be canceled from an open order.

There is no limit to the number of items you can put on one order. However, the detail screen can only display seven simultaneously. When the screen fills up, it automatically rolls to a second screen. To view all the items on the order, you just need to roll up or down.

The order total accumulates and displays on the upper right portion of the screen and the cumulative gross margin for the order also displays. The order total includes only the extended total for shipped merchandise, using the actual selling price. It excludes any tax, freight, or labor charges so that the order total and gross margin displayed are for merchandise only and are not distorted by these miscellaneous charges. Freight and labor charges are shown separately.

Any backordered merchandise (ordered and not shipped) is also shown in a separate extended total. Invoicing for any backordered merchandise is completed through backorder processing after receipt of the merchandise.

Tender screen. The tender screen displays the order total, including any taxes or freight charges added to the order. It is used to record payments or deposits for an order.

To record payment for an order, the operator keys an amount and selects a pre-established tender code. The tender code setup indicates which tenders will be accumulated into 'Paid' and which input fields are required for each tender. For example, you can require an expiration date, authorization code and minimum amount for Master Card, but not require them for cash or check.

Payments can be split among as many tenders as are required to process the sale. When the total tendered exceeds the ordered amount, the System will calculate the change due. To facilitate the change calculation, each tender code also allows you to specify whether change is allowed for the tender.

Deposits on an open order may be:

- **Recorded**
- **Forfeited**
- **Refunded**

through the tender screen.

Header Option. Order level fields are retained on the order header record and are optionally available for input on the order header screen (as determined by control record settings).

A key field on this screen is the release code. The default release code is designated for each sales department in a control record. **When the default release code is applicable, there may be no need to access the header screen at all.** However, several order level functions can be selected through the header screen such as:

- Alternate release code (instead of the department default): Release code determines the document type produced for the order. The default is pre-established for the department. However, any other valid release code can be assigned or executed from the header screen.

-

Alternate invoice date (instead of the System date): the invoice date determines which accounting period statement the transaction will appear on. The System will assign the current date automatically and the operator can assign an alternate on the header screen (if needed).

- Alternate terms code (instead of the one in the Customer record): the terms code determines the due date for an order, whether the order amount is fully due on the due date or split into multiple due dates, and whether any discount is allowed for that order. It will default from the customer record but can be overridden for an individual order on the header record.

- Alternate tax rate (instead of one in customer record): a tax rate keyed here will apply to the entire order, as taxes are calculated once for the entire order at invoicing time.

- Alternate salesman, keyed by or taken by can be edited for the order instead of the one in the customer record.

Freight Option. Occasionally the need arises to assign a freight or handling charge of some type. These may be UPS or other carrier fees or simply an internally generated surcharge. A separate screen allows you to key an amount and description which print on the invoice and are shown as a separate total on the invoice.

Labor Option. In a work order environment, labor charges may be added to an order by calling the labor screen with a function key from the parts entry screen. Both the billing rate and the cost are assigned in the database as hourly charges or on a per job basis. Each job may be associated with an employee or mechanic ID.

ORDER/TICKET/INVOICE NUMBER

Order number, ticket number and invoice number are separately assigned and incremented as an order passes through its processing stages. Order numbers are a System wide value and will not be duplicated. Invoice and ticket numbers are assigned incrementally within each branch location.

ORDER NUMBER

The order number is 7 digits long and is assigned automatically when the <ENTER> key is pressed on the initial screen. You will always be able to find the order through the order number. **An open order is available for modification until it is invoiced or cancelled.**

Even if the order is subsequently cancelled, the order number remains with the cancelled order and is not used again. The cancelled order is still available for inquiry although no further processing is allowed.

TICKET NUMBER

Typically the next step for an order is ticketing, where a pick ticket is printed to assist in the pulling of merchandise for delivery to the customer. When an order is ticketed, a ticket number is assigned **in addition to** the order number. While there is only one order number, there may be several ticket numbers for a given order.

For example, an order is taken and a ticket printed for pulling stock. Then, the customer calls back and adds items to the order. Typically, a second ticket is printed for the new items. If we used the same ticket number, you would have two tickets with the same number which have different items on them. The ticket number will be different in each case but the order number remains the same.

Or, alternately, the customer places a large order and your warehouse is organized in zones. In order to be efficient in pulling merchandise, you've assigned different people to different zones and you need one ticket printed for each zone. In this case, even if the order is split into multiple tickets for your convenience in pulling the merchandise in the warehouse, the customer's order is still tied together for reference and for invoicing through the order number.

The ticket number is also 7-digits long and is unique within location. Each location can designate its starting ticket number and then the System assigns the next available number automatically.

INVOICE NUMBER

After all the items on tickets are pulled and verified, an invoice is produced for the whole order. In this manner, the customer sees one invoice for his order regardless of your internal handling procedures.

The Order Entry invoice number assigned is a 7-digit number unique within each location. It is assigned when an invoicing release code is processed for the order. This can occur within Order Entry for individual orders (such as counter sales, where the customer takes the merchandise with him) or from pick verification in batch mode when one or more pick tickets have been processed.

Even after invoicing, the order is available for inquiry as a closed order. An inquiry at this stage would display an order number and an invoice number as well as ticket numbers used during order processing. **Line item level detail can be retained indefinitely and purged at the user's option. Invoices can be reprinted at any time if the user has not purged that data from the files.**

PRICING METHODOLOGY USED BY ORDER ENTRY

DATABASE FILES

1. Item master file:
   - Each item is assigned a Base (exchange) value and, if applicable, a Base Core value. For some vendors, the Base value is your actual cost for the part. If the vendor does not publish a cost price sheet, a reference price such as "List" or "Jobber" is used and the costs are determined by applying separate Exchange and Core discount factors to the Base values. **As a general rule, DMS recommends that you use the lowest printed price sheet available from each vendor as your Base price.**

   - Up to nine (9) additional prices, ie. Jobber, Stocking Dealer, Installer, List, etc. may be assigned to each part number. These prices may be calculated from a pre-set mark-up/mark-down factor (contained in the Price Matrix file) applied to the Base or by actually keying the desired value at each level. As with Base, the System carries separate exchange and core values for each price level.

2. Item Location File:
   - The item location files also carries a base price plus up to nine additional price values for each part number. Normally, these are duplicates of their corresponding values in the Item Master file.

   - This file also carries various cost values which are updated by future pricing or receipt of a purchase order. Also contained in this file are current replacement cost (updated by maintenance or future pricing) and last receipt and average receipt costs (updated by purchase order receiving).

3. Customer Master File:
   - Contains the default pricing level and any standard discount or markup factor.

4. Customer Contract Pricing File:
   - The contract pricing file is used to guarantee a specific customer a certain price or discount percentage for one or more items for a defined period of time. The contract may be specified for one or more warehouses and options provide for consideration of promotional pricing that may be in effect.

5. Customer Profile File:
   - The customer profile file is used to guarantee a specific customer a certain discount or markup percentage from a specific price or cost level for a group of items for a defined period of time. This file also allows you to indicate whether other price exceptions in existence for the item (selling quantity break or promotional pricing) will also apply and whether the customer will be allowed to backorder under this price exception.
6. Promotional Pricing File
   - Promotional pricing is used to give any eligible customer a certain price or discount percentage for one or more items for a defined period of time.

7. Selling Quantity-Break File:
   - Selling quantity-breaks are used to give any eligible customer eligible a specific price or mark-up/mark-down percentage of his normal price that will vary based on the quantity ordered.

Overview of the DMS Customer Pricing Plan (Umbrella) Program

The DMS *Customer Pricing Plan* feature provides the ability to create a pricing program that can be applied to multiple customers using the same pricing scheme.

The *Pricing Plan* lets allows the mark up/down of an entire manufacturer, groups of part numbers within a manufacturer that have a common pricing profile code, or, to the extreme, down to a single part number. It is our opinion that our *Contract & Promo Pricing application* is better suited for pricing management for individual part numbers.

Within a Pricing Plan, the base price can be changed to another price level in your item pricing file or a percentage up/down of any price. Also, for each selected group, the constants in the customers record can be over-ridden to accomplish:

- accepting back-orders,
- receiving quantity breaks or
- receiving promotional pricing.

There is an effective date and an expiration date so the Pricing Plan can be set up in advance to start and end as needed.

There is also the *Customer Pricing Profile* which can be used in conjunction with the *Pricing Plan*. A *Plan* can be applied to any number of accounts to handle special pricing that they all have in common and *Profiles* can be used to address any special requirements of individual customers.

ORDER ENTRY PRICING LOGIC

Order Entry will always give the customer the <u>best</u> (lowest) price available within the established rules for the customer.

When an item is keyed in Order Entry, the System calls the pricing routine, which executes the following job steps:

1. If the contract flag in the customer master file is set to "Y", the contract file is checked. If an active contract for the item entered exists, the price is retrieved.

    - If the check promotional pricing flag in the contract file is set to "Y", the promotion file is checked and, if an active promotion exists, the price is retrieved.

    - The customer is given the lowest price between the contract price and the promotional price (if one exists).

    - If the check promotional pricing flag is set to "N", the contract price is the final price.

    - Selling quantity breaks and customer profiles are not checked if the item is on an active contract.

2. If the contract flag in the customer master file is set to "N" or if an active contract is not found, the profile flag in the customer master file is checked. If this flag is set to "Y", the customer profile file is checked. If an active profile exists, the price is retrieved using the price level and factor values from that profile.

- If the check promotional pricing flag in the customer profile file is set to "Y", the promotion file is checked and, if an active promotion exists, that price is retrieved.

- If the check selling quantity break pricing flag in the customer profile file is set to "Y", the selling quantity break file is checked and, if an active selling quantity break exists, the price is retrieved.

- The customer is given the lowest price between the profile, the promotional price (if one exists) and the selling quantity break (if one exists).

- Selling quantity breaks and/or promotional price files are not checked if their respective flags are set to "N" in the customer profile record.

3. If the contract flag in the customer master file is set to "N" or if an active contract is not found and if the customer profile flag in the customer master file is set to "N" or if an active profile is not found, the price is retrieved using the price level and factor from the customer master file.

    - If the check promotional pricing flag in the customer master file is set to "Y", the Promotion File is checked and, if an active promotion exists, that price is retrieved.

    - If the check selling quantity break pricing flag in the customer master file is set to "Y", the selling quantity break file is checked and, if an active selling quantity break exists, the price is retrieved.

    - The customer is given the lowest price between the customer master default price, the promotional price (if one exists) and the selling quantity break price (if one exists).

    - Selling quantity breaks and/or promotional price files are not checked if their respective flags are set to "N" in the customer master record.

DIRECT PRICE OVERRIDE

In some environments, the System calculated selling price may be overridden by keying a price directly or by keying a factor which is applied to the normal price. This ability may or may not be available depending on company policy. **An override factor (markup or discount) can be applied to a line item or to an entire order.** When the order level factor is used, a default factor is set up prior to the items.

PRICING FOR INVALID/NON-STOCKED ITEMS

When the item number is keyed in Order Entry, it is validated against the inventory location items and inventory master items. If the item number is not found at this location (non-stocked at this location), the transaction code determines whether or not it may be added to the order. If the transaction code allows non-stocked sales, the item is priced just as it would be if it were in stock.

If no item master record is found, an INVALID message appears at the bottom of the screen. If the transaction code is set up to allow sale of invalid items, the required input fields automatically display for the invalid item (including manufacturer, price, factor, cost and item description). Typically, price is keyed and cost is derived in one of the following ways:

- calculate cost from selling price using the factor from the manufacturer code file
- key actual cost in Order Entry

If the price/cost keyed or calculated result in a gross margin less than the limits set in the department control record, a warning will be issued in Order Entry (if the customer flag to issue GM% warning is set to 'Y').

PRICING BY LOCATION

Typically, pricing is the same for an item at all locations so that if a customer goes into two different stores, he's quoted the same price for an item at both locations. However, there are circumstances when you may want pricing to vary at a location as follows:

- an outlet location sells at a different discount level
- locations are geographically disperse and competitive pressures vary between locations

In these cases, you can activate pricing by location. When pricing by location is activated, you can indicate which sites will use the prices in the location record and which sites will use prices from the master record.

ORDER ENTRY TERMS CODES

Each customer has a terms code assigned in his Customer Master Record. Unless an alternate terms code is keyed on the header screen, this is the terms code assigned to each invoice in Order Entry.

Each terms code also has an associated list of valid tender types for the code (for example, split or deferred terms may be restricted to in-house charge tender).

ORDER ENTRY CREDIT CONTROLS

There are two credit control checks made during the order entry process:

- available credit
- past due balance

Should the customer fail to pass either one of these tests, there are two levels of control ranging from a warning issued to the person keying the order to a credit hold on the order. In the case of a credit hold, the order may be taken but it will remain in a suspended state until cancelled or approved by someone with credit approval authority. These two credit control checks may be applied independently of each other and varied by customer.
In addition, an account may be placed on Order Entry hold. When this action is taken, an order cannot be initiated at all for the customer on Order Entry hold.

TENDER TYPES

Tender types are used to indicate how payment is made for an invoice. The tender types can be aggregated towards 'Amount paid' on an invoice, depending on how the tender record is set up. Typically, the in-house charge tender does not add to 'Amount paid' while cash, check, and credit card tenders do add to 'Amount paid'.

You can also designate a maximum or minimum amount for each tender and indicate whether change due is allowed. If allowed, you can indicate the tender the change is given in.

You can require that a check/credit card number, expiration date and authorization code be completed for check and credit card tenders. This information is stored for reference and can be retrieved on demand.

ORDER ENTRY TRANSACTION CODES

The default transaction code for each location is set up in a control record. However, at the item level on the detail screen, you can use any valid alternate transaction code available from a “pop-up” window. This is a key element in the functioning of Order Entry, as the transaction code determines:

- whether the transaction is an A/R debit or credit
- whether the transaction impacts inventory or not
- if the transaction impacts inventory, which on-hand type is affected
- whether the ship quantity is calculated from the on-hand or force-shipped.
- whether the item price is System-calculated or zeroed when the item is added to the order
- whether invalid (no item master exists) or non-stocked (no location item exists) sales are allowed

Therefore, it is the transaction code that controls the inventory impact of a transaction as well as key Accounts Receivable and pricing results.

Defining transaction codes are central to defining your System's Order Entry processing strategy.

Prebuilt Transaction Codes

CC	Credit Core Returns
CD	Credit Damaged Goods
CI	Credit Stock Returns
CN	Credit Drop Ship
CW	Credit Warranty Returns
IC	Invoice Core
QT	Quote
ID	Invoice Damaged Mdse.
II	Invoice Stock Mdse.
IN	Invoice Drop Ship
IS	Invoice Stock without Demand
IW	Invoice Warranty Mdse.
KIT	Kit +/- (Price balancing)

ORDER ENTRY RELEASE CODES

Release codes indicate a stage of order processing which may or may not have a separate document type associated with it. For example, when the order is taken, a 'PI' release code can be used to produce a pick ticket. Then, after merchandise has been pulled and verified, an 'II' release code can be used to produce an invoice. Typically, the release codes are defined with help from your DMS Installation Engineer to accommodate your specific processing needs.

ORDER ENTRY DOCUMENT TYPES

The release code processing evokes a customized program that produces the document type you've designated, in the format you need. A document type control record also indicates which outque the printed output is directed to. Control records also dictate the sequence in which items print on the document and the page break criteria.

DMS has developed "template" documents for common release codes. Specifically, there is a System-generated document for the following:

- Invoice
- Pick Ticket
- Deposit Receipt
- Price Quote

DMS provides a set of standard forms including invoices, statements, pick tickets, purchase orders, Accounts Payable checks, and Payroll checks with the System or provide selected customized forms subject to a custom programming setup fee are also available.

DOCUMENT PRINTING

As mentioned earlier, document types are identified for each release code. In this manner, you can print packing slips, tickets, invoices or other documents you need at each processing stage. Sequence of items on any document may be selected from one of the following:

- manufacturer/price sheet order
- zone/bin sequence
- sequence keyed

Each order processing document you have defined may be directed to printers based on any one of the following:

- location
- department
- zone/bin
- carrier (UPS, etc.)
- workstation

If not directed to a specific printer outque, the document will be directed to the workstation's default printer.

You may also hold a document before printing or save a copy of a document on the spool file after printing, as needed.

ACCOUNTS RECEIVABLE PROCESSING

These are features you need to understand about Accounts Receivable processing:

- Order Entry impact on Accounts Receivable
- Batch Accounts Receivable
- Cash application
- Accounts Receivable Inquiries
- Day close activities
- Service charge calculation
- Statement processing
- Month close activities
- Archiving
- Messaging
- Notes

ORDER ENTRY IMPACT ON ACCOUNTS RECEIVABLE

When an order is created the customer's available credit is adjusted immediately. If a customer were to purchase at several of your locations on the same day, you would see the transactions reflected in his available credit as they occur.

If a deposit is taken on an order, the deposit information is retained along with the order detail. Later, the deposit may be refunded and the order cancelled or increased to pay for the total invoiced order. However, in either case, the deposit is held in the accrued deposit file and is not physically recorded in the Accounts Receivable files until the order is invoiced.

Every invoiced order and its associated payments are passed to Accounts Receivable during day close activities, even if the invoice was paid with cash or cash equivalent. In other words, all Order Entry sales and payments are written to Accounts Receivable. In this manner detail for all sales activity is available for inquiry and reports even though statements are not produced for cash type customers.

To summarize, if you were to request an Aged Trial Balance detail to view a detailed inquiry of a customer's Accounts Receivable:

- any un-invoiced orders would show up in the open orders total but not in the actual A/R and would be deducted from the customer's available credit
- any orders invoiced since the previous day close would be reflected in the customer's available credit but not updated in the actual Accounts Receivable detail file.
- any invoiced transactions would not yet appear on a trial balance or an inquiry until the day close procedure is run.
- once an order with a deposit is invoiced, both the invoice and the deposit are passed to Accounts Receivable during day close and the deposit looks just like any other payment in A/R.

It is particularly important at month-end to understand when transactions get updated to Accounts Receivable. If you are still keying transactions for the previous month through Order

Entry, you need to close a day before you see the detail on Accounts Receivable and before you print statements. **Statement printing is done "as-of" a date, so you can continue to process transactions and close days in the next month even if the statements and month close are not yet complete for the previous period.**

BATCH ACCOUNTS RECEIVABLE

Batch Accounts Receivable entry is an alternative entry process to Order Entry for getting invoices and credit memos into Accounts Receivable. Typically, batch entry is used:

- at System start-up to load beginning balances for balance forward customers or to load invoices and credit memos for open item customers
- for inventory locations who have not gone live on the System yet but whose transactions need to be reflected in Accounts Receivable and statements

Accounts Receivable batch entry serves its purpose for getting information into Accounts Receivable for statement purposes, but does not substitute for using Order Entry for inventory management requirements since line item detail is not retained for these transactions. Therefore, normal sales analysis reporting and any other module interface (such as demand history for purchasing, GL link and others) do not get updated with detail transactions when using Accounts Receivable batch entry.

Each time transactions (credits or invoices) are keyed into Accounts Receivable batch entry, they need to be listed in order to:

- proof read the entries just keyed, and
- determine the System-assigned access code assigned to each transaction.

If a check or credit card payment is returned to you (refused by the bank), you may recall the transactions associated with the batch to link the return to the invoice(s) it originally paid and make adjusting entries to re-open each one. More typically, you would use batch Accounts Receivable to create a transaction for the amount of the charge-back and control the aging with a due date you key.

CASH APPLICATION

Cash application process is used to apply credits to invoices, apply payments to the customer's account, give discounts or make adjustments to the customer's account. Cash application is a batch process where you key transactions, print the edit listing and correct errors before updating the Accounts Receivable file.

Adjustments can be positive or negative using the field- and field+ keys to identify the amount posted. Any credit memo, unapplied credit, service charge, or invoice can be updated using a pre-defined adjustment code.

Credits can be fully offset either individually (using an action code) or automatically (using a command key to apply to oldest invoices first) or they can be partially offset using an action code and an amount. If a payment is entered and not fully used to offset invoices in the session, an unapplied credit balance will be automatically created when you exit the customer.

The transaction types that display in cash application are as follows:

I = Invoice or credit memo originated in Order Entry. A credit memo has a negative (-) after the balance

M = Manual invoice or credit memo originated in batch Accounts Receivable.

U = Unapplied credit originated within cash application when a payment is not fully applied to invoices before exiting cash application

S = Service charge transaction originated during service charge processing

B = Balance forward consolidation record created during month close. The detail that was consolidated into this record has been purged from the Accounts Receivable files and replaced with a single consolidated record.

In each case, to view any payment adjustments or discounts which apply to the transaction, put an 'I' action code in front of the line item in the “action code.” The cash application activity which relates to this item will display on an inquiry. Discount information relating to a specific invoice can be displayed the same way.

ACCOUNTS RECEIVABLE INQUIRIES

Aging inquiries are available for each customer and for Accounts Receivable as a whole. After displaying summarized totals for each age bucket, you can “drill-down” to inquire into the details that created the total (customer A/R detail, customer order detail or customer master record). You can also change the parameters (which buckets are included, or minimum balance to include, for example) and recalculate the inquiry dynamically (on-line).

Individual customer inquiry can be achieved from within cash application, from a menu option or from the first screen of Order Entry. Again, the detail will include only the Order Entry information from the last day closed. However, batch Accounts Receivable, cash application or service charge information will be current as of the latest day close update.

There are three main inquires available:

- A/R Aging Analysis available from the System Reports & Queries menu and from the Accounts Receivable inquires menu. This inquiry provides both summary and detail aging information. The detail inquiry works though a selection screen which allows selection of customers based on parameters such as amount owed for selected periods, salesperson, credit manager, etc. Customers meeting these criteria are listed and may be individually selected for further detail A/R information.

