Basic Four® Manufacturing System

BASIC FOUR MANUFACTURING SYSTEM

ACCOUNTING CONTROL

Special Features

- Billing from an open Sales Order or by direct invoice creation.
- Sales Tax report of both taxable and non taxable sales can be used to summarize $ sales by country, region or zip code, if desired.
- Cash receipts allow both A/R and Non A/R entries.
- Calculation and application of service charges on past due accounts.
- A/P Cash Requirements aged by due date into categories defined by user.
- Payroll allows multiple rates per employee.
- Payroll taxes are table driven to allow user to do new year tax table changes.
- Payroll allows for automatic check reversal by entry of employee code and check number.
- General Ledger Asset Accounting uses both depreciation and ACRS.
- General Ledger allows the journal entry of items that are automatically reversed next period.

BASIC FOUR MANUFACTURING SYSTEM

ACCOUNTING CONTROL

The Accounting Control module is a totally integrated financial management system. The applications which comprise this module are: Customer Billing, Accounts, Receivable, Accounts Payable, Payroll, and General Ledger. The applications may be installed separately and in any sequence. Each application may be modified to meet various management needs.

Reduction in Clerical Effort

- Automatic calculation of discounts.
- Automatic preparation of A/P checks, Payroll checks, 941's, W2's, Invoices, Customer Statements and Financial Statements.
- Automatic posting of transactions to the general ledger.
- Payroll government/union reports automatically created.

Improved Cash Management

- Customer aging reports to improve customer payments.
- Cash requirements planning.
- Current and accurate financial information.
- Payment control over Accounts Payable checks.

Current Management Information

- Inquiry capability to determine financial status of customers and vendors.
- Inquiry into transaction activity of general ledger account.
- Prompt generation of financial statements at month or period time.

Flexibility

- Ability to process manual Accounts Payable and Payroll checks.
- Full maintenance and adjustment capabilities with proper controls and audit trails.

ACCOUNTING CONTROL/CAPABILITIES

Customer Billing

- Invoice Entry
- Credit/Debit Memo Entry
- Invoice & Memo Printing & G/L Distribution
- Invoice & Memo Register Print
- Sales Tax Report
- Sales G/L Distribution
- Master File Maintenance

Accounts Receivable

- A/R Inquiry
- Credit/Debit Application
- Cash Receipts Application
- Cash Receipts Register & G/L Distribution
- Aged Trial Balance
- Service Charge Calculation
- Service Charge Register & G/L Distribution
- Customer Statement Printing
- A/R Update (remove zero balances)
- Adjustment Entry
- Adjustment Register and G/L Distribution
- Manual A/R Entry
- Manual A/R Register and G/L Distribution
- Customer File Maintenance

Accounts Payable

- A/P Inquiry
- Voucher Entry
- Voucher Register and G/L Distribution
- Cash Requirements
- Payment Selection
- Preliminary Check Report
- Check Printing
- Final Check Register
- Adjustment Entry
- Adjustment Register and G/L Distribution
- Manual Check Entry
- Manual Check Register and G/L Distribution
- Vendor File Maintenance
- Vendor File Add
- Year End Vendor File Update

Payroll

- Initialization
- Time Card Entry/Maintenance
- Time Card Edit List
- Gross to Net
- Payroll Register
- Check Printing
- Check Register, G/L Distribution & YTD Update
- Deduction Report
- YTD Employee Earning Report
- Employee Ledger Print & Clear
- 941 Report
- W2's
- Unemployment Report
- Workman's Compensation Report
- Quarter and Year End Update
- Employee YTD File Maintenance
- Employee File Print
- Income Tax Table File Maintenance
- Unemployment Tax Table File Maintenance
- Manual Payroll Entry
- Manual Payroll Register
- Manual P/R Check Register, G/L Distribution & YTD Update
- Manual Payroll Deduction Report
- Payroll Reverse Entry
- Payroll Reversal Register
- P/R Reversal Check Register, G/L Distribution & YTD Update
- Payroll Reversal Deduction Report
- Certified Payroll Report
- Union Report & Statistics
- Union File Maintenance
- Fund File Maintenance

General Ledger

- G/L Inquiry
- Transfer Journal Records to Month-End File
- Fixed Journal Entry Register and G/L Distribution
- Asset Accounting
  - ACRS/Depreciation Register & G/L Distributions
  - Alternate ACRS/Depreciation Register
  - Asset File Maintenance
  - ACRS Table Maintenance
  - Alternate Asset File Maintenance
- Journal Entry
- F/L Trial Balance
- Update for Financial Statement Print
- Financial Statement Printing
  - Income Statement Print
  - Balance Sheet Print
  - Budget Statement Print
  - Budget File Maintenance