- A/ R Aging Inquiry available from within the Order Entry program and from the Accounts Receivable inquires menu. This inquiry provides selection criteria for order status, transaction type, location, and beginning transaction number or due date. Aging and available credit information is displayed.

- A/R Payment Inquiry available from the A/R inquiry menu. This inquiry lists all payments made by a customer. Payments may be selected by tender type, check or credit card number, payment date, or payment amount. A listing of payments meeting the selection criteria is displayed with further detail inquiry available.

DAY CLOSE IMPACT ON ACCOUNTS RECEIVABLE

Day close performs a key Accounts Receivable processing function by posting the detail for any invoices, credit memos or payments made through Order Entry to Accounts Receivable (including paid invoices and invoices to cash customers). In this manner, all invoice and payment detail is available for reporting and inquiry, even if statements are not routinely produced for the customer.

Deposit amounts are not posted to Accounts Receivable and are held with the open order detail until they are applied, refunded or forfeited.

SERVICE CHARGE CALCULATION

The basis for a service charge includes:

- A service charge flag (Y/N) in each customer record
- The service charge percent established in a control record for each inventory location
- Aged balances included in the service charge calculation and set up in a control record
- Use of credits in the calculation and set up in a control record
- Any minimum service charge amount or minimum balance to service charge that you have established in a control record

Then, at the end of each month before statements are run and before the month is closed, service charges can be processed.

Service charge processing is also a batch process. The first step is to calculate service charges, which builds a work file and prints a listing of charges created. You can review the listing and make modifications to the service charge batch before updating it to Accounts Receivable.

Once updated, the service charges will appear immediately on detail Accounts Receivable inquiries and reports and is available for statement printing. The update program automatically puts a '9' in the leftmost position of transaction number for service charges and displays it as a transaction type 'S' in cash application and Accounts Receivable inquiry.

STATEMENT PROCESSING

Statements are simply a print program and may be printed on demand at any time during the month without affecting Accounts Receivable aging.

The System retains the detail information needed to reprint a statement as of any point in time with date selections for “Include activity through” and “Age receivables as of”. This flexibility allows statements to be recreated and printed without concerns about closed accounting periods. Even though the detail is maintained by the System, options are provided that print the statements in either a balance forward or open item format.

Statements may be printed for all customers flagged in the customer master to receive statements or by statement group. Statement groups allow statements to be selectively printed for customers with different billing cycles, etc. Customized statement messages may be printed on the statements and they can be controlled by start-stop dates.

In addition, statements may be faxed directly from the ISERIES 400 to your customer without the necessity of printing a hard copy version.

MONTH CLOSE

For open item customers the detail remains physically there until it is archived or deleted with a separate purge job and is accessible for inquiry or Query. However, the statement print job will include paid detail for the current period only (through the “as-of date” you designate in the statement print selection).

For balance forward customers, paid detail for the current month only is printed on the statement. However, once a month-close is run, all detail (both paid and unpaid) is consolidated into balance forward records for the period and the detail is no longer available for any type of access.

Since detail records are retained on the System until purged or archived, Month Close is a rather simple process primarily creating certain summary records to speed up management inquires for inventory and sales figures.

ARCHIVING ACCOUNTS RECEIVABLE DETAIL

Detail for balance forward customers is consolidated into summary records for each period during month close. However, the detail for open item customers remains available until it is archived and deleted through menu options. The archiving process allows you to designate an 'as-of' date for the purge and physically removes the detail from the file. Any balance forward consolidation records up to the same "as-of" date are also removed by archiving.

If information needs to be retrieved from the archived detail, it can later be restored and merged into the active files using System menu options.

MESSAGES

Messages may be associated with invoices and credit memos in cash application. You can elect to print these messages on internal reports only or on customer statements. When Accounts Receivable transactions are consolidated or archived, the associated messages are purged from the file along with its transaction.

For lengthy messages or messages not associated with a particular transaction, System notes may be more appropriate.

NOTES

Notes can be made and retained through a “free-form” messaging feature, which is accessed from various System application modules. These notes automatically record the USER ID, the date and time the note was made, and can be reviewed or edited on-demand. Notes are used for collection activity, purchase orders, or other special handling requirements at a customer account level.

Notes are located within a freestanding file and do not get purged by month end processing or Accounts Receivable archiving jobs.

ACCOUNTS RECEIVABLE AGING

These features will help you better understand how Accounts Receivable works:

- Fiscal year (FY) definition
- Six user-defined aging buckets
- Julian/variable/monthly aged customers
- Open item/balance forward customers
- Due/Discount date calculation
- Discounts allowed/booked
- Split/deferred payments
- Account ownership
- Statement codes

Each of these features is discussed in more detail below.

A/R AGING PERIODS, INVENTORY PERIODS, GL PERIODS

The three System Period Files are:

* Accounts Receivable Period File	This file controls Accounts Receivable aging and establishes due dates within the Accounts Receivable Module for users who age receivables by accounting periods rather than invoice date.
* General Ledger Period File	This file controls financial reporting and is used throughout the System to segregate activity into discreet GL accounting periods
* Item History file	This file affects forecasting, projected item sales and the process of allocating item movement to the proper sales period.

Both A/R periods and inventory periods need to be defined in the System for use in period processing routines, aging invoices, calculating due dates, ranking items, forecasting trends, purchase forecasts and many other System functions. The A/R periods used in Accounts Receivable and billing functions is described separately from the inventory periods used primarily by purchasing/forecasting.

Period definition also occurs separately for Accounts Payable and General Ledger within each of those modules. This allows you to establish a different cutoff for Accounts Payable than for invoicing, for example.

FISCAL YEAR

The Fiscal Year can be defined as 12 or 13 periods and may be set up on a calendar year or alternate period as required. Typically, the Accounts Receivable year would be set up the same as your General Ledger year. For each period, the beginning date, ending date and due date need to be defined in the System.

TRANSACTION AGING PERIODS

There are six (6) user-defined aging buckets that are established in Accounts Receivable Aging Maintenance. These aging buckets are defined in days for variable (Julian) customers and in months for monthly aging customers. The user may also select whether these agings are based on invoice date or on due date, although due date is most common.

The due date code assigned to each aging bucket is used to categorize invoices as future, current and past due for reports and statement printing. The invoice itself is not coded with this age code because the invoice detail is retained and is used to recalculate totals for aging inquiries, statements and trial balances at the time they are run. To produce aging reports, the System reviews the Accounts Receivable files and calculates the bucket each invoice should fall into based on invoice/due date.

Unapplied payment credits are aged according to due data assigned by the user when the credit is keyed while credit memos are aged in the same manner as invoices. However, a service charge control record allows you to indicate how outstanding credits are applied to past due amounts when calculating the service charge. Processing options include:

- don't use credits at all
- apply credits from the current period to past due amounts
- apply credits from the current period to past due amounts only if the current period has a credit balance.

Credit application to past due balances during service charging can be set up for each location and for each customer aging type (monthly/variable).

WEEKLY AND MONTHLY CUSTOMERS

Each customer is designated on the customer master file to use either weekly (Julian) or monthly aging.

If the customer is set up for weekly (Julian) aging, his invoices are aged based on elapsed days from date of invoice. If the customer is set up for monthly aging, his invoices are aged based on A/R period dating in the A/R year file.

Both aging types may be mixed in the Customer Master File and each may be based on the invoice date or the due date.

OPEN ITEM/BALANCE FORWARD CUSTOMERS

Any customers set up for variable (Julian) aging are also open item customers. However, monthly customers may be further subdivided into open item or balance forward at the customer level.

Open item means that the invoices for the current month are not consolidated by due date in Accounts Receivable when the month is closed. Each statement will print the invoice and its associated payments, discounts, credits and adjustments until the period following the one in which the invoice is paid off. This provides a full item-by-item audit trail for every invoice and

credit memo in your Accounts Receivable that some customers may require. If desired, the statement may be printed in balance forward format.

However, open item billing also requires that you apply credits and payments received to specific invoices. There are automatic System features to aid in this process.

Balance forward customers will only see current period transaction detail on their statement. Any transaction detail for closed periods has been aggregated into consolidated aging records during month close processing.
Payments for balance forward customers do not need to be applied to specific invoices. They may be recorded as unapplied credits in the current period and then allowed to aggregate into the aged balance due when the month is closed.

DUE/DISCOUNT DATE CALCULATION

If the customer is designated as variable (Julian), his due/discount dates are determined by

- the terms code assigned to the customer
- the elapsed days to discount set up in the terms code
- the elapsed days to due date set up in the terms code

If the customer is designated as monthly (either balance forward or open item), the actual due/discount date applicable is determined by

- the terms code assigned to the customer
- the discount date in the terms code
- the due date set up in A/R period maintenance

An alternate terms code can be assigned to a specific order on the header screen of Order Entry, if you want to create a different due date. Invoice dates can also be overridden on the Order Entry header screen if you want to create an invoice "as-of" a specific date. Therefore, even though the default due date is determined by your database records, they can be overridden in Order Entry as required.

PAYMENT DISCOUNTS

Discounts discussed within this section are payment discounts given for prompt payment of invoices as opposed to trade discounts, which have nothing to do with when an invoice is paid. If a terms code indicates a payment discount is available on an invoice, Order Entry will calculate the discount allowed and record the amount with the posted Accounts Receivable transaction so that it is available for inquiry when you are applying payments in Cash Application. Day close generates a report of transactions that are being passed to Accounts Receivable along with its associated available discounts.

When a “payment on account” is made through Cash Application entry, any eligible discount is automatically applied through the use of a function key. Discounts for transactions that are no longer eligible for discount may be manually entered by the user.

An inquiry is available in Cash Application to see the discount date and amount on any given invoice and to assist in determining if the customer is still eligible for a discount at the time the payment is recorded.

SPLIT/DEFERRED PAYMENTS

Split and deferred payments can be defined within a terms code. The terms code allows you to designate the number of days/months before the first payment is due and the number of payments that the invoice should be divided into. Each payment has its associated amount due, discount amount and due date. Any odd pennies go into the last calculated payment amount.

A delay is calculated from the normal due date. In the example given below, if the A/R year file is set up as follows:

Period beginning date	1/1/03
Period ending date	1/31/03
Due date	2/25/03

An invoice, which is produced during the month of January, would normally be due on 2/25/03. A delay of delay of '1' period or '30' days would result in a due date of 3/25/03 and a delay of '2' would result in a due date of 4/25/03.

In order for split/deferred billing to work, the invoice must be created through Order Entry and you must be aging by due date. When the split/deferred transactions are created for a given invoice, the transaction date is the same for all payments and the due date is calculated based on the terms code. Therefore, these invoices need to be aged on due date rather than transaction date to obtain the desired result in your Accounts Receivable agings.

Batch Accounts Receivable does not create split or deferred invoices. In batch Accounts Receivable you control a deferred due date by keying the due date when you key the transaction. You create split invoices by keying multiple invoices, each with its own due date. The invoice number can't be duplicated within the batch A/R routine, so you need to key each transaction with a unique transaction number (the original invoice number can be recorded in PO field, if needed).

ACCOUNTS RECEIVABLE OWNERSHIP

Before using Order Entry, the starting invoice number in each location is initialized. Invoice numbers can be set to start at your current invoice number for each location or to start over at '1' for each location. When using Queries with an invoice number, remember the invoice number may not be unique access all locations but it will be unique WITHIN a specific location.

Recording transactions with both location AND invoice number allows you to print a trial balance for a customer number range, for a location, or across all locations as needed.

Although a 'normal' location is designated in the customer record (for reference), the actual selling location is recorded for each invoice.

Service charge processing allows you to designate a master location which can be used to "roll up" service charges into one record or to service charge balances due at each location separately.

Service charges are also the only Accounts Receivable records that are not written to both the Master and sub accounts - **service charges are written to the Master account only.** You need to be aware that a trial balance of type 'S' (Sub) accounts can yield a different total than a trial balance of type 'M' (Master) accounts which will INCLUDE any service charge balances due. Unapplied payments are allocated only to the Master account in a Master/sub relationship since the credit limit is calculated from the Master account balances.

STATEMENT CODES

You must assign a statement code to each customer to assist in selecting options for statement printing. Different codes can be created to control timing or distribution of statements or to inhibit statement production entirely. At statement print time there is a "wild card" selection parameter of '***' which selects ALL statement codes.

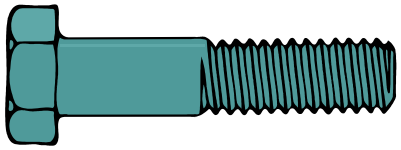
Statement codes are user-defined, 3-character alphanumeric codes. If every customer's statement is printed at every month-end, a single code of ' M ' can be set up to speed up data entry.

NOTES

OVERVIEW OF INVENTORY DATABASE

The following sections describe some of the concepts that will be helpful to understand before you begin building your inventory database. However, prior to getting into the detail documentation, this section describes in broad terms how the inventory database is structured. Specifically, there is a "tops-down" structure consisting of:

- Manufacturer and supplier
- Groups
- Item-related records



MANUFACTURER/SUPPLIER

Manufacturer and supplier(s) of the item are set up first. This allows you to create multiple item-related records in one pass when you begin creating item numbers. There are some tips in the Data Collection and Data Entry sections of our Database Documentation Manual that will help you enter manufacturers and suppliers easy and quickly.

GROUPS

There are several functional groupings of items (some required, some optional) which need to be established and considered before items are created. As you create the item records, you will assign the group designations to individual items (for example, you will assign each item to a price group, a sales analysis group, and others).

ITEM RECORDS

There are a minimum of four required records that must be created for each item:

Inventory master - contains information that is relevant to the item at all locations (such as price, description, selling increments). You create one inventory master record per item.

Inventory location - contains information that is likely to vary from one location to another (such as primary zone/bin, primary supplier, cost, on-hand, on-order). You create one inventory location record for each location in addition to the single inventory master record described above.

Supplier item record - contains information that is unique to each supplier (such as minimum order quantity, package quantity, supplier's part number, cost in this supplier's currency). A minimum of one supplier item record is created for each inventory location. Alternate suppliers may also be added for each location (optional).

If your purchasing is done centrally, you can designate the main warehouse location as the supplier for each branch and designate the supplier(s) your buyer normally uses for the main warehouse's supplier item record(s).

Inventory Zone/Bin record – contains primary zone/bin information for the item at each location (such as minimum quantity level, maximum quantity level, restocking increment). A minimum of one inventory zone/bin record is created for each location.

DMS has several "automatic" features that will speed data entry for inventory records and create the required information in one pass instead of having to key each of them separately.

In addition, there are five (5) optional item records that can be added as they are needed:

Cross-reference item record - includes alternate part numbers that may be used to reference the same item (such as your competitor's number or your customer's number). These records provide an alternate access path wherever item input is required; the cross-reference item record points back to the item record that has been associated with it.

Alternate item record - includes alternate items that you stock and which may be sold instead of the requested item. The alternate items have their own inventory master, inventory location, supplier item and zone/bin records. However, you have indicated that this item is interchangeable with another inventory item.

Barcode field: - each inventory master record allows you to record a barcode number in a specific field. This number creates a cross-reference record so that the item can be located in Order Entry. Order Picking, Receiving, Physical Inventory, or Customer Returns using this number. Even if you are not using barcoding, it may be useful to key a number here for reference (such as the "old" part number from your previous System or the supplier's number if it is not needed on the purchase order.

Extended description - an unlimited number of lines of description may be added to provide additional description for an item.

Related items - comments and related items may be displayed during Order Entry for specified items. This feature prompts order entry personnel to offer “add-on” or related items during the order taking process.

ON-HAND QUANTITIES

The System stores several on-hand quantities in each item location record as follows:

The four (4) following quantities are used to make up the actual on-hand quantity.

- Available: available for sale (not allocated to an open order or pick ticket); calculated as actual on-hand less committed, reserved for back order, and miscellaneous.
- Committed: quantity allocated to open orders or pick tickets. This quantity is updated when an order is invoiced or ticketed.
- Reserved for backorder: inventory that has been received but is reserved to fill backorders instead of being available for sale; included in actual on-hand but not included in available on-hand.
- Miscellaneous: can be used for any user-designated purpose when inventory needs to be valued or tracked separately (such as bonded inventory which is costed differently than other inventory of the same item or inventory which is physically located in a different physical area).

The three (3) following quantities are tracked by the System and are excluded from the actual on- hand quantity.

- Core: inventory of cores received by Order Entry as core returns. Reductions to the core inventory occur when the cores are sold through Order Entry to the manufacturer as returns to the manufacturer.

- Damaged: received as damaged or moved to damaged on-hand with an inventory adjustment; requires a special transaction code or inventory adjustment to remove damaged on-hand, typically after settlement from supplier or other internal disposition of damaged goods.

- Warranty on-hand: defective inventory taken from customers pending return to supplier; not included in available for sale or in actual on-hand.

NOTES

INVENTORY DATABASE

Inventory items are accessed in the DISTRIBUTION/EXPRESS System by the item number you key; your decisions about how to assign this number will have a significant impact on how your System functions. Therefore, a separate section is dedicated to part number assignment below. In addition to part numbers, you define each of the following categories in the inventory database:

Manufacturer	Cross-reference code
Inventory master item	Cross-reference record
Inventory location item	Alternate item
Supplier	Kit items
Supplier item	Inventory groups

ASSIGNING MANUFACTURER CODE

A three-character code is assigned to the manufacturer of each item and then items are assigned to manufacturers as they are created. **For this reason, the manufacturer code must be set up before you begin creating inventory items.** The manufacturer MAY also be the primary supplier of the item but not necessarily (it is important to note that manufacturer and supplier are set up separately). The manufacturer makes the item, the supplier is the company from whom you buy the item, and they may be the same in most cases.

Manufacturer becomes part of the inventory master file key, enabling duplicate part numbers to be accessed within the System (each manufacturer/part # combination forms a unique key).

Even though the manufacturer must exist for each part number, it does not have to be keyed in Order Entry, item maintenance or purchasing to access an existing item. The VENDORLESS ITEM ACCESS feature allows an item to be accessed based on the part number, cross-reference number, or barcode number.

NON-MERCHANDISE MANUFACTURERS

To allow addition of labor and other non-merchandise items to an invoice in Order Entry, some non-merchandise manufacturers are created in the manufacturer file. Therefore, when manufacturers are created, they are assigned to one of the below manufacturer types for use in sales analysis and other System reporting:

A - Merchandise	E – Miscellaneous (Customer defined)
D - Labor	F – Miscellaneous (Customer defined)

INVENTORY ZONE/BIN ITEM

The primary zone/bin item will be created automatically during item addition for each warehouse location. In each zone or zone/bin designated, the minimum and maximum quantity level for each item in that location can be optionally entered as well as the re-stocking quantity. Zone/bins are automatically printed on pick tickets that may be may be split-printed to designated printers for zone efficient picking.

INVENTORY GROUPS

When items are created they are assigned to a series of "groups" for later analysis or reporting. Group names are designated within the DISTRIBUTION/EXPRESS System as follows:

Group name	Use:
CS - Commodity	Search by alphabetic description for items not available through electronic cataloging or specific item search
IP - Future pricing	Select on basis of price sheet for price update (usually 1 price group per price sheet)
PC - Customer profile	Designated group for special pricing to a customer or group of customers
PF - Purchase forecast	Use special forecast parameters to project inventory requirements for a suppler or a group of suppliers
RK - Rank	Designated group for popularity ranking purposes based on item demand history (see separate discussion on ranking). Also used to designate elements for trend calculation and forecasting.
SA - Sales analysis	Designated group for sales analysis reports. Typically, similar products are assigned to the same group to provide sales analysis breakdowns within a manufacturer or across manufacturers
SG - Core group	Used for core bank reporting.
M1 – M5	Up to five “user-defined” groupings are available at the item level to achieve detailed custom analysis for inventory and financial reporting.

Other groups are available for use in the customer record and they are discussed in the customer section. The above groups are those relevant to the item database.

Each user can develop as many 3-digit 'subgroups' within each of the above categories as he needs to in order to use each of the features needed for his business. Inventory Groups are assigned when the item is created in the database.

Group code development is one of the key decision-making areas of database development. How you assign these codes determines how several System features work and how you will be able to analyze your sales and inventory information. While it is possible to change group codes after the database is created, it becomes very cumbersome to do so. Therefore, it is strongly recommended that they be as accurate as possible before beginning to create items in the database.

ITEM COSTING

When the supplier item is keyed, a cost matrix is assigned to the item. The cost matrix includes a cost factor and a core cost factor, which are used to derive cost from the base price of each item. Seven (7) costs by location are calculated by the System as follows:

Cost level	Updated by:
C1 - Current replacement cost	Future pricing or supplier maintenance
C2 – Last receipt cost	PO receipt
C3 – Last receipt landed cost	PO receipt
C4 – Average purchase cost	PO receipt
C5 – Average landed cost	PO receipt
C6 – Standard cost	Manual/special job
C7 - Standard landed cost	Manual/special job

C2 through C5 are updated in each location item record by the receiving function.

SUPPLIER

Supplier (the primary source that you buy from) MAY be the same as manufacturer for an item. However, in some cases, your primary supplier may not be the manufacturer of an item and needs to be set up with its own code in supplier file maintenance.

Also, when there are other sources of inventory (other than the primary purchasing supplier), they also need to be set up in the supplier file. Some examples include:

- if purchasing is handled centrally and inventory is distributed to branches as needed, you would set your supplying location up as the primary supplier for each branch location.

- if inventory is transferred between locations, set up all locations which can transfer inventory OUT as a supplier (they are a supplier to the location which is transferring inventory IN)

- alternate suppliers can also be set up for each item and designated for use in purchase forecasting as needed

The fill-rate, lead time, cost, part number, and minimum purchasing requirements will be maintained automatically by the System for each additional supplier in the supplier item record.

NOTES

ITEM/PART NUMBER ASSIGNMENT

Any 20-character combination will work for assigning an item number and the number you use as item number will appear on the majority of the System reports and screen displays. Therefore, you will want to use a number that is most meaningful in the majority of cases. In making this decision, your concerns should include:

- Price sheet numbers
- Competitor's numbers for the same part
- Your internal part number
- Manufacturer's/supplier's number
- Customer's number for same part
- Barcodes
- Electronic data interchange (EDI)
- No-dash data entry in purchasing or invoicing
- Alternate number used in purchasing or invoicing
- Vendorless part number entry

PRICE SHEET/PARTS CATALOG NUMBERS

Normally, this is the number you will key as the primary part number. It is quickly recognized from your manufacturer's or primary supplier's communications and will avoid any confusion in your communications with him (purchase orders or Electronic Data Interchange), or in creating future price updates. Using the manufacturer's or primary supplier's number as the item number does not inhibit your ability to use ALTERNATE ACCESS numbers in either Order Entry or purchasing as you will see in later sections.

This number should be keyed EXACTLY as the supplier/manufacturer lists it on the price sheet, including '/', '-', ' ' and any other special characters. If you elect to use EDI for purchasing or price updating at a later date, creating the number now exactly as it appears on the price sheet/catalog will prevent any miscommunication with your supplier/manufacturer later.

NO-DASH/STRIPPING FEATURE

In some cases, the manufacturer/supplier's number contains some special characters (such as slashes “/”, dashes “-“, or quotes “”), which can slow data entry. **The DISTRIBUTION/ EXPRESS System can be set up to allow you to key item numbers without the special characters** -- but the decision must be made UP FRONT before you start entering part numbers.

You can identify up to 15 characters in a control record, which are "stripped" from the item number to create a search key when the item master record is added to the file. This allows you to access part number "A-1", for example, by keying "A1" in Order Entry, purchasing or item maintenance.

If this “stripping” process creates part number duplicates, the System can correctly handle that (because the manufacturer/part number combination is unique). Usually the saving in data entry time and accuracy is worth activating this feature. The database impact is **that you identify in a control record up to 15 characters to be stripped, one time, BEFORE creating any part numbers**. Then you create item master records, as they exist in the price sheet, including all the special characters.

EXISTING PART NUMBERING SYSTEM

You may have an internal part numbering system currently in place that you want to continue using because your people are familiar with it or because your warehouse is organized around it. However, if the price sheets from the manufacturer use another number, you need to decide which of the below alternatives make more sense for your business:

- Use the manufacturer's number as the System part number and your part number as a cross-reference part number - here's how that would work:
  - either part number could be keyed in Order Entry. Regardless of which number is keyed, the System retrieves the manufacturer's part number, displays that number on the screen, and prints that number on the invoice
  - in purchase forecasts, reports, purchase orders, and receiving, the manufacturer's part number would be used.
- Use your part number as the System part number and the manufacturer's number as the supplier's item number (in the supplier item record). Here's how that would work:
  - in Order Entry you would key your part number. The System would display this number on the screen and print this number on the invoice
  - in purchase forecasts and reports your part number would be used
  - when creating purchase orders, you could designate the supplier's item number to print on the PO; then at receiving time, you would receive items using the supplier’s item number from the packing slip to correspond to the same numbers on your outstanding purchase order.
  - however, the on-hand quantity, on-order quantity, item demand history and other information would be stored in the System under **your** part number.

You need to determine which strategy is the best solution for your business.

ALTERNATE ACCESS PATHS

Once the part number is established in the inventory master file, any number of alternate access paths can be defined through the cross-reference item feature. Each record in the cross-reference item file contains two elements:

- the Primary Key, which is an existing manufacturer/part number combination such as ACD/PF20, and:

- the Alternate, which is a unique 3-character code/20-character part number combination. In this case, the 3-character code is a user-defined Cross Reference Code, which indicates whether the part number is your internal part number, your competitor's number, your customer's number, or others. For example:

Cross-Reference Code	Cross-Reference Item Number	Keyed in Order entry*
CUS	AAA PF20	AAAPF20
GEN	BX442-01	BX44201

*NOTE: Any of these would result in retrieval of ACD's PF20 from the database

Once alternate access paths are defined in the cross-reference item file, the item number can be returned by keying any of the alternatives from anywhere in the System. Typically the number displayed on the invoice, screen, report or purchase order will be the primary item key. However, there are exceptions to this:

- you can designate the customer's cross-reference item number to print on his invoices

- you can designate the supplier's item number (from the supplier item record) to print on his purchase orders

Any other exceptions will need to be handled on a case-by-case basis. Examples of cross-reference numbers include competitor number(s) for same item, your generic number for same item, or customers' number(s) for the same item.

Virtually an unlimited number of cross-reference numbers can be created for each item number. This feature allows you to key the part number your customer, alternate supplier or competitor uses and retrieve the corresponding item from your inventory.

BARCODE NUMBERS

Barcode numbers CAN also be set up as a cross-reference number so that if the barcode number is keyed manually, the part number is automatically returned by the System. However, in order to implement use of barcode readers/scanners, the barcode number is defined in a separate 20-character field in the item master file. The DISTRIBUTION/EXPRESS System supports use of barcode scanners for Order Entry, Order Picking, Receiving, Physical Inventory, and Customer Returns if the user has the supported equipment configuration.

Barcode numbers can be assigned at any time (when the item is first created or at a later date). If the no-dash feature is active, the special characters identified will also be stripped from the barcode when scanning.

Duplicates are NOT allowed for barcode numbers (more than one item cannot be retrieved with the same barcode number).

If barcodes are not used initially in your System, you can use the field as a cross-reference access path. This field typically used to link your old part numbers with new items numbers created from a pricing service load-pak.

ALTERNATE ITEMS

Alternate or substitute items are not an additional access path for an item but define a linkage among existing inventory items. Each alternate item exists as a separate item on the inventory database with its own inventory master, inventory location, supplier item and zone bin item records.

To identify alternate items to the System, use Alternate Item Maintenance to create a list of items that can be used IN PLACE OF an item requested in Order Entry. This list of alternates will display in Order Entry under the following circumstances:

- automatically when the requested item has insufficient inventory at this location to fill the order quantity

- on demand at any time when you key a part number and press the F15 key

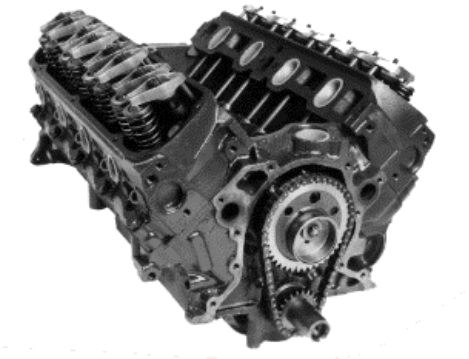
In both cases, the list of designated alternates will display along with the on-hand quantity and price. You may then select from among the alternate numbers to fill the order.

Alternate item designations for existing inventory items can be added to your database at any time. Also, part numbers can be added to an existing list of alternates at any time.

KITTING / BILL OF MATERIALS

KIT ITEMS

Once items have been included in the item master file, they can be designated as kit items and priced as part of a Master Kit unit or as individual components. This is another specialized item file that links groups of items under a “Kit” Number for sale in Order Entry.



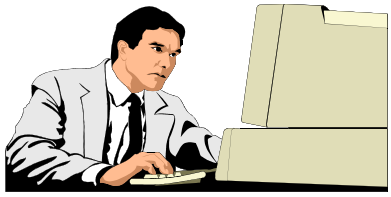
ENGINE KIT CATALOGING

Engine Kit Catalog interfaces with Order Entry to search and retrieve item numbers from a pre-defined database file based on inputting a combination of year, make, model, and engine size. The kit file is also integrated into this module to display all components required for a given engine kit master record.

NOTES

PURCHASE FORECASTING

OVERVIEW



A successful replenishment buying module must be capable of suggesting stocking levels sufficient to satisfy normal customer needs without compromising management's objectives for inventory turn rates. In most distribution environments, this is basically the process of determining what quantity of a given item will be requested in the length of time it takes the supplier to deliver that product.

In a perfect world, the order for the last "WIDGET" in stock would pulled, packed and staged for delivery just as the carrier was backing up to the incoming freight dock with the next shipment. Unfortunately, neither sales demand nor a vendor's ability to deliver product on a consistent basis is quite that predictable for all items in inventory.

At any given time however, a large percentage of the stocked items do fit pre-defined sales and delivery profiles within certain acceptable tolerances. Suggested replenishment quantities for these items can be reliably determined with minimal user intervention. This leaves the buyer with more time to review and, if necessary, adjust the purchase forecast values for the exceptions.

The purchase forecasting techniques used by the DISTRIBUTION/EXPRESS System are founded on six (6) basic principles:

- Record item usage as it occurs.
- Analyze the usage to establish demand patterns and to identify items with abnormal or unusual sales activity.
- Project future usage from historical sales demand.
- Record supplier fill-rate and lead time independently for each item purchased.
- Determine suggested stocking levels based on the projected usage of each item over it's calculated days of supply (lead time + review time + a user-defined percentage of safety stock).
- Identify, segregate and categorize for exception processing those items that do not fit within standardized sales and/or delivery profiles.

Although the purchase forecasting module utilizes several sophisticated mathematical calculations to determine projected usage and suggested stocking levels, the majority of these formulas are applied simply to decide if the historical data is adequate and within acceptable limits to support a reliable purchase decision.

Those items which are consistently used at the rate of three per week, purchased from a supplier who regularly ships within one week of the order date with a ninety-five percent fill-rate and has a prepaid freight policy that dictates one order per month, should require only minimal effort from the buyer to generate a purchase order.

Mathematical calculations cannot accurately predict if an item that has sold for the first time in two years should be restocked or not. It is equally impossible to forecast a suggested order

quantity sufficient to meet the demand of an item that has been on backorder from it's sole supplier for the last three months. Exceptions such as these require manual intervention by a knowledgeable buyer.

The purchase forecasting algorithms are designed to identify and isolate these purchase forecast exceptions for the buyer. The purchasing review screens provide easy, on-line access to every pertinent piece of data the buyer requires to make a knowledgeable purchasing decision.

PURCHASE FORECAST CONCEPTS

Purchase forecasting utilizes many advanced concepts to achieve profitable results through significant increases in customer service levels and inventory turns. The formula used to determine the Suggested Order Quantity is as follows:

DS x (ADDxT) = FQ – (OH + OO) +CBO = Suggested Order $\geq$ (PJQ or MOQ)

DS	-	Days Supply = (RT+LT+SS)
RT	-	Review Time between orders
LT	-	Lead Time to receive order – dynamically calculated by System
SS	-	Safety Stock – amount of inventory required to meet service level objectives by inventory rank (A,B,C,C,E,N)
ADD	-	Average Daily Demand is calculated by dividing the average monthly demand over past 12 months by number of business days in month
T	-	Trend of current item demand compared to historical demand of forecast period(s)
FQ	-	Forecast Quantity
CBO	-	Customer Backorder
OH	-	On-hand item availability
OO	-	On-order with supplier
PJQ	-	Per job quantity
MOQ	-	Minimum order quantity

Several key benefits of DMS Purchase Forecasting are:

- Purchase by Exception – Review and purchase only the product lines that meet minimum supplier freight requirements.
- Ability to review and purchase product lines not meeting supplier forecast parameters.
- System automatically “Flags” abnormal items for buyer review.
- Average DMS customer buying time is one (1) day per week.
- System “frees buyer’s time” and provides analytical tools to achieve higher inventory ROI.
- Purchasing module is easy-to-use, flexible, and very effective.

RECORDING USAGE

The most basic element of any replenishment purchase forecasting system is the ability to monitor item usage over time. If sufficient historical data regarding an item's movement can be accurately recorded, then mathematical analysis of that information can be applied to develop a projected usage pattern.

The sales history for each item must be updated frequently in order to provide the buyer with the information necessary to react to changes in inventory balances and sales demand in a timely manner. On-hand quantities are updated in a “real time” mode by the Order Entry module as the ENTER key is pressed for each ordered line item and inventory is incremented by the shipped quantity.

Of equal importance is the ability to distinguish 'normal' sales demand from usage that has been artificially impacted due to promotions, out of stock conditions, special orders and other extraneous (but common) item movement. The System provides several safeguards to cover these exception conditions.

First, the Order Entry user has the ability to override the System default that triggers an update to demand if he or she recognizes that the entry being made is not a typical sale. This is accomplished on a line item basis by changing the transaction code to a “0” demand code and thereby bypassing the demand forecast for this item or order. A second check is made during the period close process where the total demand recorded during the period is validated against a user-defined filter and, if necessary, smoothed (“filtered”) to remove spikes. Finally, the purchase forecasting job itself is designed to flag any abnormal activity so that visual warnings are issued to the buyer during the review process.

Item history in the Distribution/Express System is tracked by period with twelve periods per year. Each period carries separate fields to capture net ordered, ordered with demand and shipped quantities which are updated from the Order Entry line item detail on a daily basis. A fourth field, filtered demand, is calculated during the period closing process. This value represents the 'smoothed' usage of each item after applying formulas within user-defined parameters to reduce the effect of any abnormal activity that might have been recorded during the period. **This “filtered” quantity is the value actually used to project suggested stocking levels.**

The Item History File is keyed by year and may be retained indefinitely with available disk space being the only constraint. **Two full years of sales history plus history for the current year is maintained by the System to maximize the effectiveness of the forecasting process.** Any history retained beyond this is not used by the forecasting module but is available through an inquiry window from the suggested-buy screens and may be of benefit to a buyer.

DEFINING USAGE PERIODS

Item usage is the net movement (sales minus credits) of each part number over pre-defined time increments. In the Distribution/Express System software, these increments are defined as periods with twelve periods designated within each calendar year. The beginning and ending dates for each period are user-defined.

Either 12 or 13 demand periods may be defined, as required for purchasing and forecasting. Typically, 12 periods would be used if you want monthly forecasting/buying, 13 periods would be used if you want forecasting/buying periods with equal number of working days. As a general rule, these dates should be assigned so that each period contains approximately the same number of working days. It is also suggested that the ending date of each period fall on a weekend if possible. Although the period closing job can be run unattended and concurrently with all other System tasks except forecasting, it is a task that requires considerable System resources and is better suited to processing during off-peak hours.

The period file also contains the number of business days in each period and the number of days that have been closed within that period. The System uses this information to determine what percentage of the current period remains open at any given time. This in turn enables the purchase forecasting job stream to calculate what demand quantity of each item can be expected for the remainder of the period.

The specific instructions for assigning the number of periods and the beginning and ending dates for each period are covered in the 'Database' manual. **It is important to note that the periods used in purchase forecasting affect only item movement quantities. Sales Analysis and accounting periods are defined separately.** It is not necessary that these periods have common date ranges and is even discouraged if your company's fiscal year does not begin on January 1st.

Although the System is designed to function properly in firms having a fiscal year that does not coincide with the calendar year, this is typically an accounting decision and should not impact inventory management. However, most buyers are more comfortable when YTD inventory movement figures represent what has occurred since January 1.

CAPTURING USAGE

During the Order Entry process, an order quantity and a transaction code is captured for each item sold. Previously assigned flags within the transaction code or the order header that affect the forecasting process include:

1. Is this a debit or credit transaction?

2. Is an on-hand balance affected?

3. If on-hand is affected, which on-hand field (Available, Miscellaneous, Warranty, Damaged or Core)?

4. Is sales demand is affected?

*5. Is this a sale or credit that affects core, warranty or damaged on-hand balances?

*6. Is this a sale or credit to a “vendor or branch” type customer (vendor returns)?

*7. Is this item being filled as the result of backorder processing?

* These transactions do not update the demand history file

Using this information, demand history is updated for all line items regardless of whether the order was invoiced or not. The item creation date on the order determines which demand period will be updated.

Each period in the item history file contains three buckets:

- **Ordered** - The net order quantity of all debits and credits
- **Demand** - The net order quantity of all debits and credits having a transaction code that is flagged to affect demand
- **Shipped** - The net ship quantity of all debits and credits

Each of these values plays a critical role in the purchase forecasting process. The ordered and shipped quantities provide fill-rate percentages and quantify customer service level objectives. The demand value serves as the basis for projecting future sales activity.

MANUAL OVERRIDES TO USAGE (Promotional Events)

Under some conditions, it may be desirable to manually pre-load expected item usage quantities. This is usually done where a special promotion is being run at some future date and management is able to accurately estimate what quantities of each item will be required to cover the expected demand during that time.

EXCEPTIONS TO USAGE PROCESSING

The day-close process intentionally excludes certain types of activity from being updated to the history file, such as returns to vendors.

When a superceded item is processed through day-close, the demand quantity is **always** updated to the superceding item regardless of which item was actually shipped. However, the order and ship quantities are updated for the item that was actually processed.

ANALYZING USAGE

Period close, the next step in the purchase forecasting process, analyzes the information that has been recorded and accumulated daily since the last period close. Each item's activity in the current period is evaluated against a statistical profile created from its historical usage. This comparison will indicate if the activity for the item in the current month is consistent with its prior history plus or minus a user-defined level of tolerance.

The final task in analyzing item usage within period close is the determination and assignment of a popularity ranking code to each item. **The item rank identifies the relative popularity of an item when its usage is compared to that of other similar items within the same product line.** Although the rank of an item has no effect on its projected demand, it is used by the forecasting job to determine the number of days of safety stock required and consequently adjusts the recommended stocking levels.

FILTERING USAGE

A fourth bucket contained in the history file, **Filtered Demand**, is generated during the period close process. The Demand quantity, which was updated on a daily basis, is now subjected to a filtering test to determine if it deviates from the weighted average usage by more than a user-defined tolerance.

WEIGHTED AVERAGE USAGE

During period close, the weighted average usage of each item is recalculated based on its weighted and filtered movement over the most recent twelve periods.

This value is used as the basis for projecting usage for any items with less than one year of sales history. It is also compared to the projected demand by the purchase forecasting jobstream and will cause an exception flag to be set if the deviation between them is outside user-defined tolerances for any item that is not pre-flagged as “seasonal.”

TREND

During period close, a trend factor representing any upward or downward pattern in usage is calculated for each item except "N" ranked (new) items and items pre-flagged as “seasonal.“ This result in the form of a percentage (%), item trend, is applied to the historical demand to project anticipated usage by month for the next twelve months.

ITEM RANKING

During period close, all items within each rank group are evaluated for possible re-ranking. Ranking establishes the hierarchical position of each item within a group based on it's relative sales when compared to other items with similar characteristics.

Ranking serves two important purposes:

1. It provides management with a tool to quickly see how their financial investment in inventory is spread between fast and slow moving items.

2. It enables the buyer to control the amount of safety stock carried by assigning a higher number of days of safety stock to faster moving items and to reduce safety stock as items decline in popularity.

In summary, these are key points regarding item ranking that should not be overlooked:

- Item ranks are assigned based on the relative popularity of all items within the same rank group.
- The rank order is the relative position of an item based on its weighted average usage when compared to all items within the group.
- Item rank does not affect projected usage but does affect the forecast quantity.
- "X" ranked items (no sales demand in over 1 year) are never re-ranked by the System. However, they are identified on an exception report for the buyer to review.

PROJECTING USAGE

During period close, item usage by period is projected forward for the next twelve months. The specifics of this process are outlined in our Purchasing documentation but the primary concept is to calculate a trend rate or growth factor representing any upward or downward pattern in each item's usage and to apply that result to it's historical demand.

Although the data in the example below is admittedly too consistent to be realistic, it illustrates the basic concept of projecting demand based on the calculation of a trend factor and the application of that factor to the historical filtered usage.

Mth	2001 usage	2002 usage	2003 projected
Jan	10	11	12
Feb	11	12	13
Mar	12	13	14
Apr	13	14	15
May	14	15	16
Jun	15	16	17
Jul	15	16	17
Aug	14	15	16
Sep	13	14	15
Oct	12	13	14
Nov	11	12	13
Dec	10	11	12
Total	**150**	**162**	**174**

Two years of history are compared to develop a trend factor that indicates the change, up or down, in an item's rate of usage. In this example the 2002 usage is up by eight percent, (162 - 150) / (150) = .08, over the 2001 usage. If the two columns representing filtered usage were switched so that the higher usage occurred in the earlier year, the trend factor would be .07- or seven percent down (150 - 162) / (162).

When calculating projected demand, a value of 1.00 is added to the trend and that result is multiplied by the filtered demand for each period within the past year to determine the expected usage for the next twelve months.

Items with less than two years of history, slow moving items, items with sporadic demand and seasonal items are processed in a slightly different manner.

It is important to recognize that the trend factor is recalculated each month using the most recent history to project usage for the next twelve months. The period close at the end of July, 2002 will compare July 2001 through June 2002 usage with that of July 2002 through June 2003 to develop the trend factor and the usage will be projected through June of 2003.

CALCULATING PROJECTED USAGE

During period close, the projected usage over the next twelve months is calculated by multiplying the filtered usage for each of the previous twelve periods by the item's trend. The System is projecting each item's anticipated demand forward for one year from the current period based on it's usage for each month in the prior year plus or minus any adjustment that may be indicated due to an increase or decline in it's activity.