General Ledger (Cont'd)

- Update after Financial Statement Print
- Year End Update.
- General-Ledger File Maintenance
  - Description File Maintenance
  - Description File Print
  - Balance File Maintenance
  - Balance File Print
  - Account Finder File Maintenance
  - Account Finder File Print
  - Fixed Journal File Maintenance

BASIC FOUR MANUFACTURING SYSTEM

SALES CONTROL

The Sales Control Module is made up of three applications. Sales Order Processing to enter, Print, maintain and ship customer orders. Sales Analysis to provide marketing insight and calculate salesmen's commissions. Customers satisfaction by allowing inquiries into orders, inventory, purchase orders or work orders on a fast convenient basis.

Improve Customer Service

- Immediate inventory availability check (including multiple warehousing).
- Customer Service can provide fast answers on sales orders, purchase orders, work orders and sales history.
- Automatic back order generation.
- Legible customer acknowledgements and shippers.
- On line - real time inventory update.

Reduce Effort and Errors

- Automatic pricing, sales tax, billing, shipping, salesman and product description information.
- One entry feeds invoicing, back orders, accounts receivable, and general ledger.
- Sales history and salesman commissions are automatically updated.
- All orders available through inquiry - no more searching for paperwork.

Improve Management Control

- Order Booking Register to see how business is going.
- Order Backlog Report to manage in-house work.
- Automatic credit checking.
- Sales analysis to spot to trends new markets, bad products, etc.

Reports

- Order Print
- Picking List
- Packing List
- Order Booking Register
- Open Order Report
- Back Order Print
- Unshipped Parts Report
- Order Backlog Report
- Customer Sales Analysis
- Product Sales Analysis
- Salesman Commission Register

SALES CONTROL/CAPABILITIES

SALES ORDER PROCESSING

Master File Maintenance

The creation, correction and deletion of master file data for customers, Ship to Addressed, Quantity Prices, Contract Prices and Sales Taxing.

Order Entry

Customer orders are entered through the terminal. The keying of a customer number retrieves and displays the customer's information. The user may direct the system to copy the address of the customer as the shipping address or an alternate shipping address can be manually or automatically specified. Line items are entered by part number, and the system displays the part description, units of measure, and price. The quantity ordered is entered and the extension is calculated. Inventory is committed as each part is entered. There are eight different pricing routines in addition to sales tax indicators, no-stock lines and message lines.

Order Printing

All orders entered are printed on order forms. An alignment mask is printed to check for correct paper positioning and reprint capability is provided.

Picking List Print

Prints all items to be picked by bin location within warehouse for all orders received since the last print.

Packing List Print

Prints all items to be shipped by order within ware house for all orders received since the last print.

Order Booking Register

A register which shows all of the information printed on the orders and used for reference to determine dollar volume "booked".

Open Order Report

Shows all un-invoiced orders and back orders in the system. Order number, order date, customer name and number, purchase order number, description, quantity ordered, price and extended price are all printed.

SALES ORDER PROCESSING

Order Maintenance/Inquiry

Any information on an order may be changed, lined added, or lines dropped. Inventory will automatically be updated and reprint capabilities are provided.

Customer Billing

This selection will allow the operator to enter the Customer Billing module.

Back Order Printing

Any order lines which are not shipped complete, automatically create a back order which prints the same information as orders do.

Unshipped Parts Report

Shows current back orders or all open orders in part number sequence; showing part number, description, and quantity for each customer, the customer name, number purchase order number, order date, back order date, and total quantity for each part.

Order Backlog Report

Sorts ordered/unshipped parts into needed date categories; showing part number, description, quantity on-hand, quantity on-order, quantity committed for the four category dates, total, quantity available and the reorder point.

SALES ANALYSIS

Sales Analysis Weekly Update

This function takes sales data from invoicing and updates Sales History files for Sales Analysis by customer and by Product.

Customer Sales Analysis Register and Update

The register is in customer number sequence showing the customer name and number, part number and description, the month's sales for present and previous year with the percentage difference and the YTD sales for the present and previous year with the percentage difference. At month end the period update is accomplished.

Product Sales Analysis Register and Update

Shows in part sequence, all parts and quantities which had activity in any of the last 18 months. An update is done at month end.

SALES ANALYSIS

Display/Print Sales Data

A bar graph of monthly sales for the last 12 months by customer by part.

Salesman Commission Register and Update

A monthly register for each salesman which shows the invoice number, date, customer name, gross sales, discount offered, tax freight, net sales, gross profit, and commissions, with totals in each category and quarter-to-date and YTD commissions. An update is done at month end.