Most distributors have a definitive business cycle that swings up or down with the seasons of the year. The concept of basing future demand off the actual usage from the same period in the prior year compensates for this normal change in sales activity. **Items that are truly seasonal such as snow blowers, tire chains or garden tools can be automatically identified by the System and accurately forecast on an exception basis.**

In some instances, the demand for the same period in the prior year is not available or may not be a reliable indicator for projecting future usage. These exceptions and the manner in which they are processed are outlined below:

1. Slow moving items, new items and non-seasonal items with sporadic demand

- The demand for items averaging less than one unit per period, new items ("N" ranked), and those that do not have a positive demand in each period of the prior year, cannot be reliably determined by projecting current year usage from their activity in the same periods of the prior year.

* Projected demand for items with this profile is based on their average weighted usage multiplied by their trend rate.

2. Items with zero or negative average weighted usage

- If an item has zero or negative usage, it should not be considered for replenishment.

* The projected demand for items with zero or negative average weighted usage will be set to zero for all future periods. It is important to note that DMS recommends that order entry credit transaction codes that do not affect available on-hand should also not affect demand. A slow moving item that is sold in one period and returned for warranty credit in the next could have a negative weighted usage if warranty credits are set to reduce demand. A return to stock credit could also cause a negative average but the unit would be in inventory and available for sale should a future request occur.

3. Adjustments to trend

- The trend factor is an indicator of any historical change, up or down, in an item's demand history. Extremely erratic demand however may generate a trend rate that is statistically unreliable.

* Although trend will be determined from the data available and the result of this calculation written to the location item record, the projected demand formula is set to filter any trend factor that is less than 1.00 negative or greater than 1.00 positive. **If trend is adjusted, the item will be visually flagged for the buyer's attention on the suggested buy review screen.**

4. Adjustments to projected demand and carryovers

- If the item projected demand for the first period is less than "1", it will be adjusted to "1". If it is greater than "1", it will be adjusted to the nearest whole number.

* The average weighted usage is multiplied by the trend factor to project demand. If the result is less than "1", it is adjusted upward to "1". If the result is greater than "1", it is half adjusted to the nearest whole number. This adjusted projection is then subtracted from the original projection to calculate a carryover value for the next period.

5. Projecting seasonal items

- The average demand for a seasonal item is calculated by dividing the total demand for the last 12 months by the number of months with demand not equal to zero.

- The trend for seasonal items is unconditionally set to zero.

- Seasonal items should be assigned to a unique rank and forecast group.

- Projection of seasonal items is accomplished by moving the prior year's filtered demand for the same months into the current year periods.

LEAD-TIME

Lead-time is the elapsed time expressed in days between the time a purchase order is placed with a supplier and the date it is received. The order date, put away date, quantity ordered and quantity received for each of the four most recent purchase order receipts are carried in the supplier item file. This file is updated by the purchase order receiving process for each item selected by the buyer to affect lead-time and fill-rate.

SUPPLIER FILL-RATE

Fill-rate is a measurement expressed in percentage of the quantity and value of items received within a purchase order as compared to the original quantities ordered. Fill rate percentages are influenced by all receipts except backorder fills. Receiving actions that increase available, miscellaneous or damaged on-hand types have a positive influence on fill-rate. Backorder, canceled and lost sale actions have a negative impact on fill-rate calculations.

RECORDING SUPPLIER FILL RATE AND LEAD TIME

After establishing the projected usage by item and period, the next step in the purchase forecasting process is to evaluate the ability of each supplier to deliver product in a reliable and timely manner. The criteria for judging supplier performance are measurements of lead-time and fill-rate.

Lead time, review time and percentage of safety stock are the three elements that determine the required days of supply which must be maintained in order to meet sales demand. Of these variables, **lead-time typically has the greatest influence on stocking levels.** Imprecise lead-time settings will result in either too much inventory being purchased thus reducing turn rates or too little inventory being purchased causing lower customer fill-rates. Lead-time is measured as the number of days between the date an item is ordered and the date it is received and added to inventory.

Fill-rate is the primary indicator of a supplier's reliability and represents the "shipped-to-ordered" percentage of each order that a supplier ships. **DMS measures the fill-rate based on ordered and received quantities for each item on first-time receipts only.**

To accurately gauge the performance of a supplier, both lead-time and fill-rate must be considered. A supplier who ships an order within one week but has only a sixty percent fill-rate

may be less desirable than a second supplier with a lead-time of two weeks and a ninety-five percent fill-rate.

Supplier performance must also be judged on the types of orders being placed. Most distributors will place **special orders** with a vendor in response to a critical request by a customer. These orders typically occur after the buyer has established direct contact with the supplier, the product is confirmed as being available before the order is placed (100 percent fill-rate) and an expedited delivery method is usually requested (short lead time). **Orders of this type must be excluded or at least segregated from the fill-rate and lead-time calculations used to establish a supplier's typical performance levels.**

Another type of order, which should not affect normal lead-time and fill-rate statistics, are delayed shipment orders (future orders) where an order is placed well in advance of the expected delivery date. Promotional and Spring or Fall dating orders typically fall into this category.

A flag at the purchase order line item level dictates whether or not each item affects supplier performance data. Special orders are set to default this value to "N" and replenishment orders default to "Y". Buyer overrides to the default are allowed during the purchasing process.

Although purchase order and receiving history information may be retained indefinitely, only the last four receipts of each item are considered when evaluating supplier performance for average lead-time and fill-rate percentage.

DETERMINING SUGGESTED STOCKING LEVELS

The Replenishment Buy forecast job calculates a suggested purchase quantity for each item based on:

1) The projected usage over a pre-determined period of time

2) The current inventory on-hand and on-order position

3) Any adjustments necessary to bring this calculated value up to user-defined “per-job-quantities” (PJQs) and/or supplier minimum order quantities

The purchase forecasting routine runs within the day-close activities and processes only those items assigned to purchase forecast groups that are designated by the buyer for review. The frequency of review is user-defined and can be varied from one forecast group of items to another. DMS suggests that all items, except those products that are truly seasonal, be forecast on a daily basis.

The purchase forecasting job first calculates the required days of supply based on the review time, lead-time and safety stock levels designated for each item. The projected usage that was previously determined by the period close job for each of the next twelve months is then compared to the required days of supply and an item stocking level is automatically calculated. This result represents the quantity of each item required to meet the anticipated demand for the forecasted days of supply.

Next, using current inventory on-hand and on-order positions, a suggested-buy quantity is calculated. If for example, the suggested stocking level for the forecast period was 10 with 3 units on-hand and 6 on-order, the suggested-buy quantity would be 1.

The suggested-buy value is then compared with minimum factory pack quantities and adjusted to the proper purchase multiple. In the previous example, if the minimum order quantity were 3, the suggested-buy quantity would be rounded upwards to "3". If adjustments are necessary for minimum order quantities, any suggested-buy quantity that is greater than 1 but less than the required quantity will be adjusted upward to that quantity. Once the lowest minimum order quantity is met, the System will half-adjust the suggested-buy quantity to the nearest requirement multiple.

DAYS OF SUPPLY

The Replenishment Buy purchase forecasting job establishes the suggested stocking level for each item based on it's projected usage over the calculated days of supply. Days of supply is comprised of three variables:

Review time: The frequency with which a purchase order is reviewed and placed with a supplier.

Lead-time: The average number of days between the date an order is placed with the supplier and the date the shipment is received and placed into stock.

Safety stock: The average number of days of additional inventory deliberately kept on-hand to meet fill-rate objectives in the event of unanticipated delays in lead-time and/or unexpected

increases in item usage. Safety stock is normally varied according to each item's ranking code (popularity rank) with more safety stock for "A" items and less for ""D" items.

CALCULATING SUGGESTED STOCKING LEVEL:

The days of supply provides the length of time that the forecast must cover and the projected demand file provides the expected usage quantities for each period starting with the most current and going forward for one year. Each period however, represents roughly one calendar month and the purchase forecast is typically produced daily. The number of business days remaining in the current open month is calculated by the System to determine what percentage of the projected demand for the current month will be required.

CALCULATING RECOMMENDED PURCHASE QUANTITY:

The suggested stocking level represents the quantity needed to meet the anticipated demand over the required days of supply. This result is compared to the per job quantity (PJQ), a user defined value in the location item file, and the greater of the two quantities is used as the basis for determining the recommended purchase quantity (RPQ).

The RPQ is reduced by the quantities currently on-hand and/or on-order and increased by the quantity on customer backorder. Finally, this quantity is adjusted to conform to the minimum order requirements established by the supplier for each item.

EXCEPTION PROCESSING

In addition to generating a recommended purchase quantity for each item, the purchase forecasting job segregates the items into smaller product groups that are more easily managed by the buyers. The decision making process used for product group assignments parallels that of a buyer's assigned responsibility.

CLASSIFICATIONS

The System's purchase forecast routine performs a series of tests to determine which of eight (8) potential classifications will be assigned to each item. The tests are applied in a certain hierarchy and any item meeting all the qualifications for a certain class will be assigned to that group even though it may also meet the tests for a subsequent class.

- Special Handling
- Missed ETA or Supplier Backorder
- Critical
- Priority
- Normal
- "N" ranked items
- "X" ranked items
- Item is superceded or discontinued.

For items that have missed ETA dates or are on supplier backorder, the on-order quantity may be sufficient to meet the anticipated demand, resulting in a forecast quantity of zero, but the item cannot be supplied by it's vendor. An alternate source of supply or a call to the vendor might be warranted for these items.

Items that are classified as critical and priority are those that are either currently out-of-stock or are predicted to be out of stock by the time the next shipment arrives. An option to create a separate purchase order for these items with an expedited method of shipment specified may be necessary. All items in either of these classifications will have a positive forecast quantity.

Items classified for normal replenishment with a positive forecast quantity are those with on-hand and/or on-order quantities sufficient to meet the demand that is expected to occur between the forecast date and the expected receipt date but not adequate to cover the requirements for safety stock and review time.

The forecasting for "N" ranked or new items is based on limited history, which increases the potential for an error, so they are "flagged" by the System in a separate class for the buyer's review.

"X" ranked items are items which have not moved within the past twelve (12) months or more or those that have had demand but currently have an on-hand or on-order quantity greater than zero need not be reviewed and will have a zero forecast quantity. Those that have had a positive demand within the past year will have a forecast quantity only if current on-hand and on-order is less than the projected usage.

Superceded and discontinued items are identified by the System for the buyer to be reviewed. A positive forecast will be created only for the difference between the customer backorder quantity and the total of available and reserved on-hand plus the on-order quantity. In most cases, items that have been superceded or discontinued are no longer available from the supplier. Any open backorders to a customer should probably be cancelled after advising the customer of the situation.

SALES ANALYSIS

DMS Sales Analysis information is captured instantly by the System and through reports, on-line screen inquiries, and customer-defined queries provides meaningful sales, profit, inventory, and financial management information to analyze your company activities.

DMS provides a "Reports & Queries" Menu for the System that features 130+ pre-defined reports and queries to analyze various System data. This comprehensive list is outlined by System Application category in the last section of this System Overview. Further customer-defined queries can easily be produced utilizing the System's DDS (Data Dictionary Specifications) files and the iSeries 400 Query/Report Writer feature.

SALES ANALYSIS

- Sales Representative Commission Report
- Sales, Productivity Analysis, & Commission by Employee
- Sales By Customer
- Customer Performance Report
- Sales By Manufacturer
- Qwik-Order Sales By Customer
- Gross Margin Return On Investment

Some of the more popular Sales Analysis reports follow:

- Sales Productivity Analysis and Commission By Employee – This report is used to determine the performance of each employee by listing the number of orders, items, and pieces processed with sales, credits, and the percent of credits to sales. Either one or two date ranges (month and YTD, etc.) may be specified and a commission may be optionally calculated based on a percentage of either net sales or gross margin.
- Sales By Customer – This report lists sales, percent of sales to total, profit, and gross margin percentage by customer for each selected sales type (merchandise, labor, freight, sales tax, misc 1, and/or misc 2) with two date ranges available.
- Sales By Manufacturer – This report lists sales, percent of sales to total, profit, and gross margin percentage by manufacturer and sales analysis group with two date ranges available.
- Lost Sales Analysis – This report is used to list lost sales by part number with all information required by a buyer to increase stocking levels or to add a previously non-stocked item to inventory. Information on this report includes item rank, customer number, quantity lost, $$ value lost, ID of the user who created the lost sale, the source of the transaction (Order Entry or Stock Check), ETA date and the user-defined reason for losing the sale.

Date: 9/12/97 SERVICE PARTS COMPANY ORR451
Time: 16:33:12 SALES BY EMPLOYEE DMSSYS

Location: *ALL* Cost: OE Core included August Sales 8/01/97 8/31/97 Y-T-D Sales.... 1/01/97 8/31/97 Page 1

Cust Sls Rep	Date range	#Orders	#Items	#Pieces	Sales	Credits	Cr%	Net Sales	G/Margin	G/M%	5.00% of M Commission
AL JACKSON	August Sales	154	566	2267	12988	34-	.3	12954	2815	21.7	140.75
	Y-T-D Sales....	1187	5655	33075	83163	7092-	8.5	76070	16734	22.0	836.70
CINDY JONES	August Sales	15	21	39	676	0-	.0	676	265	39.2	13.25
	Y-T-D Sales....	4109	10124	35855	257859	32547-	12.6	225311	72498	32.2	3624.90
JIM DANIEL	August Sales	345	952	2671	25945	213-	.8	25731	7893	30.7	39.45
	Y-T-D Sales....	2787	8375	25820	228853	4949-	2.2	223903	68940	30.8	3447.00
JACK DAYTON	August Sales	840	2278	8807	52868	7470-	14.1	45397	15407	33.9	770.35
	Y-T-D Sales....	7432	20942	72145	474513	64606-	13.6	409907	131066	32.0	6553.30
HARRY MILLS	August Sales	579	1629	5565	41736	3868-	9.3	37867	12571	33.2	628.55
	Y-T-D Sales....	4478	12336	35068	331447	28193-	8.5	303254	98826	32.6	4941.30
IVAN RUSH	August Sales	171	505	1343	12341	1868-	15.1	10473	3105	29.6	155.25
	Y-T-D Sales....	2210	6162	17372	153261	25624-	16.7	127636	36984	29.0	1849.20
LARRY JEFFS	August Sales	638	1450	4690	37590	4001-	10.6	33589	11169	33.3	558.45
	Y-T-D Sales....	5149	12642	48053	357817	25918-	7.9	301899	98595	32.7	4929.75
DAVID BEAN	August Sales	461	2027	4919	55129	4833-	8.8	50296	14553	28.9	727.65
	Y-T-D Sales....	6356	22587	56606	587338	58643-	10.0	528694	159907	30.2	7995.35
Total		3203	9428	30301	239273	22287-	7.4	216983	67778	31.3	3388.90
		33708	98823	323994	2444251	247572-	10.0	2196674	683550	30.2	34177.50

Date: 10/16/97 SERVICE PARTS COMPANY ORR457
Time: 16:41:28 SALES BY CUSTOMER DMSSYS

Location: 999999 COST: OE Core included September Sales 9/01/97 9/30/97 Y-T-D Sales.... 1/01/97 9/30/97 Page 1

Normal and subsidiary Customer	Date range	#Orders	#Items	#Pieces	Sales	Credits	Cr%	Net Sales	G/Margin	G/M
10	September Sales	7	8	2	580	128-	20.7	460	110	23.9
ADAMS WHOLESALE	Y-T-D Sales....	70	135	716	8,988	1,919-	21.4	7,069	937	13.3
100	September Sales	52	138	373	5,132	84-	1.6	5,048	896	17.7
ABEL SALES	Y-T-D Sales....	358	922	2,399	27,491	2,490-	9.1	25,001	4,749	19.0
1000	September Sales	2	2	7	215	0	.0	215	66	30.7
ANDERSON COMPANY	Y-T-D Sales....	14	14	18	1,163	50-	4.3	1,112	292	26.3
10000	September Sales	122	305	1,204	9,514	135-	1.4	9,379	1,619	17.3
CONSOLIDATED PARTS INC	Y-T-D Sales....	697	1,862	7,407	63,619	2,193-	3.4	61,426	11,034	18.0
10010	September Sales	1	1	1	29	0	.0	29	2	6.9
EDAMS CHEVROLET	Y-T-D Sales....	10	12	19	459	145-	31.8	313	66	21.1
DEE	September Sales	15	25	477	2,369	0	.0	2,369	473	20.0
DEE PARTS INC.	Y-T-D Sales....	86	147	1,006	7,995	1,083	13.5	6,912	2,028	29.3
FALCON	September Sales	3	300	1,312	15,949	32-	.2	15,916	1,528	9.6
FALCON MOTORS	Y-T-D Sales....	3	300	1,312	15,949	32-	.2	15,916	1,528	9.6
Customer type totals	September Sales	3	300	1,312	15,949	32-	.2	15,916	1,528	9.6
	Y-T-D Sales....	4	301	1,313	16,088	32-	.2	16,056	1,529	9.5
Location totals	September Sales	4,730	15,324	62,248	627,627	37,581-	99.9	590,045	95,757	16.2
	Y-T-D Sales....	30,494	90,545	342,580	4,156,970	260,260-	99.4	3,896,710	618,906	15.9
GRAND TOTAL	September Sales	4,730	15,324	62,248	627,627	37,581-	99.9	590,045	95,757	16.2
	Y-T-D Sales....	30,494	90,545	342,580	4,156,970	260,260-	99.4	3,896,710	618,906	15.9

Date: 10/16/97 — SERVICE PARTS COMPANY — ORR455
Time: 16:50:19 — SALES BY MFR AND S/A GROUP — DMSSYS
SORTED BY SALES — Page 1

Location: *ALL — From 9/97 thru 9/97 — From 1/97 thru 9/97

Mfr	Normal & Subsidiary Sales analysis group	********** September Sales ********** Sales	%Tot	G/Margin	G/M%	******** Y-T-D Sales.... ******** Sales	G/Margin	G/M%
ACD	BATTERIES	28,206.92	4.7	4,730.76	16.7	130,724.09	22,705.44	17.3
	REM ALT/STR	25,988.94	4.4	3,209.55	12.3	128,673.99	19,028.55	14.7
	FILTERS	20,880.90	3.5	1,502.45	7.1	114,423.28	11,110.49	9.7
	BRAKE PARTS	15,008.85	2.5	3,902.68	26.0	72,872.04	17,809.11	24.4
	AIR COND.	14,861.54	2.5	3,147.69	21.1	137,604.08	25,404.98	18.4
	EMMIS. CTRL	12,222.90	2.0	2,929.81	23.9	63,209.87	13,867.66	21.9
	ELECTRICAL	10,728.71	1.8	2,560.20	23.8	52,317.40	11,102.13	21.2
	CARBS/SERV.	9,331.18	1.5	1,914.98	20.5	47,249.84	9,670.99	20.4
	TRANS PARTS	7,956.54	1.3	556.29	6.9	28,554.22	1,731.76	6.0
	FUEL PUMPS	6,941.00	1.1	1,616.50	23.2	34,520.21	8,797.16	25.4
	BEARINGS	5,904.52	1.0	2,332.15	39.4	32,337.32	11,137.29	34.4
DZ	RUNNING BOARDS	.00		.00	.0	139.41	.00	.0
MTC	FILTERS	5,441.89	.9	476.98	8.7	5,441.89	476.98	8.7
	AC / FREON	4,228.50	.7	49.68	1.1	4,228.50	49.68	1.1
	CV JNTS/BTS	1,749.79	.2	14.25	.8	1,749.79	14.25	.8
	CARB. ASSMB	1,293.57	.2	827.24	63.9	1,293.57	827.24	63.9
	CAPS/STATS	954.68	.1	105.55	11.0	954.68	105.55	11.0
	RUBBER GOOD	880.45	.1	26.14	2.9	880.45	26.14	2.9
	ELECTRICAL	813.78	.1	24.94	3.0	813.78	24.94	3.0
	WIPER BLADE	176.40	.0	.00	.0	176.40	.00	.0
	SPARK PLUGS	128.04	.0	.00	.0	128.04	.00	.0
	SHOCK ABSRB	106.82	.0	3.21	3.0	106.82	3.21	3.0
	WIRE & CABL	88.04	.0	.61-	.6-	88.04	.61-	.6-
	THERM. GSKT	55.02	.0	2.54	4.6	55.02	2.54	4.6
	Total this mfr	15,916.98	2.6	1,529.92	9.6	15,916.98	1,529.92	9.6
	Customer type totals	15,916.98	2.6	1,529.92	9.6	16,056.39	1,529.92	9.5
	--* GRAND TOTALS *--	590,080.68		95,765.85	16.2	5,705,399.52	949,282.57	16.6

Date: 10/01/97 SERVICE PARTS COMPANY ORR459
Time: 16:23:18 LOST SALES DMSSYS
9/01/97 thru 9/30/97
Location: DAVENP Page 1

Mfr	Item	Rnk	S/S	Customer	Qty	Lost$	User ID	Src	Date	On hand	On Order	ETA	Trans code or reason
ACD	D106PS	X		68075	1	8.55	AL	O	9/30	0	0		OUT OF STOCK
	IGNITION												
	Total this item				1	8.55							
ACD	D434	B		1210	1	4.31	JACK	O	9/23	0	2	11/15	OUT OF STOCK
	IGNITION												
	Total this item				1	4.31							
ACD	D1592	X	S/S	4562	1	12.07	JACK	O	9/17	0	0		OUT OF STOCK
	IGNITION												
	Total this item				1	12.07							
ACD	D3199	B		16075	1	4.71	JANE	O	9/11	0	6	11/15	OUT OF STOCK
	IGNITION												
	Total this item				1	4.71							
ACD	D6225	D		68340	1	20.55	TUDOR	O	9/04	0	6	11/15	OUT OF STOCK
	IGNITION												
	Total this item				1	20.55							
ACD	D6259	N/S		34510	1	52.03	JANE	L	9/29	0	0		NOT STOCKED
	IGNITION			76500	1	49.95	TUDOR	L	9/23	0	0		NOT STOCKED
	Total this item				2	101.98							