Customer S/A Inactive Record Removal

Removes records where sales for all recorded periods are zero.

Product S/A Inactive Record Removal

Removes record where the prior 18 months show zero sales.

CUSTOMER SERVICE

Stock Status Inquiry

A valid part number is entered and the corresponding description, unit of measure, quantities on-hand, on-order, commitment availability, lead time, and vendor number are displayed. The inquiry can be for total company or by warehouse location. Once the stock status for an item has been displayed, additional inquiry functions are available.

On-order Inquiry

This inquiry is used to determine what comprises the on-order quantities for a part. Outstanding purchase orders and work orders for the part will be displayed showing order number, vendor name, date entered, date excepted, unit of measure, quantity ordered and cost.

Commitment Inquiry

This selection allows the user to determine which customer and work orders to which the part has been committed. Information which will be displayed is order number, customer name, customer purchase order number, date entered, date wanted, unit of measure and quantity.

CUSTOMER SERVICE

History Inquiry

If the History option is selected all customers that purchase the part over the last 12 months will be displayed. Information available for each customer is number, name, quantities purchased each month for the last 12 months, current months as well as total quantities.

Purchase Orders by Vendor

If this selection is specified, the vendor number is entered and all outstanding or selected purchase orders will be displayed. The orders can be displayed either in detail. or summarized format. Information available is purchase order number, date entered, date expected, unit of measure, quantity, and cost. If the detail display is specified, the above information will be shown for each part on the purchase order.

Orders by Customer

If this selection is specified, the customer number is entered and all outstanding or selected sales and back orders will be displayed. The orders can be displayed either in a detail or customer purchase order number, date entered and date wanted. If detail is specified, the part number, description, unit of measure and quantities are displayed.

BASIC FOUR MANUFACTURING SYSTEM

INVENTORY CONTROL

The Inventory Control module provides the applications necessary to maintain accurate, up-to-date, costed inventory records. The five applications in this module are: Inventory Maintenance; Purchase Order Processing; Inventory Average Costing; Inventory Analysis; and Multiple Warehousing Inventory. Through this module and automated connections to Sales Order Processing, Work Orders and Material Reporting a perpetual inventory is maintained for on-hand, on-order and committed quantities.

Ease of Inventory Management

o Real time, accurate update of on-hand, on-order and committed quantities allows immediate understanding of inventory position.

o Automated maintenance of average cost and reporting of average, LIFO or FIFO inventory valuation without any manual steps.

o Full Physical or Cycle Inventory counting to support what you are currently doing or wish to do in the future.

Better Customer Service

o Immediate updates mean accurate up-to-date inventory position can be related to customer order/inquiry.

o Purchasing tools which allow for back order monitoring and due date reviews means better expediting and more appropriate inventory levels.

o ABC Analysis and the Inventory Management reports support better, more knowledgeable purchasing techniques.

o Multiple warehouse capability helps identify and support shipments from the inventory location with available stock.

Reduce Clerical Effort

o Produce an accurate Purchase Order for your Vendor with his part numbers and unit of measure with fewer key strokes than typing.

o Produce "Inventory Count" tags to assure no item is overlooked or misspelled during count.

o Produce ABC Analysis and "turn" reports that used to take days to prepare manually.

o Since all updates are automated, "posting" of inventory no longer requires manual effort.

Inventory Master File Maintenance

Entry, correction and deletion of inventory data.

Month & Year End Inventory File Clear

Zeros the year-to-date and/or the month-to-date accumulation fields in the inventory record.

Issues & Receipts Entry

Entry of increases or decreases in the on-hand (and on order, if desired) count fields(s) in the inventory master record. Used in place of other inventory features in early part of installation cycle.

Issues & Receipts Register

A register of the issues/receipts for audit trail purposes.

INVENTORY CYCLE COUNT

Select Parts for Count

Selection of parts for counting by count code. Count codes are "A" for monthly, "B" for quarterly or "C"/"D" for annually (the default is to an annual count). Count codes may be set by the ABC Analysis or manually through Inventory Master File Maintenance.

Print Input Document

Prints a document used for recording cycle counts.

Input Cycle Count

Input quantities counted for cycle count items.

Maintain Count File

Allows correction of cycle counts entered.

Print Count Report

Reports discrepancies between actual count and perpetual count for problem resolution.

Update Inventory

Updates the on-hand count (if different than the perpetual count) and changes the cycle count date.

INVENTORY PHYSICAL COUNT

Tap Input

Entry of count by tag number and part number. Multiple tags per part is allowed.

Maintain Count File

Correction of tags entered.

Reports

- o Issues & Receipts Register
- o Cycle count Input Document
- o Physical Count Register
- o Physical Count by Tag Number
- o Purchase Order Print
- o Purchase Order Receiving Register
- o Purchase Order Back Order Report
- o Open Purchase Order Report by Number
- o Open Purchase Order Report by Date Wanted
- o Part/Vendor File Print
- o Inventory Average Cost Register
- o Status Report
- o Re-order Report
- o Management Report
- o ABC Analysis
- o Warehouse Transfer Register & G/L Distribution

Print Count Register

Prints counts as entered and shows discrepancies between physical count and perpetual count.

Inventory Count by Tag Number

Prints counts in tag number sequence to review for missing tags.

Update Inventory

Updates the on-hand count (if different than the perpetual count) and changes the count date.

PURCHASE ORDER PROCESSING

Purchase Order Entry

An on-line, interactive purchase order entry program which validates vendor number, part numbers, pricing and automatically makes extensions and down totals. Vendor's name, address, part numbers and prices are automatically displayed. The operator may change any information displayed as well as enter non-stock parts and message lines. Inventory "on-order" is automatically updated at entry time.

Purchase Order Printing

All purchase orders entered are printed on purchase order forms in a neat, legible and organized format. Reprint capability is provided.

Purchase Order Register

A register which shows all of the information entered on purchase orders since the last register print. Used for future reference in case of lost purchase orders or questions relating to the original entry.

Purchase Order Receiving

As shipments are received, the operator enters the purchase order number and the original purchase order information is displayed. The operator enters the quantity received for each line item. If the quantity received is less than the quantity ordered, a back order may be generated or cancelled. The operator may accept the shipment as complete without confirming each line item. Inventory "on-hand", "on-order" and average cost is automatically updated at receiving time.

Purchase Order Receiving Register

All receipts are recorded for future reference and as an audit trail. If average costing is being used, the new average cost is printed. All parts which have commitments against them will show the Sales/Work order number and quantity of the commitment which may be used for expediting.

Purchase Order Back-Order Report

All line items which were not received complete or cancelled are printed on a register for review and possible problem ?. The back-order quantities remain open until received or cancelled through Purchase Order Receiving.

PURCHASE ORDER PROCESSING

Purchase Order Maintenance

Any information on an open purchase order may be changed, line items added or dropped. Inventory "on-order" is automatically adjusted and reprint capabilities of the purchase order are provided.

Open Purchase Orders Report by Number

A report, in purchase order number sequence, listing all purchase order line items which have not been received or cancelled. The report prints the total dollar amount which may be used to project financial commitments.

Open Purchase Orders Report by Date Wanted

A report, showing by due date all open purchase order line items. Used to monitor shipments due and expediting required.

Vendor File Maintenance

All vendor information may be changed in the on-line environment. An edit list is provided.

Vendor File Add

The entry of information relating to a new Vendor and resulting in a "Vendor number" assignment. Using this method of "Vendor number" assignment allows a "name search" if the Vendor number is unknown during functions requiring a Vendor entry.

Part/Vendor File Maintenance

The relationship between your part and the vendors same part is maintained on line. Including quantity pricing, units of measure conversions, vendor's part number and lead time. Multiple vendors for the same part may also be kept.

Part/Vendor File Print

A report listing all of the part/vendor file information.

INVENTORY AVERAGE COSTING

Inventory Average Cost Maintenance

Entry of the part number, the quantity received and the invoiced cost per unit and acceptance/override of the last received cost as the original receiving cost creates a cost variance per unit received and a new average cost per unit in on hand inventory.

Inventory Average Cost Register

A report showing the Inventory Average Cost Maintenance entries and their effect on the average cost per unit.

INVENTORY ANALYSIS

Status Report

Shows part number and description; unit of measure; quantities on-hand, on-order and committed; unit list price and unit average cost; MTD sold; and the inventory values at cost (average, FIFO, LIFO) and list.

Reorder Report

Lists all inventory parts whose on-hand, plus on-order, minus committed, minus required is below the minimum quantity for re-ordering. It shows for each part the part number, description, cost, unit of measure, YTD sales, back order percentage, order demand for each of the previous four periods, on-hand, on-order, available, the reorder point, suggested reorder quantity, and the cost extension. May be run for a specific vendor or a specific warehouse.

Management Report

A monthly report that shows part number description, unit of measure, sales, cost, profit, profit percentage for the month and year, inventory turns, average dollar cost and months on hand. Used to review profitability of product lines.

ABC Period Register and Update

Run once every four weeks to identify all inventory as an "A", "B", "C", or "D" inventory item. "A's" and "B" are the items requiring the closest inventory management. Shows the "A" and "B" items, the part number and description, unit cost, unit of measure, YTD sales, back-order percentage, demand for each of the previous four periods, quantities on-hand, on-order, and available; reorder point, reorder quantity; lead time and turns. If desired, new quantities will be calculated for minimum and maximum inventory levels.