//

Mfr	Item	Rnk	S/S	Customer	Qty	Lost$	User ID	Src	Date	On hand	On Order	ETA	Trans code or reason
SP	22540987	X		1210	1	7.81	JIM	O	9/12	0	0		OUT OF STOCK
	ENGINE PARTS												
	Total this item				1	7.81							
ST	SC20	A		68300	2	11.16	JIM	O	9/02	2	100	11/18	OUT OF STOCK
	HOSE CLAMPS												
	Total this item				2	11.16							
	Total all items				427	4737.70							

DATE: 3/20/03 ** ** SRR0
TIME: 13:16:38 Daily Operating Statement @ 202 PAGE:
USER: DMSSYS Activity with 3/19/03 Closing Date ---REPRINT---

		DAILY SALES			M-T-D SALES		
		Customers	Transfers	Suplr returns	Customers	Transfers	Suplr return
SALES:	* Merchandise	31,597.36	8,630.92	.00	410,971.52	109,224.15	.0
	Core	1,645.20	35.00	.00	32,917.98	5,011.00	.0
	Sales tax	48.57	.00	.00	628.97	11.27	.0
	Freight	.00	.00	.00	3.44	.00	.0
	Labor	.00	.00	.00	.00	.00	.0
	Misc (E)	20.63	.00	.00	1,268.39	557.95	.0
	Misc (F)	.00	.00	.00	.00	.00	.0
	Gross sales	33,311.76	8,665.92	.00	445,790.30	114,804.37	.0
CREDITS:	* Merchandise	438.42-	10.15-	.00	27,068.71-	799.08-	.0
	Core	77.00-	.00	.00	14,343.14-	170.00-	.0
	Sales tax	.00	.00	.00	54.57-	.00	.0
	Freight	.00	.00	.00	.00	.00	.0
	Labor	.00	.00	.00	.00	.00	.0
	Misc (E)	.00	.00	.00	1,623.44-	.00	.0
	Misc (F)	.00	.00	.00	.00	.00	.0
	Gross credits	515.42-	10.15-	.00	43,089.86-	969.08-	.0
	PCT of Sales	1.5%	.1%	.0%	9.7%	.8%	.
NET SALES:	* Merchandise	31,158.94	8,620.77	.00	383,902.81	108,425.07	.0
	Core	1,568.20	35.00	.00	18,574.84	4,841.00	.0
	Sales tax	48.57	.00	.00	574.40	11.27	.0
	Freight	.00	.00	.00	3.44	.00	.0
	Labor	.00	.00	.00	.00	.00	.0
	Misc (E)	20.63	.00	.00	355.05-	557.95	.0
	Misc (F)	.00	.00	.00	.00	.00	.0
	Net sales	32,796.34	8,655.77	.00	402,700.44	113,835.29	.0
MARGIN:	Margin sales	31,158.94	8,620.77	.00	383,902.81	108,425.07	.0
	(-) Cost of sales	25,429.38-	8,620.77-	.00	315,225.93-	108,425.07-	.0
	Gross Margin	5,729.56	.00	.00	68,676.88	.00	.0
	G/M percent	18.4%	.0%	.0%	17.9%	.0%	
FILL RATE:	Requested	2,666	43,566.24		35,800	559,842.63	
	(-) Lost	117	3,337.96		2,038	40,003.15	
	Released	2,549	40,228.28		33,762	519,839.48	
	Percent fill	95.6%	92.3%		94.3%	92.9%	

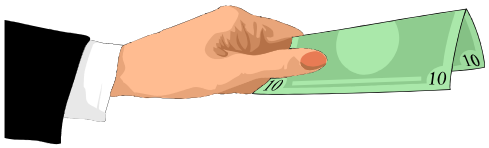
* Included in margin sales

NOTES

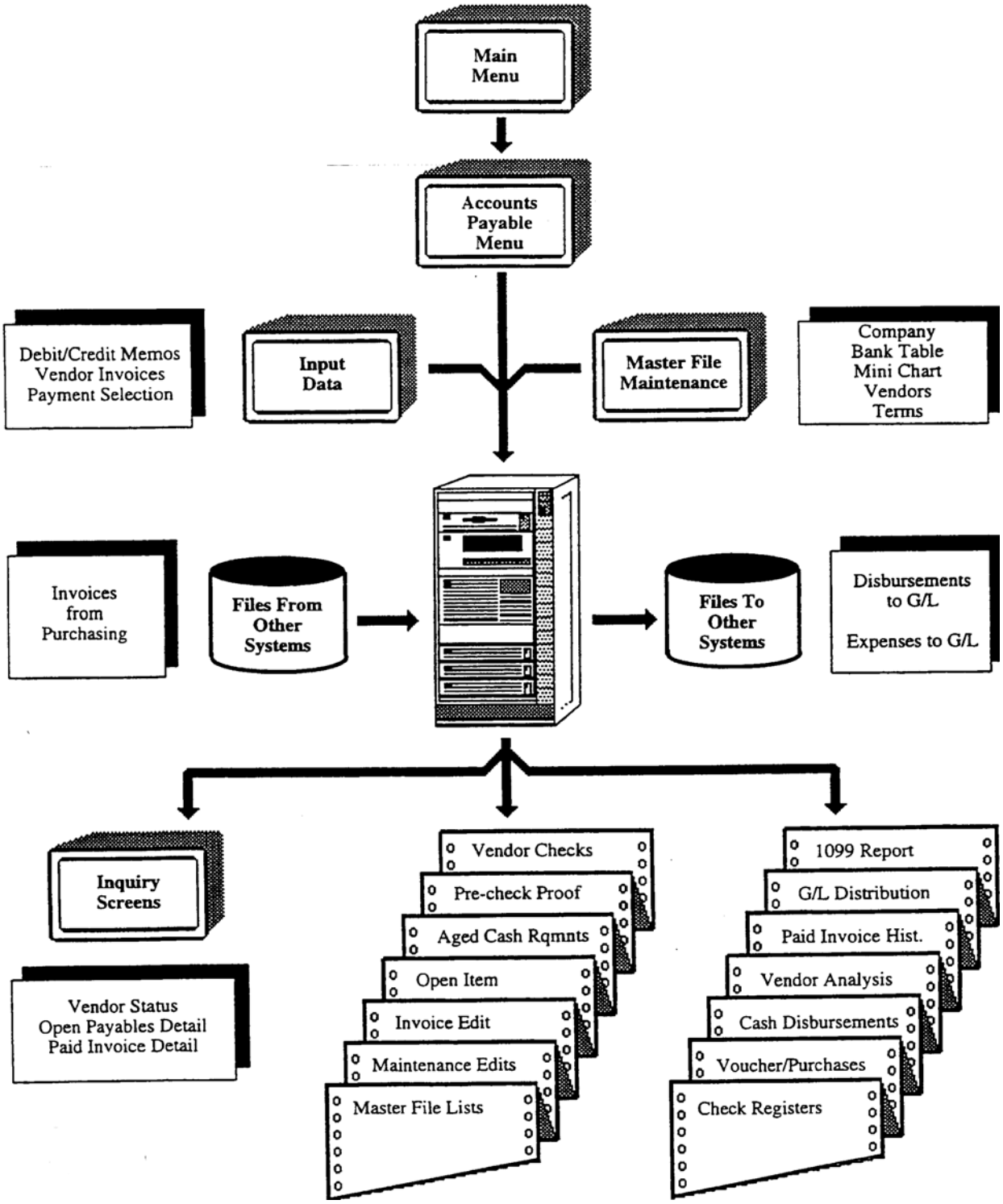
ACCOUNTS PAYABLE

Accounts Payable writes checks and tracks credits, discounts, partial payments, and recurring obligations, enabling you to effectively manage your business expenses. It includes numerous vendor and payables inquiries and an extensive library of expense analysis reports.

Features included in the Accounts Payable Module are as follows:



- Multi-company processing of concurrent months
- User-defined accounting periods
- Voucher number entered or automatically assigned to provide invoice and credit memo control
- Automatic calculation of due date, discount date, and discount amount based upon vendor terms data
- Generalized payment selection by due date, discount date, or vendor
- Specific invoices may be selected for payment or partially paid
- On-demand posting to Payables, Cash, Discount, and Expense accounts in the DMS General Ledger System
- Up to 999 expense account distribution items may be entered, edited and balanced for each invoice
- Duplicate invoice check and vendor name search
- Manual and void checks may be entered and processed
- Handles one-time checks without vendor setup
- On-demand interface with DMS Purchasing System
- Variable period cash requirements report
- Vendor analysis of discounts taken and lost
- On-line inquiry or listing of open items and/or paid history items for a specific vendor
- Vendor number is seven (7) alphanumeric characters, the Ledger account number is 13 digits, and the invoice number field is 12 characters
- Recurring Payables are maintained on-line and may be posted on-demand
- A 1099 identification number field is in the Master Vendor File and year-end “1099 MISC” forms may be printed
- “Prox” terms are accommodated (i.e., “Prox 15” means due the 15th of the next month)
- A ten (10) character Purchase Order number may be entered for each invoice
- During the invoice entry program, the posting period will default to the current expense period from the "company” control file
- Invoices can be processed by control group (batch) allowing one or more workstation operators to enter invoices, edit them, and update the open file without affecting information in other groups of invoices
- The vendor inquiry has an option to display and/or print a paid invoice history, all open payables or those items paid during the current month


Main Menu
Accounts Payable Menu
Debit/Credit Memos
Vendor Invoices
Payment Selection
Input Data
Master File Maintenance
Company
Bank Table
Mini Chart
Vendors
Terms
Invoices from Purchasing
Files From Other Systems
Files To Other Systems
Disbursements to G/L
Expenses to G/L
Inquiry Screens
Vendor Status
Open Payables Detail
Paid Invoice Detail
Vendor Checks
Pre-check Proof
Aged Cash Rqmnts
Open Item
Invoice Edit
Maintenance Edits
Master File Lists
1099 Report
G/L Distribution
Paid Invoice Hist.
Vendor Analysis
Cash Disbursements
Voucher/Purchases
Check Registers

GENERAL LEDGER

The General Ledger gives you advanced General Ledger and financial reporting, designed to meet the needs of today's businesses. Entries can be posted to current, previous, and future periods from any DMS application. Comprehensive and flexible report formats provide over 60 financial, comparative, and audit trail options.

Features included in the General Ledger Module are as follows:

- Multi-company processing with variable fiscal year-end capability
- Maintains current year and period or annualized budget data for each account
- Accommodate prior fiscal period journal entries
- Account number structure is user-determined
- Year-end adjustments, reports, and close-out is independent of routine monthly activities
- The "end-of-year" processing allows adjustments to be applied to any month in the year
- Report selection, end-of-month close and end-of-year close is by company
- Account number hierarchy may be re-structured by the user for printing financial statements
- Recurring journal entries are maintained on-line and may be posted on-demand
- Accommodates on-demand editing and posting of journal entries from other DMS Modules
- Account inquiry of current month and fiscal year journal entries
- Enhanced menu, entry, and maintenance screen formats
- Ledger account number is 13 digits plus a two-character "company code"
- Account description alpha-search capability
- A separate menu is provided for use during the initial start-up phases for entering, balancing, and updating historical information
- The "Standard Journal Entry" feature includes a frequency code, a number of occurrences, and amounts (which may be overridden)
- Journal entries are balanced on-line during data entry

Reports:

- Balance sheets and income statements are user-designed and formatted by a 'report writer'
- Financial statement data may be printed in detail, summary or both
- Consolidated company and/or cost center reporting can be accommodated
- Month-to-date and year-to-date Ledger reports may be produced in detail or summary format
- P&Ls and supporting schedules may be printed on a 'calendar' year-to-date basis as well as a 'fiscal' year-to-date basis

General Ledger Screens and Reports

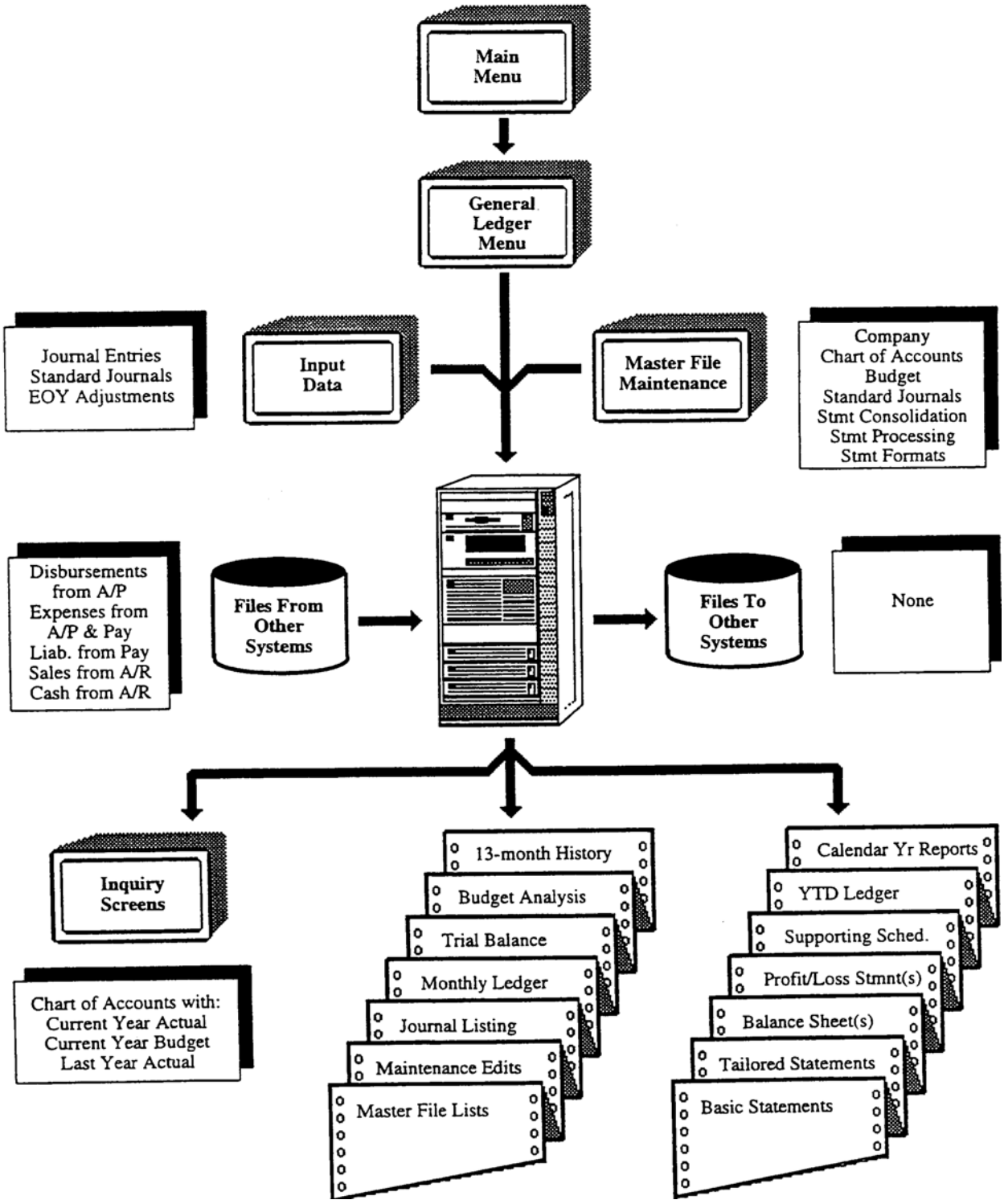
The DMS General Ledger module is very flexible and allows aggregation and consolidated reporting across multiple locations. More specific screen and report details can be found in the DMS Financials Report Book (yellow cover).

General Ledger Screens:

- General Ledger Main Menu
- General Ledger Master File Menu
- General Ledger Data Entry Menu
- General Ledger Processing Menu
- General Ledger Reports/Inquiry Menu
- Chart of Accounts Inquiry #1
- Chart of Accounts Inquiry #2

General Ledger Reports:

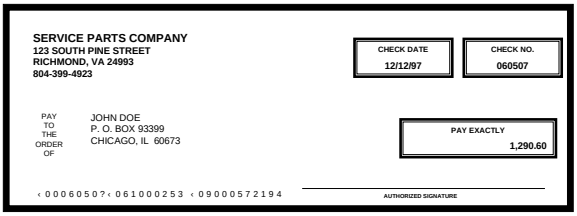
- Budget Proof Listing
- Month-to Date General Journal
- Month-to-Date General Ledger
- Month-to-Date Ledger Summary
- Balance Sheet – Assets
- Balance Sheet – Liabilities & Capital
- Statement of Operations
- Analysis of Financial Position
- Statement of Income
- Combining Statement of Operations


Main Menu
General Ledger Menu
Journal Entries
Standard Journals
EOY Adjustments
Input Data
Master File Maintenance
Company
Chart of Accounts
Budget
Standard Journals
Stmt Consolidation
Stmt Processing
Stmt Formats
Disbursements from A/P
Expenses from A/P & Pay
Liab. from Pay
Sales from A/R
Cash from A/R
Files From Other Systems
Files To Other Systems
None
Inquiry Screens
Chart of Accounts with:
Current Year Actual
Current Year Budget
Last Year Actual
13-month History
Budget Analysis
Trial Balance
Monthly Ledger
Journal Listing
Maintenance Edits
Master File Lists
Calendar Yr Reports
YTD Ledger
Supporting Sched.
Profit/Loss Stmnt(s)
Balance Sheet(s)
Tailored Statements
Basic Statements

NOTES

PAYROLL

Payroll eliminates the tedious calculation involved in payroll preparation by automatically figuring federal, state, and local tax withholding, as well as up to eight other deductions per employee. It accumulates information for tax reporting, and prints payroll checks in any format you choose, a variety of report, and employee W-2 forms.


SERVICE PARTS COMPANY
123 SOUTH PINE STREET
RICHMOND, VA 24993
804-399-4923

CHECK DATE 12/12/97

CHECK NO. 060507

PAY TO THE ORDER OF
JOHN DOE
P. O. BOX 93399
CHICAGO, IL 60673

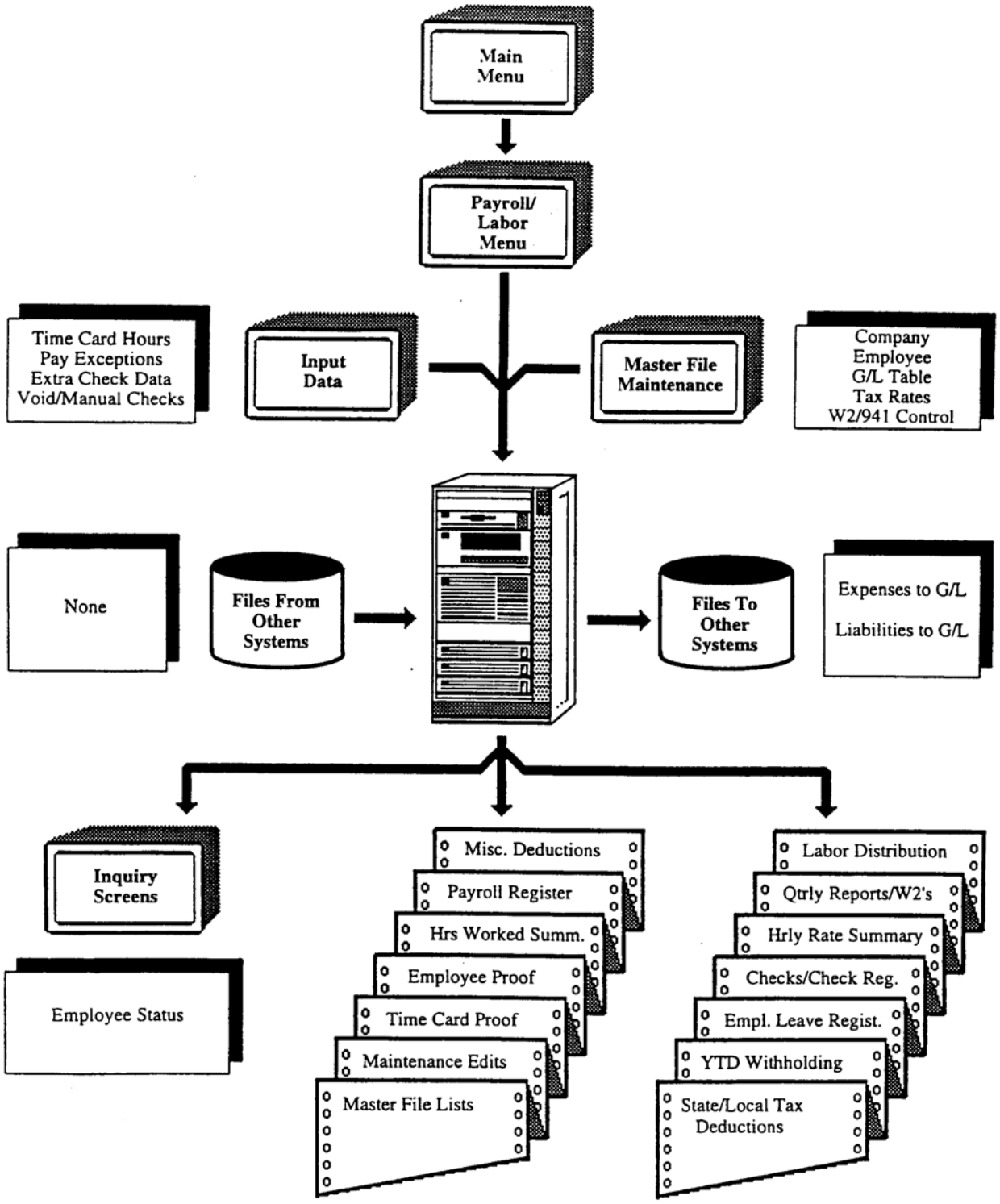
PAY EXACTLY 1,290.60

‹ 00060507‹ 061000253 ‹ 09000572194

AUTHORIZED SIGNATURE

Features included in the General Ledger Module are as follows:

- Multi-company processing is supported
- On-line editing of input information from multiple terminals
- On-line inquiry and/or file maintenance to Payroll Master File
- Employee Master File allows for certain personnel data along with various payroll/labor classification fields
- Provides for automatic generation of General Ledger entries for gross distribution and all deductions
- Earnings input may be in the form of hours worked (i.e., regular, overtime, and/or double time), or amounts which add or subtract from gross or net pay
- Allows for extra check capability for bonus or advanced vacation. Tax withholdings on an extra check may be by percentage, fixed amount, or according to the appropriate programmed tax routine
- Detail edit and balance report available to reconcile all earnings input
- Accommodates electronic interface with ACH Direct Deposit
- Provides for cafeteria plan benefit adjustments including 401K contributions
- Sick and vacation time taken is maintained with user defined accrual rates by employee
- Allows for separate input, editing, and updating of void and manual check information so that a complete audit trail of activity is provided on each period payroll register
- Accommodates up to 9 rate differentials which may be applied as a percentage or amount above an employee's standard hourly rate
- Accommodates up to four (4) local tax withholdings per employee
- Accommodates withholding for all states though user-maintainable tax tables. DMS provides revisions as required
- Allows either a calculated tax deduction or a specific amount for each employee
- Accommodates withholding of a fixed additional state and federal tax amount
- Handles variable pay schedules; i.e., weekly, bi-weekly, semi-monthly, or monthly by employee
- Allows for up to 99 taxable or non-taxable pay adjustments (additions or deductions) within each user defined company
- Any 15 of the 99 company-level pay adjustments plus a wage garnishment may be active for each employee
- Pay adjustments may be used for non-cash fringe benefits, e.g. auto allowance, certain insurance coverage, etc.