WAREHOUSE INVENTORY

Warehouse Description File Maintenance

Entry, correction and deletion of address data for each warehouse.

Warehouse Inventory File Maintenance

Entry, correction and deletion of part master data by warehouse.

Warehouse Transfer Entry

Entry of parts and quantities being transferred between warehouses.

Warehouse Transfer Register & G/L Distribution

A register of transfers being made for audit purposes and showing the distribution to General Ledger.

BASIC FOUR MANUFACTURING SYSTEM

ENGINEERING CONTROL

The Engineering Control module allows easy creation and maintenance of Bills of Material for all products (parts lists). A single part change will automatically update all of the bills of material affected. Change one basic cost and review the effect in the entire product line. The Same As Except for BOM (Bill of Material) allows creation of new bills by using common subassemblies or an estimate of the cost of a new product. The Bill of Material processor can handle any number of levels (9 is standard) and all changes are made in the real time, on-line environment.

Same Time

An inquiry will bring up the current bill of material for a part number. No more hunting for the latest revision. Any change to a part is automatically changed in all Bills of Material.

Engineering can verify all "where used" assemblies before an engineering change is made.

The Same As Except for BOM entry allows new product bills of material to be crated almost effortlessly when they are similar to an existing product.

Accuracy

Engineering, production and cost accounting all use the same bill of material.

When a bill of material is changed, it is incorporated in all programs the next time they are run, except for released work orders and routings which are not changed automatically.

All personnel use the same bill of material which prevents two departments from working with different revisions.

Control Inventory

The Indented Quantity display allows for the immediate checking of component availability.

Part numbers and descriptions will always be the same for improved stock control.

Reports

o   Single Level Parts LIst
o   Single Level Where Used
o   Indented Parts List
o   Indented Where Used
o   Indented Quantity Report
o   Indented Cost Build Up
o   Cost Build Up Register
o   Summarized Parts List
o   Summarized Where Used
o   Same as Except for BOM Register
o   Same as Except for BOM Cost Estimate

SINGLE LEVEL BILL OF MATERIALS

Part Master File Maintenance

This program allows for the addition, deletion or changing of part master information. Before a part may be deleted, the programs check to make sure it is not active in a bill of material.

Product Structure File Maintenance

When a bill of material is being entered, each line (parent part number and component part number) must be entered into the computer. ONce an entire subassembly is entered, an entry of the subassembly párt number will automatically link all of its components to a new parent. The product structure file maintenance programs allow for additions, deletions, or changes. In the add mode, each part is validated and is checked to make sure it is not "used on itself". If the add causes a low level code change, the programs update the low level code in all components and maintains where used and parts lists linkages.

Single Level Parts List

This report or display will show the next lower level subassemblies for a given product. It is used for such things as: assembly requisition listing, requirements planning explosion entering engineering changes and determining assembly costs.

Single Level Where Used

This report or display will show the total usage of this part at the next higher level. It is used to evaluate the effect of an engineering change and component allocation.

MULTI LEVEL BILL OF MATERIALS

Indented Parts List

This report or display will show the detail makeup of a given product including subassemblies. It shows each component part and the quantities used. It is used for such things as: product assembly planning, product cost breakdown, and service parts cateloging.

Indented Where Used

This report or display will show all of the higher level assembly detail where a part is used. It is used for identifying usage of components affected by an engineering change and for value analysis.

Indented Quantity Inquiry/Report

This report or display is in the same format as the indented parts list with the addition, for each component, of the stock status, lead time, and if a reorder should be placed. It is used to check inventory availability, lead time for a product and to initiate a purchase or work order.

Indented Cost Build-Up Report

This report is in the same format as the indented parts list with the following additional information for each component: actual material cost, standard material cost, actual labor cost, standard labor cost, actual burden cost, standard burden cost, total actual cost and total standard cost. It is used to check, by product, where any cost variance occurred.

Cost Build-Up

This selection will automatically calculate the last actual cost for all part numbers in inventory based on the last actual costs of all the components.

Cost Build-Up Register and Update

This register will show the old and new costs of all the parts updated in the Cost Build-up Update program.

Summarized Parts Lists

This report or display will list the total usage of each component for a given product and the total quantity used. It is used to such things as: product costing, master production schedule planning and gross material requirements.

MULTI LEVEL BILL OF MATERIALS

Summarized Where Used

This report or display will list the total usage of this part at each higher level. It is used for such things as: determining end product usage of components affected by an engineering change; determining the effect of component cost changes on all end products and determining the impact of a material shortage on all end products.

Delete/Replace Entire BOM Structure

Instead of deleting or replacing each component, this program allows the entire BOM to be deleted or replaced with a single entry.

Delete/Replace Component Where Used

Allows the user to replace or delete a part in every bill of material where it is used with a single entry.

SAME AS EXCEPT FOR BOM

Same As Except For BOM Entry

This selection will allow the creation of a new part number (end product) and a new bill of material based upon an existing bill of material. Components and quantities may be added, changed, or deleted from the existing bill to create the new bill.

Same As Except for BOM Register

This register or display is in the same format as the Indented Parts List for any new product created through the Same as Except for BOM Entry. IT is used to verify the entry of a new Bill of Material.

NEW PRODUCT ESTIMATING

Same As Except for BOM Cost Estimate

This report is in the same format as the Indented Cost Build-up Report for any new product created through the Same as Except for BOM Entry. It is used to estimate new product cost based upon standard and actual costs of all components including labor, material and burden.

BASIC FOUR MANUFACTURING SYSTEM

MANUFACTURING COSTING

The Manufacturing Costing module provides for the distribution and reporting of costs associated with the manufacturing process. This module accumulates cost from other modules in the system such as Accounts Payable, Labor Reporting, Material Issues and Work Order Progress Reporting. Budgeting may be used to compare actual cost to expectation.

Accuracy

o Automated entries from Labor Reporting
o Automated entries from Material Issues
o Direct entries from Accounts Payable Distribution
o Separate Miscellaneous Charges Entry and Register
o Integrated with work in process General Ledger accounts

Faster Evaluation

o Terminal inquiry on costs
o On-demand Work Order Cost Report
o Closing summary of costs for partial or completed Work Orders
o Flexible definition of budget
o Separate Budget Variance reporting

Reduce Clerical Effort

o Costs accumulated automatically from Accounts Payable, Labor Reporting, Material Reporting
o Budget Variance reporting by work step and cost type
o Automatic calculation of burden as a % of direct labor $ or as an hourly rate

Reports

o Labor Burden Calculation Register
o Miscellaneous Charges Register
o Work Order & WIP Costing Register
o Costing General Ledger Distribution
o Work Order Cost Report
o Progress Work Order Cost Register
o Progress General Ledger Distribution
o Work Order Cost G/L Summary
o Work Order Budget Register
o Work Order Variance Report

Labor Burden Calculation Register

Reports the burden calculated for each labor entry by employee within Work Order. Burden may be an hourly rate or a percentage of labor dollars. Burden values are added as a cost to Work Orders.

Miscellaneous Charges Entry

Entry/Maintenance of charges to a Work order. The types of charges may be labor, material, equipment, services or miscellaneous. Typically only used to record outside services not passed from Accounts Payable.

Miscellaneous Charges Register & General Distribution

An audit trail of charges by Work Order that have been entered and will be added to the Work Order.

Work Order & WIP Costing Register & G/L Distribution

A register of costs from Labor Reporting, Material Issues, Accounts Payable Distribution and Miscellaneous Charges. General Ledger distribution of costs, including WIP, is printed as a separate report.

Work Order Cost Inquiry

The total current cost of a Work Order broken down into labor, material and other by operation.

Work Order Cost Report

Status of all or selective Work Orders with regard to costs by type within step.

Progress Work Order Cost Register & G/L Distribution

A register of costs by Work Order for which finished goods (either partial or complete) have been reported. The accompanying G/L Distribution shows the accounting move from WIP to Finished Goods in the General Ledger.

Work Order Cost G/L Summary

A summary by account within work order of amounts applied to the General Ledger.

WORK ORDER BUDGET REPORTING

Work Order Budget Entry

Entry of Work Order Budget Values by operation, by cost type or by total Work Order.

Work Order Budget Register

A report of Budget Entries by Work Order.

Work Order Variance Report

A report of all or selective Work Orders showing cumulative costs by cost code, by operation, by Work Order, and the budget variance to date.

BASIC FOUR MANUFACTURING SYSTEM

MANUFACTURING CONTROL

The Manufacturing Control module gives personnel control of the processes, people and material involved in the manufacturing of a product. It provides for the creation, review, reschedule and close of work Orders; the entry, review, variance reporting and dispatch reporting of Labor; the entry, review, and shortage reporting of Material Issues; the entry, review and printing of Routings; and the determination and reporting of Net Requirements.