Main Menu
Payroll/ Labor Menu
Time Card Hours
Pay Exceptions
Extra Check Data
Void/Manual Checks
Input Data
Master File Maintenance
Company
Employee
G/L Table
Tax Rates
W2/941 Control
None
Files From Other Systems
Files To Other Systems
Expenses to G/L
Liabilities to G/L
Inquiry Screens
Employee Status
Misc. Deductions
Payroll Register
Hrs Worked Summ.
Employee Proof
Time Card Proof
Maintenance Edits
Master File Lists
Labor Distribution
Qtrly Reports/W2's
Hrly Rate Summary
Checks/Check Reg.
Empl. Leave Regist.
YTD Withholding
State/Local Tax Deductions

Payroll/Labor Reports

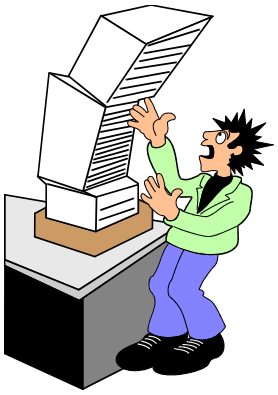
The DMS Payroll Module is very flexible and user-friendly and has a built-in interface to the Timesoft Time & Attendance Module to provide up-to-the-minute reporting and analysis of any payroll issue. More specific report and screen details can be found in the DMS Financials Reports Book (yellow cover).

Reports:

- Earnings input proof list
- Gross earnings summary
- File maintenance proof list
- Period payroll register
- Employee master file list
- State and local tax deduction
- Quarterly 941-type listing
- Payroll checks and check register
- Miscellaneous deductions
- Quarterly state and federal unemployment report
- Hourly rate summary by skill code
- Year-to-date register
- Year end W2 forms
- Employee leave report
- Labor distribution and analysis
- Void/Manual check register

NOTES

REPORT & QUERIES



DATABASE

- Accounts Receivable Years
- Item Demand History Years
- General Ledger Years
- Countries
- States
- Inventory & Address Groups
- Payment Tenders
- Accounts Receivable Billing Terms – Julian
- Accounts Receivable Billing Terms – Monthly
- Sales Tax Authorities
- Sales Tax Tables
- Address Classes
- Locations
- Employees
- Freight Carriers
- Manufacturers
- Suppliers
- Cross Reference Manufacturers
- Additional Contacts
- Customers – Name & Address
- Customers - Accounts Receivable Information
- Customers – Order Entry Information
- Customer Profiles
- Pricing Matrices
- Costing Matrices
- Purchase Quantity Breaks
- Inventory Adjustment Codes
- Accounts Receivable Adjustment Codes
- Can-Use, Extended Description, Supercession, and Related Items

ORDER ENTRY

- Re-print Picking Ticket
- Re-print Invoice
- Open Orders by Sales Representative
- Customer Backorders – Nonstock Item
- Customer Backorders – All Items
- Price Override & Gross Margin Errors
- Ship Quantity Override
- Lost Sales
- Monthly/Quarterly Sales Tax Report
- Customer Core Bank Statement
- Customer Specific Price Sheets
- Customer Specific Shipping Labels
- Order Specific Shipping Labels

ACCOUNTS RECEIVABLE

- Aged Trial Balance
- Over Credit Limit / Past Due
- Customer Statements
- Re-print Daily Invoice Register
- Re-print Monthly Invoice Register
- Re-print Daily Sales Register
- Re-print Monthly Sales Register
- Re-print Daily Activity Summary
- Re-print Monthly Activity Summary
- Re-print Daily Operating Statement
- Daily Payments Recap
- Open Deposits Report

SALES ANALYSIS

- Sales Representative Commission Report
- Sales, Productivity Analysis, & Commission by Employee
- Sales By Customer
- Customer Performance Report

- Sales By Manufacturer
- QWIK-ORDER Sales By Customer
- Gross Margin Return On Investment

PURCHASING & RECEIVING

- Re-print Purchase Order
- Open, Closed or Past Due Purchase Orders
- Barcode Labels – Select Purchase Order
- Barcode Labels – Manual Entry
- Pricing Labels For Receipts
- Putaway Labels for Receipts
- Re-print Receiving Reports
- Overstock Report
- Seasonal Items Report
- Suggested Buy Report
- Suggested Transfer Report

PRICING AND COSTING

- Old/New Base Prices
- Old/New Resale Prices
- Old/New Cost Prices
- Pending Price/Cost Changes
- Effect of Cost Change

PHYSICAL INVENTORY

- Count Sheets
- Re-count Sheets
- Physical to Book Comparison
- Item Addition Sheets
- Zone/Bin Restocking List
- Inventory Adjustments

ACCOUNTS PAYABLE

- Company File Listing
- Vendor Master File Listing
- Bank File Listing
- Mini Chart of Accounts Listing
- Terms File Listing
- Recurring Transactions Listing
- Open Item Report
- Distribution Report
- Aged Cash Requirements Report
- Vendor Analysis Report
- M-T-D Check Register
- Paid History Report
- Accounts Payable YTD 1099 Report

GENERAL LEDGER

- Company File Listing
- Chart of Accounts Listing
- Standard Transaction Table
- Statement Processing Controls
- Statement Consolidation File
- Tailored Statement Formats
- Budget Proof Listing
- Trial Balance Report
- Budget Analysis Reports
- History Reports
- MTD Journal
- MTD Ledger
- YTD Ledger
- Calendar Year Reports
- End Of Year Reports

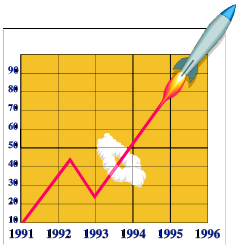
PAYROLL

- Company File Listing
- Adjustment File Listing
- Employee Master Listing
- Payroll General Ledger Table
- Labor General Ledger Table
- FUI/SUI Control Listing
- Workmen's Compensation Listing
- Tax Table
- Earnings Input Form
- Payroll Transactions Listing
- Void/Manual Check Proof
- Recurring Timecard Listing
- Payroll Check Register
- Quarterly Report
- Hourly Rate Summary
- YTD Register
- Quarter-To-Date Register
- Quarter-To-Date Adjustment Register
- Workmen's Compensation Report
- Labor Reports

NOTES

OPTIONAL SYSTEM MODULES

Optional System modules may be added to the base System that will enable it to be customized to fit the specific requirements of your business.

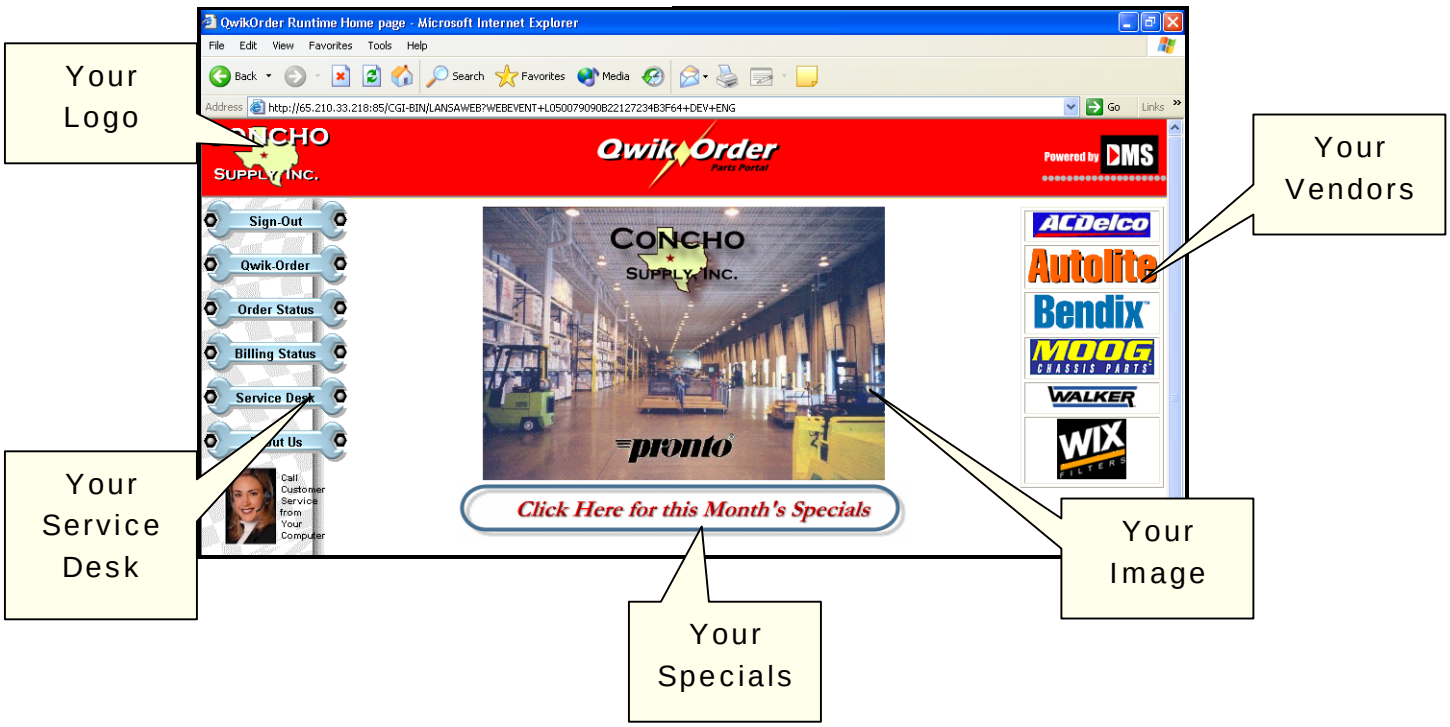


* **Serial Number Tracking** - provides features needed to track and analyze serialized items.
* **Contract & Promotional Pricing** – Contract Pricing is used to manage by customer a certain price or discount for one or more items for a defined period of time. Promotional Pricing is used to give eligible customers a certain price or discount for one or more items for a defined date range and allows cloning to future sales periods.
* **Multibranch Management (On-Line)** - designed to manage the on-line operations of multiple remote branches on a Host System. This Module manages and consolidates all Inventory, Purchasing, Receiving, Accounts Receivable, and Sales Analysis files for multiple locations.
* **Qwik-Order** – is a specialized EDI Customer-to-Warehouse Distributor Inquiry, Ordering, and e-Mail application that allows customers and salesmen to access the WD System to check stock, place orders, and send/receive messages. It is a “Client (PC) – Server (ISERIES 400)” Internet application that requires a broadband Internet connection and a PC running the MS Internet Explorer web browser. Qwik-Order is designed to operate over the Internet to the DMS I/Net host server module.
* **Credit Card Authorization** - provides automated credit card authorization processing from all System Order Entry workstations through a centralized phone line connection to the credit card clearing authority.
* **Query/’Ad Hoc’ Report Writer** – This popular IBM iSeries 400 program allows custom reports and queries to be created and changed as desired.
* **Lotus Notes Word Processing** – comprehensive integrated software program that includes full-function word processing with proof-reading aids, electronic mail, and calendar features. This program integrates with Query to provide mail merge capabilities to produce custom documents.
* **Transnet EDI Orders** - provides EDI capability to process and electronically transmit purchase orders, receive price updates, and inventory maintenance information from MEMA, an Automotive Parts Industry source.
* **Nu-Way EDI Pricing** - provides an EDI link to a price updating service via modem or tape for over 400 automotive and truck parts companies with a pricing database in excess of 2 million records.
* **PC Load-Pac & Pricing** - provides for the creation and updating of inventory item records from ASCII files provided by manufacturers and/or suppliers. PC readable files in data or report format (Excel, Lotus, etc.) may be converted and uploaded to the DMS ISERIES 400 System to handle situations where vendors are not included in the larger pricing databases.
* **Engine Kit Catalog** - interfaces with Order Entry to search and retrieve item numbers from a pre-defined file based on inputting a combination of year, make, model and engine size. The kit file is also integrated into this module to display all components required for a given kit master record.

* **Service Work Orders** - provides users with repair/rebuild service facilities to maintain by vehicle and mechanic an open work order file for work or service in progress until the job functions are completed and ready for final billing and labor analysis. Screen labels are user-defined and labor items may be entered to specify employee, job, rate, and cost information for use during the Order Entry process.
* **Integrated Fax** - provides System wide capabilities for sending or receiving faxes. Automatic fax processing to fax statements, invoices, purchase orders, and “Ad-Hoc” faxes to selected groups of customers or suppliers. Normal faxing of memos, letters, invoices, etc. is supported from any user's workstation on the System. Copies of both outgoing and incoming faxes are retained on-line until purged by the user.
* **Electronic Parts Cataloging** - provides easy access to automotive and truck parts selection from any terminal on the System. The DMS Electronic Parts Cataloging module can access a variety of different catalog databases including Profit Pro, CFS, and others.
* **UPS Shipping** - provides an automatic interface to a UPS shipping system to maximize the efficiency and accuracy of shipping operations.
* **On-Line Time and Attendance** - provides payroll interfaced time clock functions for System users to "punch in & out" from their workstations.

QWIK-ORDER

Qwik-Order™ is a Web-based "Parts Portal" offered to DMS customers as a Value-Added Subscription Service to help you provide your customers with a 24 x 7 real-time ordering, cataloging and customer service solution.



DMS hosts a custom web-site portal for your business that connects your customers via the Internet to your DMS system as well as providing sales and top-tier technical support. All of this is available as a low-cost, turn-key monthly subscription service that will increase your competitiveness, dramatically lower your sales costs and helps prevent the loss of customers and sales to your increasingly "web-savvy" competitors.

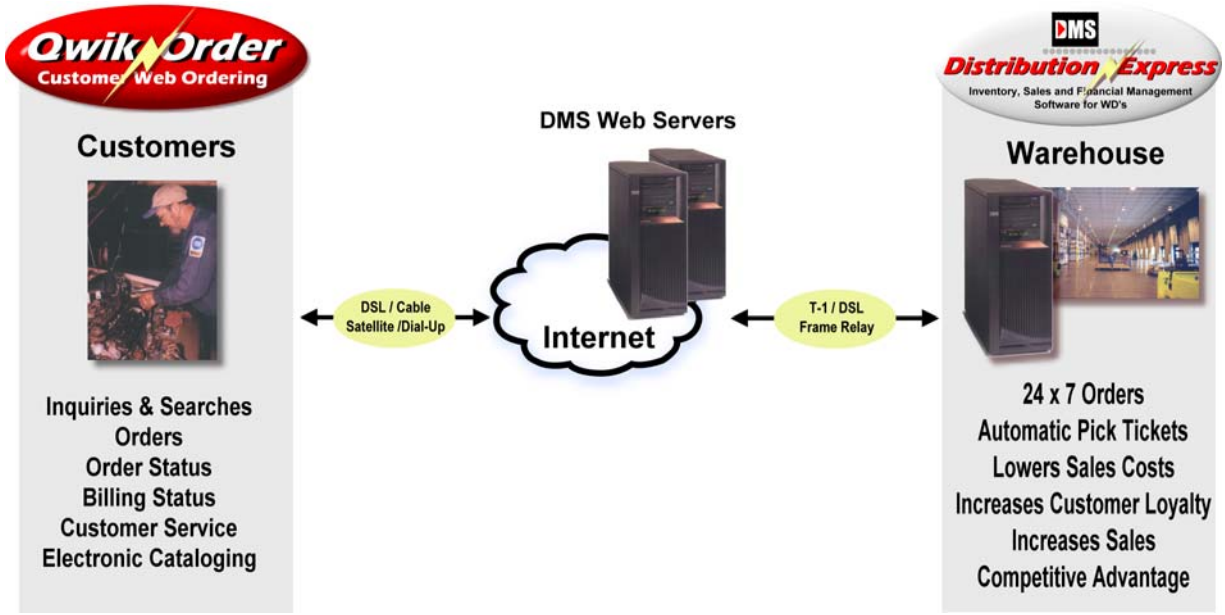
Benefits For Your Customer

- Easy-to-Use PC Browser-based Ordering System
- Real-Time Warehouse Inventory Availability and Customer Specific Pricing
- Electronic Parts Cataloging
- Automatic Order Generation at Warehouse – 24 x 7
- Real-Time Order Status with Order Detail
- Real-Time UPS & Fed-Ex Shipping & Tracking Status
- Real-Time Billing & Account Status with ability to retrieve invoice copies and payment history
- On-Line Return Goods Authorization (RGAs)

Benefits For You

- Increases Customer Purchasing Loyalty
- Increases Sales with 24 x 7 Accessibility
- Decreases Your Current Cost of Sales
- Decreases Load on WD Order Entry Staff
- Increases Customer Service Levels
- Processes More Sales Transactions While Minimizing Personnel and Overhead Costs
- Turn-key e-Commerce Solution
- Decreased Phone, Fax & Personnel Costs
- **Increased Competitive Advantage**

How it Works



WD Requirements

T-1, DSL or Frame Relay Connection to the Internet

How It Is Implemented

1. You commit to rollout the Qwik-Order service to your “Key” customers.
2. DMS designs and develops a custom web site portal for your business and hosts it on their Internet Web Servers.
3. DMS’ dedicated Qwik-Order Marketing Staff helps you develop an implementation plan and rollout schedule.
4. You determine your top customer prospects (the 20% that are providing 80% of your sales volume) and DMS then researches each customer’s access to DSL or Cable high-speed Internet connections.
5. DMS helps you create an invitation to “Key” customers (20-25 suggested) for a Qwik-Order introduction meeting.
6. DMS helps you plan and conduct a Qwik-Order customer meeting to sign-up your initial group of customers.
7. DMS Qwik-Order Marketing Staff trains your Qwik-Order Support person and assists in on-site implementation of your first customers.
8. DMS provides on-going support to your sales staff and Qwik-Order Support Specialist.