Increase Productivity

- Labor Variance reporting by Work Center and Employee.
- "Time fence" Material Shortage reporting.
- "Time fence" Dispatch Lists by Work Center.
- Open Work Order Report or Inquiry that reflects percent complete.
- Net Material Requirements Inventory Control by Vendor or Work Center

Accuracy

- Inventory on-hand, on-order and committed automatically updated.
- Multi-Warehouse inventory control capability.
- Standard routing detail.

All entries may be linked directly to work in process general ledger accounts.

Same Time

- Calculation of Payroll entries from Labor entries.
- Automatic generation of Routings.
- Same as Except For routing creation.
- Fast scheduling and rescheduling capability.

Reports

- Work Order Print
- Work Order Report
- Work Order Progress Register
- Labor Entry Edit List
- Labor Variance by Employee
- Labor Variance by Work Center
- Dispatch Lists by Work Center
- Material Issues Register
- Material Shortages Reports
- Routing Print
- Net Reorder Report
- Net Inventory Status Report

MANUFACTURING CONTROL/CAPABILITIES

WORK ORDERS

Work Order Entry

Create a Work Order using Customer Number (if applicable), part number, quantity, the desired needed date and routing. The routing can be manually entered, retrieved from the routing file or created from the Bill of Material file. Using the run time per unit, set-up time, quantities, desired needed date and a manufacturing calendar, a suggested release date is calculated. Component parts shown in the Work Order will be updated as "committed" while the part number being produced is updated as "on-order".

Work Order Print

The Work Order will be printed showing the data as entered (or calculated) and will include a parts list showing all components, the quantities of each and the needed date. This print function may be used as a "release" feature or as the print of an order confirmation/traveler.

Work Order Inquiry

An inquiry of a Work Order showing Actual Start Date, Last Activity Date, Quantity Ordered/Completed, Material Required/Used, Labor Required/Used and a Work Order percentage complete.

Work Order Report

Printed Status of all Work Orders, not closed, showing date started, component part (if applicable), material required/used/scrapped, labor required/used and (by unit produced) standard vs. actual labor hours, % efficiency and load factor.

Work Order Process Entry

Entry of partial or full work order completion and quantity.

Work Order Progress Register

This report shows the status of Work Orders for which some completion has been reported through Progress Entry. Data similar to the Work Order Report is shown. The "on-hand" and "on-order" values for the part produced are updated as well as work in process general ledger accounts.

Work Order Maintenance

Work Orders may be modified in many ways and reprinted. This selection allows for the substitution of component parts, an alternation to the routing on a "one-time basis" and the rescheduled of a particular operation.

Work Order File Maintenance

Creation and alteration of the static data pertaining to a Work Center such as number of shifts, work hours per shift, labor and material burden factors.

Work Order Reschedule

Enter a new needed date for the Work Order and, based upon standards, a rescheduled release date will be calculated for each operation not yet begun.

Manufacturing Calendar Maintenance

Entry of Holidays and plant closings by date which will be used in scheduling work orders to reflect only working days.

LABOR REPORTING

Labor Entry/Maintenance

Enter and change labor time by employee for each work order an operation. Each entry will allow run time and set-up time to be entered separately as IN/OUT clock time and the program will calculate the actual elapsed time. Labor rates may be overridden and the hours may be split between regular time, overtime (1.5 times regular rate) and premium time (2.0 times regular rate). This entry may be used for payroll calculations.

Labor Entry Edit List

A listing of Labor Entries for visual verification. If inaccuracies are found, Labor Entry/Maintenance may be used to correct them.

Labor Entry Register and Update

An audit trail of Labor Entries to support the subsequent updates to Work Orders, the Labor Payroll Transfer file, the Variance Reporting files and the W.I.P. Costing files.

Attendance Card Entry

The entry allows attendance time to be balanced against labor hours recorded against work orders.

Labor Efficiency Reports

The Labor Variance by Employee shows standard hours versus actual hours, the efficiency %, the original hours estimated, the actual hours used and the variance for each Work Order operation based on number of units completed. Labor Variance by Work Center will reflect each Work Order operation in process or completed since the last report.

Dispatch Lists

By Work Center, the Dispatch List reflects all work expected at a Work Center by start date and Work Order operation. A "time fence" is allowed so that only this week's work may be selected.

Weekly Labor Entry Update to Payroll

All Labor entries may be transferred to Payroll for check creation.

MATERIAL REPORTING

Material Issues to Work Orders

Entry/Maintenance of material issues to a Work Order. Substitute parts may be entered as an override of the expected material. Quantities larger (or smaller) than the expected quantities may be entered due to scrap, overrun or underrun. For accounting, the debit or credit accounts may be automatically or manually entered.

Material Issues Register

An audit trail of Material Issue Entries to support the subsequent updates to Work Orders and the W.I.P. Costing files.