What It Costs

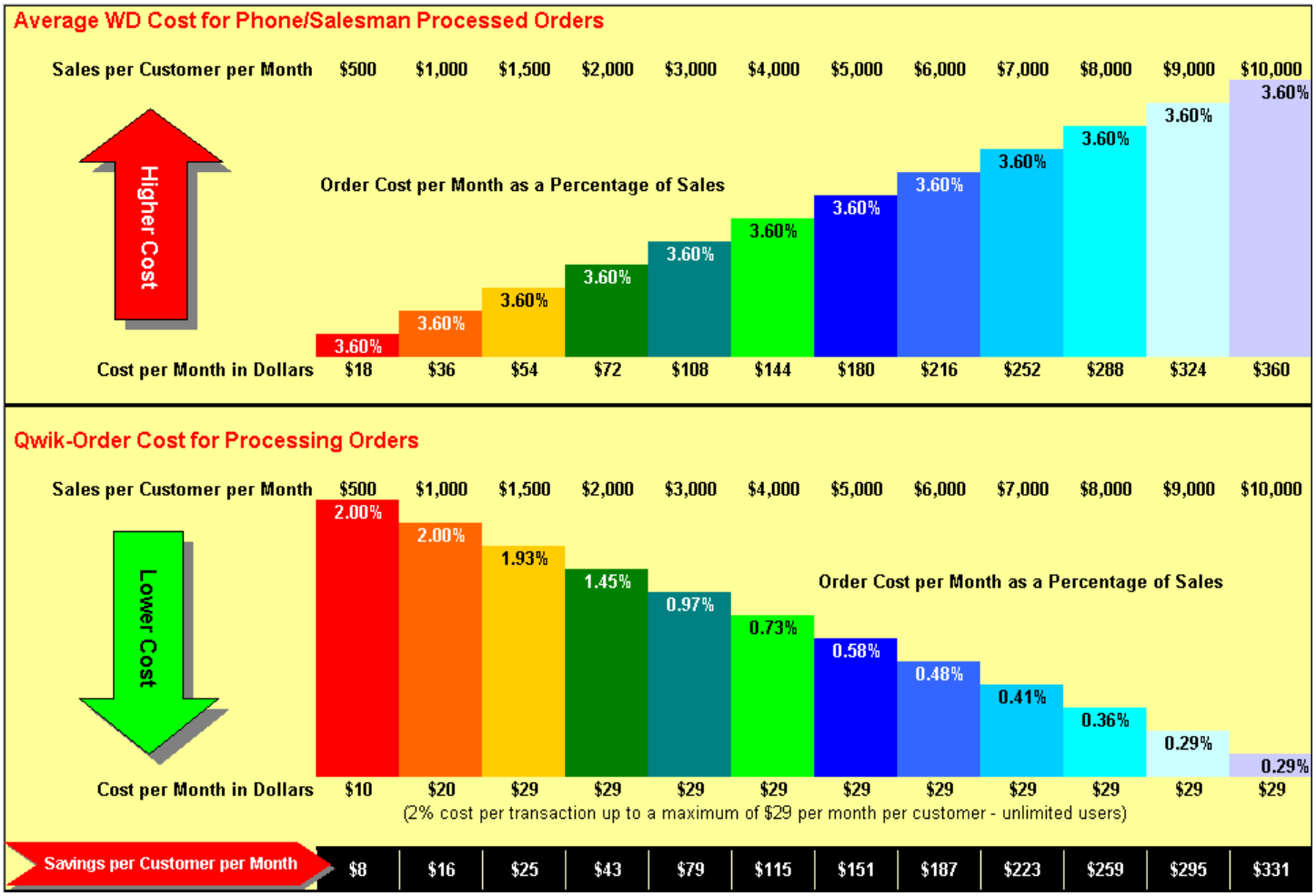
- A small, one-time setup fee for development and customizing your Website and Internet Licensing charges.
- A low monthly Website Management and Internet Server Hosting fee that is volume-reduced to FREE.

  A low monthly variable service fee of up to 2% of sales for each Qwik-Order customer with a maximum cap of $29.95 per *customer. Plus, you can connect one or more terminals at no extra charge!)*

Return-On-Investment

- Industry statistics show that your customers place FOUR (4) phone calls before an order is placed.
- Each order that you take by phone costs 12% to 18% of the sale based on fixed, personnel, and phone costs. On a $100 order, your traditional sales cost is $12 to $18 just to take and run it through your current system!
- An order received through Qwik-Order costs approximately 2% or less. That’s a **$10 to $15 savings per order**!
- You can recover the cost of the monthly service to your customer with less than $ 4 per day in new sales.
- After the first few customer Internet-placed orders are received through your Qwik-Order Website each month, ***you can be putting $10 or more per Internet-placed order directly to your bottom line!***

Qwik-Order “e-Business” vs. “Business As Usual” Order Cost Analysis



*Receiving and processing orders via the Internet with **Qwik-Order** can save you from **40%** to **90%** over the cost of processing them through your call center. Qwik-Order savings flow directly to your bottom line. If you have a 30% gross margin for example, these savings would be equivalent to a sales **increase** of from $250 to $1,000 per customer per month or more!*

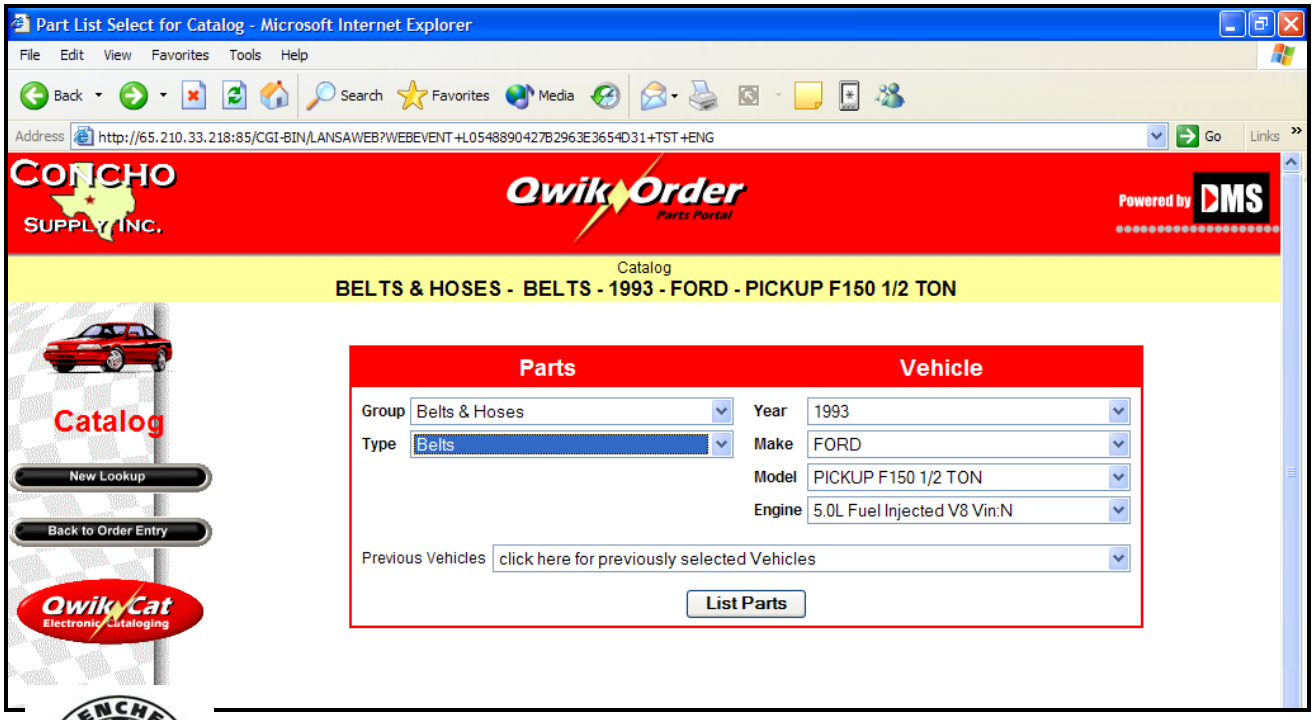
Customized Internet Ordering + Order Tracking + Cataloging + Billing + Service Desk for *LESS THAN $ 1 A DAY PER CUSTOMER!*

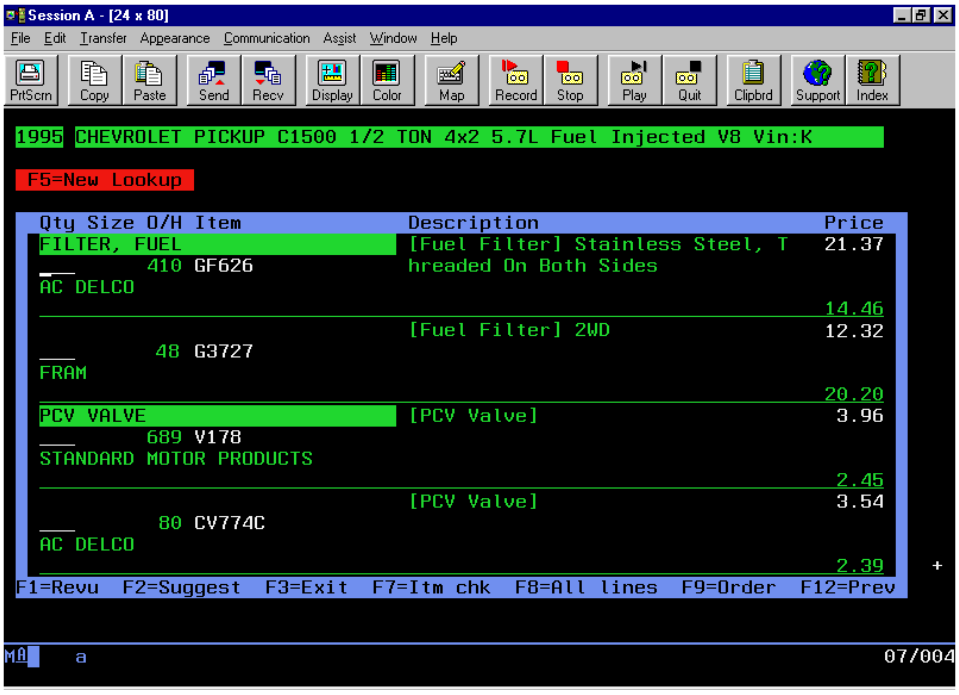
 www.dms-systems.com 1.888.985.2500

QWIK-CAT

Qwik-Cat is an easy-to-use and extensive Auto Parts and Light/Med. Truck cataloging system that is available in both web browser and traditional "green screen" versions.

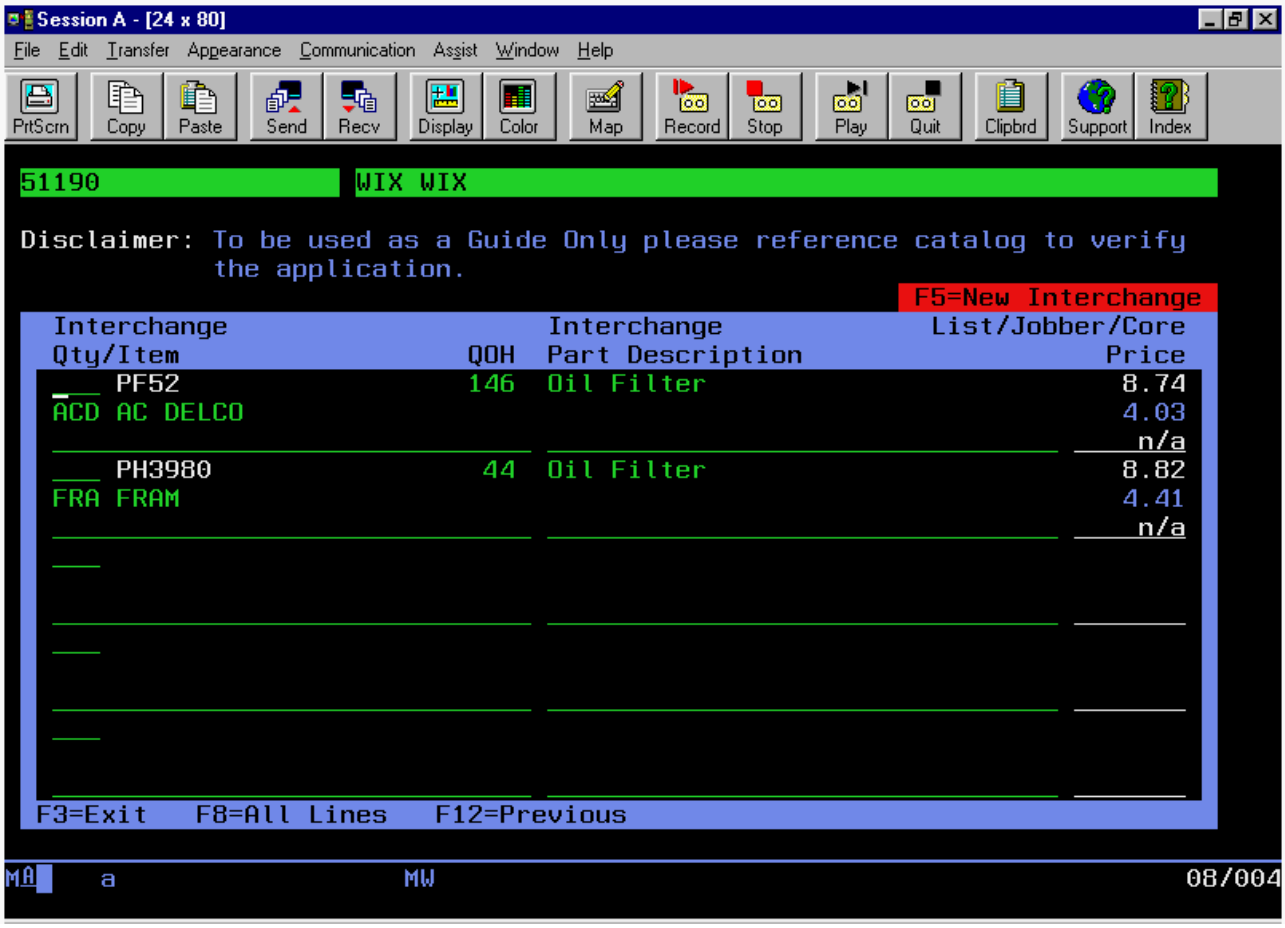
Featuring the '**2003' new and enlarged Wrenchead Catalog**, **including Interchange, Buyer's Guide, All Lines and Manufacturer Pricing**. *Qwik-Cat* will save you time and money!



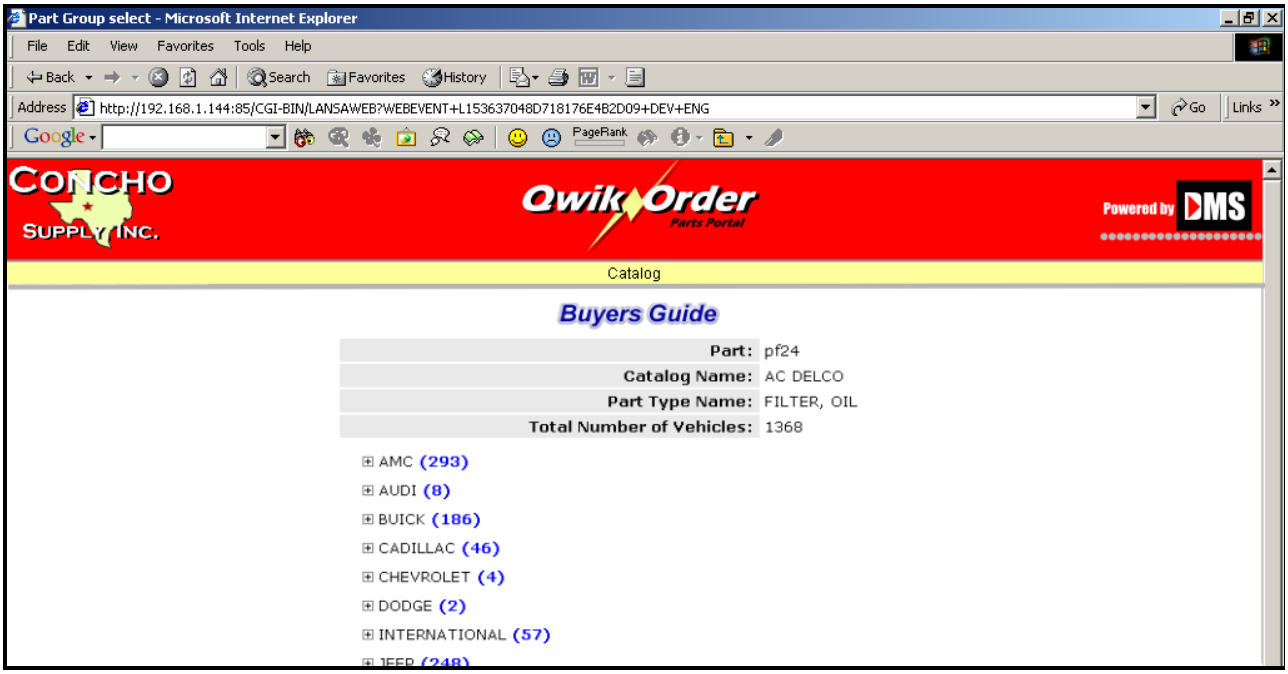


- Includes parts applications covering passenger cars, light trucks and medium duty vehicles dating back to 1967.
- Coverage exceeds 2 million hard part & accessory part numbers.
- Over 940 manufacturer lines and growing every month.
- Thousands of "Smart Pages" available with product images, technical data and specifications.
- Parts Interchange.
- Buyer's Guide
- All Lines
- Mfg. Pricing

Example of "Green Screen" version of the Wrenchead Part Interchange feature.

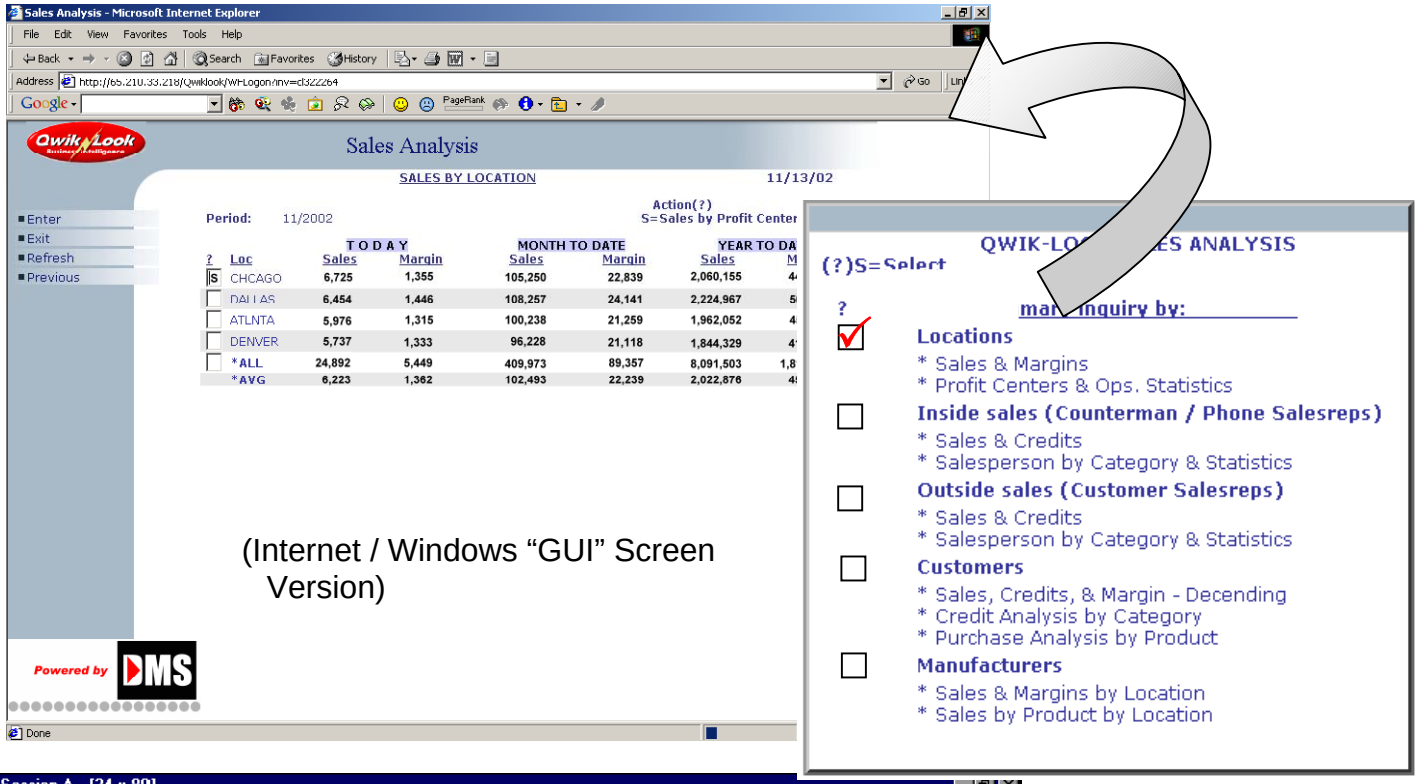


Example of the Wrenchead Buyer's Guide accessed through *Qwik-Order*.

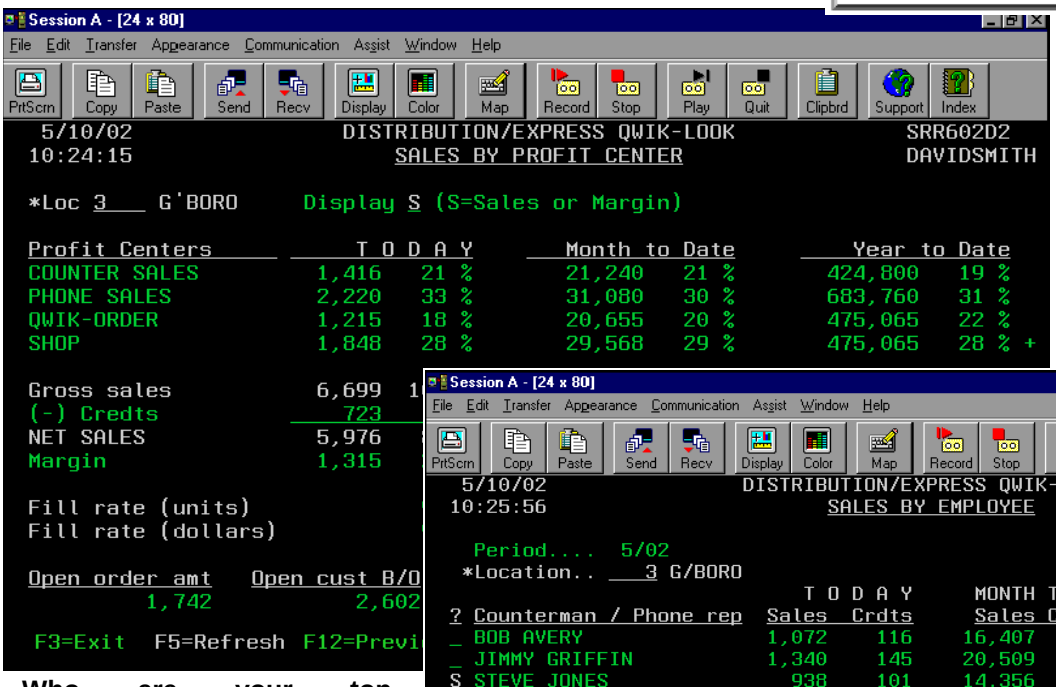


QWIK-LOOK

Qwik-Look™ is a Business Intelligence application that provides you real-time access to important data about your Company's operational and financial performance. Now you can know instantly with our "drill-down" process, up-to-the-minute Sales, Inventory, Purchasing & Receiving, Cash and Payables so that you can make intelligent and timely management decisions.



(Internet / Windows "GUI" Screen Version)

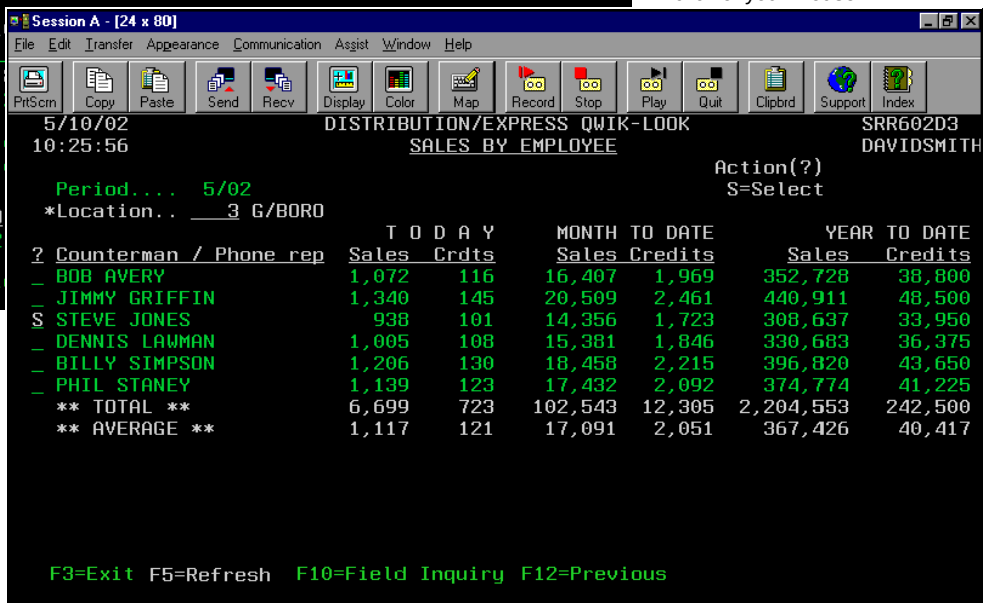


What are your sales by Profit Center – *at this minute?*

What are your Fill Rates? This key performance measurement is updated in *real-time* as sales are made.

What are your Profit Margins and Inventory Turns?

Qwik-Look offers true "drill-down" Business Intelligence at a click of your mouse!



Who are your top customers?

Who are your most profitable customers?

Who are your most profitable vendors?

Easy – Fast – ***SMART!***

QWIK-SCAN

Qwik Scan Wireless BarCode Scanning

"Wireless Warehouse Barcoding"

Pick – Ship – Receive – Put Away - Count

Qwik-Ship – provides a *paperless* method to create electronic pick tickets to pick and ship orders faster and more accurately – **resulting in reduced labor costs and increased profits**.

Warehouse personnel equipped with wireless hand-held RF barcode scanners display orders and scan items to maximize picking and pricing productivity and accuracy.

Qwik-Receive – provides a *paperless* method to process, Receive and Put-Away products from incoming Vendor Shipments and RMA Customer Returns.

Warehouse personnel equipped with wireless hand-held RF barcode scanners receive incoming Purchase Orders and process customer returns on a "real-time" basis, thus eliminating accuracy and timing issues in updating inventories available for sale to customers.

symbol

Wireless Hand-Held Scanner

Qwik-Count – provides a *paperless* method to conduct quick Physical Inventory and Cycle Counts of warehouse inventory.

Warehouse personnel equipped with wireless hand-held RF barcode scanners can quickly and accurately conduct physical inventory counts to improve inventory accuracy, financial accountability and inventory management analysis of a Distributor's inventory investment.

Qwik-Label – provides an easy method to create custom printed labels for products, shelf labels and shipping packages with al printers and Ashford are.

Wireless Access Point

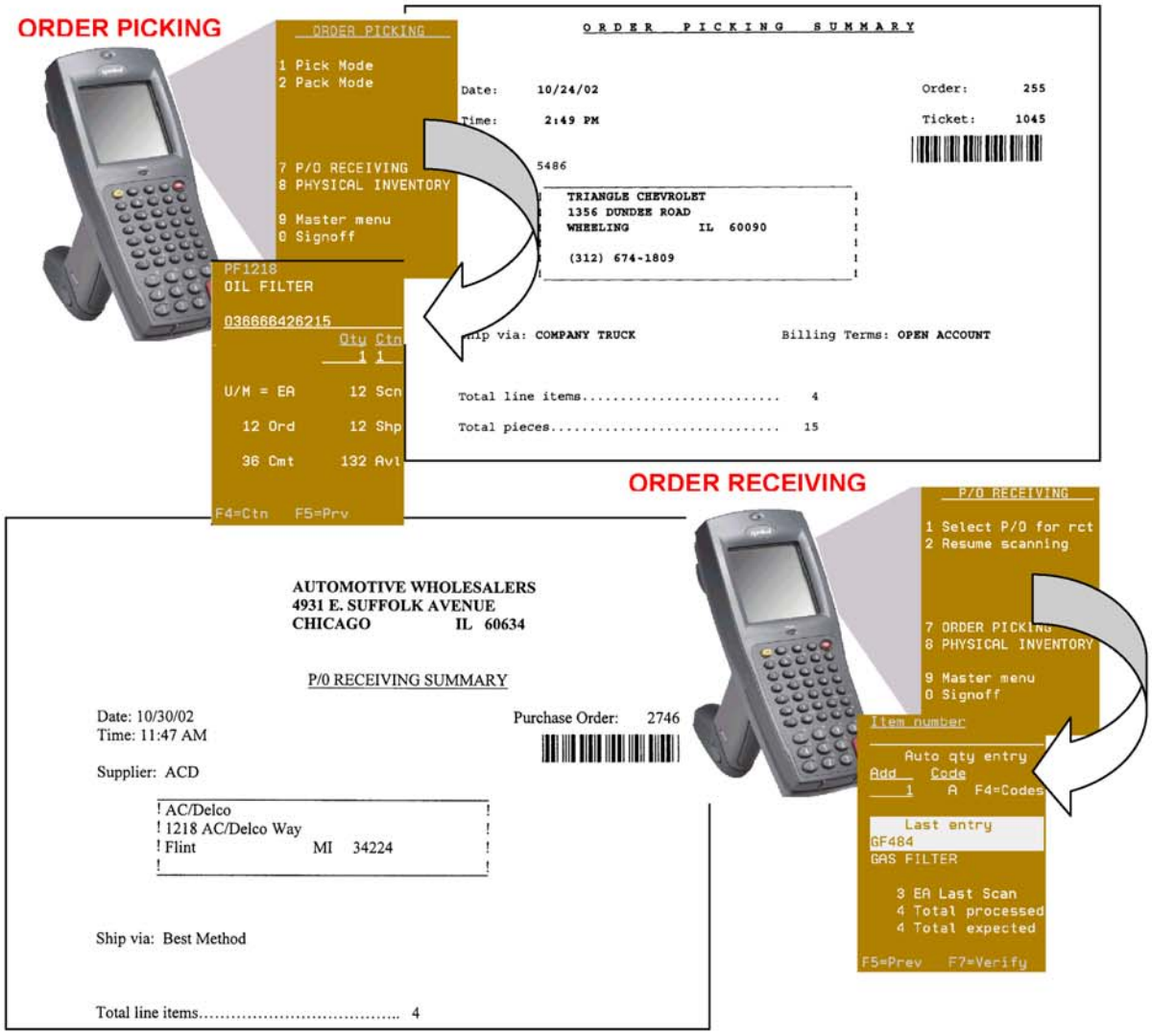
Benefits:

- ***Fast, Accurate & Easy-to-Use!***
- ***Requires only ONE person for Picking, Receiving and Counting!***
- ***A Major Labor-Saving Business tool!***
- ***Lowers Warehouse Costs and Increases Profits!***

Zebra Barcode Printer

DMS Supply Chain Solutions

Call DMS Now at 1-888-985-2500 to Order!


ORDER PICKING
ORDER PICKING
1 Pick Mode
2 Pack Mode
7 P/O RECEIVING
8 PHYSICAL INVENTORY
9 Master menu
0 Signoff
PF1218
OIL FILTER
036666426215
Qty Ctn
1 1
U/M = EA 12 Scn
12 Ord 12 Shp
36 Cmt 132 Avl
F4=Ctn F5=Prv
ORDER PICKING SUMMARY
Date: 10/24/02
Time: 2:49 PM
Order: 255
Ticket: 1045
5486
TRIANGLE CHEVROLET
1356 DUNDEE ROAD
WHEELING IL 60090
(312) 674-1809
Ship via: COMPANY TRUCK
Billing Terms: OPEN ACCOUNT
Total line items..... 4
Total pieces..... 15
ORDER RECEIVING
P/O RECEIVING
1 Select P/O for rct
2 Resume scanning
7 ORDER PICKING
8 PHYSICAL INVENTORY
9 Master menu
0 Signoff
Item number
Auto qty entry
Add Code
1 A F4=Codes
Last entry
GF484
GAS FILTER
3 EA Last Scan
4 Total processed
4 Total expected
F5=Prev F7=Verify
AUTOMOTIVE WHOLESALERS
4931 E. SUFFOLK AVENUE
CHICAGO IL 60634
P/O RECEIVING SUMMARY
Date: 10/30/02
Time: 11:47 AM
Purchase Order: 2746
Supplier: ACD
AC/Delco
1218 AC/Delco Way
Flint MI 34224
Ship via: Best Method
Total line items..... 4
PHYSICAL INVENTORY
PHYSICAL INVENTORY
1 Count by scanning
2 Recnt by scanning
4 Spot count by item
7 ORDER PICKING
8 P/O RECEIVING
9 Master menu
Item
Add qty
Last entry
AX103
TRI-POWER BELT
360 EA
368 Total count
370 Total book
F3=Exit F5=Prev
PHYSICAL INVENTORY
Location: TAMPA
REGULAR
Date: 10/30/02
Time: 8:50:02
Batch # 1
Page 1
Mfg Page to Page #Items
ACD 1 991 27748
ACL 992 1087 2663
1088 2101 28367
CLO 2102 2170 1915

TIMESOFT TIME & ATTENDANCE

Complete **and** Flexible **Time and Attendance Solution.**

Timesoft iSeries makes processing and reporting labor data easy.

Timesoft iSeries is a powerful and reliable automated time and attendance software that resides on your IBM iSeries (AS/400) midrange system that automatically collects, processes and calculates employee time and attendance data as well as provides an abundant amount of informative reports for better decision making. Timesoft iSeries prepares labor data for transfer to your payroll application, eliminating error prone manual methods and gives your company direct control over your wage rules and payment policies while delivering an abundant amount of resources to gain control in what may be your company's biggest expense: payroll. Overall Timesoft iSeries software saves your organization time and money by maximizing employee productivity.

• ***Cut*** *payroll preparation time by up to 80%*
• ***Start making*** *sound labor decisions based on accurate and timely employee time data*
• ***Free your staff*** *from less than efficient systems or outdated manual methods*
• ***Gain complete control*** *over your time and attendance operation*
• ***Gain insight*** *into employees' attendance patterns*

In today's competitive business environment - ***maximizing time, money, and employee productivity*** *is vital to your business' survival and continued success. Timesoft iSeries gives you the tools you need to boost productivity and ensure consistent and reliable results.*

Flexible Data Collection Options

Timesoft iSeries software provides three distinct options to capture employees time and attendance transactions. Allowing you to choose the input method or methods best suited for your organization.

- **Timesoft eClocks** - ***Intelligent Data Collection***
- Intelligent and reliable Timesoft eClocks validate, collect, and store employee time data even if your iSeries (AS/400) is temporarily down.
- Timesoft eClocks work off-line without consuming your iSeries' resources. Connect an unlimited number of Timesoft eClocks to a single IBM iSeries and forget about time data retrieval by defining an automatic eClock polling schedule.
- Timesoft eClocks are available in a wide variety of configurations. Timesoft eClock connectivity options include RS485, Modem, and TCP/IP.
- **Computerized Data Collection**
- *Timesoft Time Entry Module* gives your company the added flexibility to have employees punch through a computer or terminal with access to the IBM iSeries (AS/400).
- *Timesoft TimeSheet Module* allows employees to input their own start and stop times or hour totals.

Feature Summary

• Multi-company, multi-location, multi-pay periods

• Each software license comes with unlimited user profiles
• User profiles with password, department(s), and option level security
• Calculates weekly, bi-weekly, monthly, and semi-monthly pay periods
• Process regular, daily and weekly overtime
• Process vacation, sick, and personal hours
• Automatic calculation of comp time (converts overtime hours into personal hours for future employee use)
• Unlimited shifts/departments/pay policies
• Prepares time cards online
• Hours Approval Enforcement with Exception Report for hours not yet approved
• Lockout window - prevents unauthorized time
• Tracks hours by worked department/earning code
• Ensures consistent pay policies
• Tracks both hourly and salaried employees
• Processes paid, non-paid, and user-defined hours
• OT1 & OT2 rate multiplier
• Re-assign badges & employee numbers without losing link to history hours
• Assign employee to supervisor for reporting sorting purposes
• Holiday eligibility rules for hourly and salaried employees
• Massive entry of holiday hours
• Pay policy allows exception paydays (example: pay overtime on Sunday regardless of hours worked)
• Audit trail of manual hour edits with detail add/changes report
• Employee's can quickly view current/past worked hours (Available with Terminal Time Entry Module only)
• Smart design eliminates need for employees to press in/out keys. Makes clocking in/out fast and easy.
• Hundredths (.xx) or tenths (.x) hours calculation
• Flexible rounding rules - 1\4 hr, 1/10 hr, total hours worked, and actual punch.
• Quickly access history hours for up to 99 months
• Optional employee scheduling
• Optional benefit accrual module
• Powerful Lunch Rules - actual lunch, auto lunch deduction, and minimum lunch enforcement with optional grace minutes
• Provides flexible shifts
• Time and shift differential with optional extra % or $ amount
• Year to date hours accumulators
• Employee's rate for gross wages calculation
• Time Card Editor allows online re-calculation of hours
• Who is here today? inquiry
• Can process multiple pay periods simultaneously
• Quickly identifies paid-break time abusers
• Track/report on reason codes
• Software sells ready to connect unlimited local/remote eClocks
• Allows employees to clock in/out at different time clocks
• And much, much more...

Standard Modules

The following modules are included at no additional charge with base system purchase.

- Automated Time and Attendance
- Security by User Profile
- Hours History
- Reason Code Profile
- Generic Payroll Interface File
- Time Clock Manager
- Scheduled Auto Polling
- Scheduled Auto Calculation
- Earning Code for time & shift differential
- Lockout to prevent unauthorized clocking
- Year to Date Accumulator
- Time Clock Data Input Validation

Optional Modules

The following modules are optional and can be added at time of purchase or as need arises to add further functionality to your Timesoft iSeries system. These modules are completely integrated with Timesoft iSeries software and are sold separately.

- Benefit Accruals
- Scheduling
- Customized Payroll Interface File
- Time Entry
- TimeSheet
- Bell Control
- Labor Tracker

NOTES

DESKMASTER

DeskMaster™ is the complete office system for the AS/400. This highly integrated solution provides you with electronic mail, word processing, calendaring, and a set of personal productivity tools to help you stay organized.

Your AS/400 users can use DeskMaster to send and receive electronic mail to and from the Internet and other AS/400's without needing expensive PC's. That's right, AS/400 users can finally send e-mail to practically anyone using their "green-screen" terminals.

Using intuitive pop-up windows, DeskMaster has a look and feel AS/400 users could previously only wish for. Feature rich, easy to use, and extremely affordable, DeskMaster is simply the best office solution for the AS/400.

New! DeskMaster now includes a utility to convert your existing OfficeVision documents to DeskMaster!

Features (click on each link for details)

- Electronic Mail
- Word Processing
- Calendar
- Phone Directory
- Personal Productivity Tools

NOTES

DMS DATABASE CONVERSION SERVICES

DMS normally includes 50 – 80 hours of database conversion services in your proposed System configuration to transfer the "key" data files from your old system to your new DMS AS/400 System. Any further custom database conversion services performed beyond the allocated hours will be billed at a standard DMS programming rates as outlined in your Sales and License Agreement. This conversion service allowance has proven to be adequate for the majority of DMS customers and covers the conversion of selected data from the listed database files. A listing of the specific fields found in the Customer and Item Master Files was provided to you earlier in our System Presentation Booklet.

UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUCustomer Master File

Accounts Receivable File

Summary Customer Balances by Aging Period

Item Master File

- Manufacturer, Part Number, & Description **(*)**
- On-hand Balances, Item Demand History by Month, and Item Costing & Pricing – All Locations

Accounts Payable

Most customers elect to pay previously entered payables from their old system and manually transfer any remaining unpaid items to their new System. All new payables entries will be entered on the DMS System from cutover date forward.

General Ledger

Since DMS provides custom tailoring of financial statements and balance sheets during the training and installation phase, customers have the opportunity to create GL accounts and transfer balances during that phase of the installation.

Payroll

Due to the complexity and sensitivity of payroll data, this data is manually entered under supervision of the DMS trainer during the installation phase.

You will be responsible to provide your existing system's files in machine-readable form in PC format (ASCII delimited, Xbase) or AS/400 readable file format with defined file layouts. Most systems have the capability of exporting their system's files to an external PC spreadsheet program like Excel or Lotus that will give us the data in the ASCII format we require.

(*) Sometimes when existing databases are inaccurate or incomplete, customers elect to build their item database from "load-packs" created from industry pricing databases like Nu-Way. DMS has existing conversion programming in place to accommodate database load-packs from this source.

SYSTEM PLANNING CONSIDERATIONS

Cabling

Due to the wide variation in requirements, cabling is not included in DMS System proposals. Cabling includes both the hardware and installation (pulling) of wiring for displays, printers, “wireless” access devices, routers, and modems.

Cabling for iSeries 400 Systems may be Cat 5 Ethernet, Twinax, or twisted pair wiring, either PVC or Plenum, depending on building code requirements. For customers with currently installed IBM AS/400, System/38 or System/36 Systems, the cabling in place will probably suffice. (Please review the attached document on System cabling). Once requirements are defined, DMS can provide bulk or pre-assembled cables and other hardware components at competitive prices. For planning purposes, cables will usually average $35 each.

Data Conversion

Except for customer upgrades from earlier DMS Systems, data conversion is an optional service in DMS proposals.

Due to the functional richness of the Distribution/Express System, there is usually not a match between the record layout of the Distribution/Express System and other computer systems. This means that even with data conversion, each record must be accessed and updated with user-specified data to realize the full functionality of your new DMS System. In addition, many databases become contaminated over time with discontinued items, bad part numbers (dashes/slashes), old customers, etc, and re-keying or converting the data presents an excellent opportunity to clean up the database. DMS can assist you in sourcing a third party auto parts "load pack" for a minimal cost that will provide accurate part numbers that are properly sequenced and current prices to create your new item master file.

Should a customized file conversion be included in the proposal, it is the responsibility of the customer to provide the files in machine-readable form in PC format (ASCII delimited, ASCII SDF, or Xbase) or iSeries 400 readable file format with file layouts. (Contact DMS for tape/diskette formats). During the conversion phase, all changes made after the conversion process starts must be kept updated in the converted database to keep it current with the operating database.

Installation Charges

Since DMS installs Systems throughout the US and internationally, the installation expenses can vary greatly and therefore travel, food, and lodging expenses are not included in DMS proposals. DMS makes every effort to minimize these expenses and will bill these expenses at cost at the completion of each trip to the customer site.

Existing Hardware

DMS will make every effort to utilize your existing hardware components but sometimes terminals, printers, modems, etc are found to be incompatible and without testing, DMS cannot guarantee these units to be compatible with your new System. If this situation arises, DMS will provide competitive pricing for replacement units that will be guaranteed to perform as required for the satisfactory operation of your new System.

System Forms

Standard Forms:

DMS will provide you with a selection of "standard" System paper forms for pick tickets, invoices, statements, purchase orders, accounts payable checks, and payroll checks. If you purchase the DMS Integrated Fax module, DMS will provide you with a set of standard electronic forms for customer invoices, customer statements, and Purchase Orders.

DMS has an established relationship with a competitive forms printer with national distribution and requires that your initial pre-printed form orders go through DMS to ensure accuracy and timeliness of forms delivery for your System installation.

Custom Forms:

DMS will provide customized paper and electronic forms design service to a customer for an additional charge based upon the design, programming and testing time required. Since the time requirements vary from form to form, DMS will provide you with a cost quote for each custom form requested. Most custom form charges usually range between $500 to $1000, depending upon complexity of the form design.

Electronic Telephone Support Line

DMS will require a dedicated analog "dial-up" telephone line to be available when the System is installed. The purpose of this "regular" telephone line is to conduct "dial-in" support via modem to your System for software updates and database reviews. This ECS support line allows the DMS Support Desk to provide immediate response to any System problems or user questions

NOTES

CONTACT US

Ready to take the "Next Step"? Have questions? Please give us a call or drop us an email.

We look forward to becoming your business information system partner!

DMS Systems Corp.
PO Box 8049
Rocky Mount, NC 27804

252-985-2500

252-985-1900 Fax

info@dms-systems.com

http://www.dms-systems.com