Material Shortage Report

A report of materials needed by needed date and Work Order. A "time fence" is allowed to offer selective viewing of requirements.

ROUTINGS

Manual Routing Entry/Maintenance

The Entry/Maintenance, by manufactured part, of all operations (both labor and material). Information requested is work center, operation code, operation description, component part (if the step has material requirements), quantity of component part per each manufactured part, set-up hours, run hours per unit, machine number, tool number and move time. Once entered, the routing becomes standard for the processes and materials required to build the manufactured part.

Automatic Routing Creation

Used to create a simple routing from a single or multiple level explosion of the Bill of Material. Material steps will be created for each component part. A labor step will be created for all subassemblies and one for the final assembly using standard set-up and run times found in the inventory record of the subassembly or final assembly parts. This selection is usually used when there are no formal routings defined.

Same as Except for Routing

Allows for the creation of a routing by duplication of an existing routing. The change or deletion of existing operations and the addition of new operations constitute the "Except For" portion of the routing. May be used to revise a current process or as an estimating tool in the creation of new routings.

Routing Print

Selective printing of routings for review or audit.

NET MATERIAL REQUIREMENTS

Net Posting

The posting of net inventory requirements determined by comparison of available quantity (on-hand + on-order - committed - required) to the reorder point. Parts below the reorder point are exploded one level and each component part requirement is increased. The reorder code is used to calculate the requirement: Discrete, maximum/minimum or economic order quantities.

Net Requirements Reorder Report

Report by work center or vendor of all parts which need re-ordering as determined by Net Posting. The report shows recommended reorder quantity, economic reorder quantity, quantity on-hand, quantity on-order, quantity committed and quantity required.

Net Inventory Status Report

Report in part number sequence of all or selective inventory parts showing the same information as the Net Requirements Reorder Report with the addition of the minimum, maximum and reorder code.

BASIC FOUR MANUFACTURING SYSTEM

MANUFACTURING PLANNING

The Manufacturing Planning module gives manufacturing personnel the time to study alternatives in a planning mode, instead of a crisis mode. They can play the "what if" game with manpower, equipment and inventory. The three applications that make up this module are: Master Scheduling - to enter and maintain sales or service forecasts and firm planned work orders (a manufacturing plan); Material Requirements Planning - to time phase the material requirements of planned work orders, using Bill of Materials, and purchase orders (a shortage list); Capacity Planning to combine firm, planned and actual work orders by work center and date, into man or machine hours needed for manufacturing (an overload list).

Reduce Material Shortages

The MRP system prints a projected shortage list up to any future date based upon your manufacturing plan and sales/service forecast.

Pegging Requirements allows examination of all current and/or future orders affected by an anticipated shortage.

Capacity Planning will show schedules which are impossible to meet before they occur.

Improve Shipping Schedules

The "what is" game allows manufacturing personnel to try various manufacturing plans, schedules and product mixes in a planning mode.

Capacity and material requirements allow planners to see future patterns or problems before they happen.

Reduce Inventory and Manufacturing Costs

Through the use of MRP reports, material is not purchased until it is needed.

MRP allows production people to combine runs and reduce set-ups.

Increase Productivity

Image what manufacturing people could do for productivity if the right material, the right equipment and the right manpower was available at the right time. This is what the Manufacturing Planning Module can help you do.

Reports

o   Firm and Released Order Report
o   MRP Detail Report
o   MRP Planned Order Report
o   MRP Action Report
o   MRP Net Change Register
o   Capacity Report (Summary)

MANUFACTURING PLANNING/CAPABILITIES

MASTER SCHEDULING

Master Schedule Entry and Maintenance

Manufacturing personnel enter expected sales, service, or other demand for products in addition to entering firm planned work orders. Each entry is validated against the Bill of Materials and routing files. The entry consists of part number, quantity and date required. Any existing firm planned orders may be changed for deleted.

Firm and Released Order Print

A report which shows all of the orders by part number of required date which will be used by Material Requirements Planning and Capacity Planning in projecting future manpower, equipment and material needs.

Conversion of Planned to Firm Orders

A simple entry to convert planned orders from Material Requirements Planning to firm planned orders for Master Scheduling.

MATERIAL REQUIREMENTS PLANNING

MRP Regeneration

All product demand entered into the Master Schedule is exploded in time phased sequence (bucketless) into lower level requirements determined by the Bill of Materials. This program will enable the planner to automatically include released work orders, purchase orders and sales orders in the MRP Generation. Each requirement is netted against the beginning inventory balance and if the available falls below zero, a planned work order is generated. IN turn, the planned work order is netted until purchase parts create plane purchase orders. MRP Generation will allow the planner to set up time fences and will recommend expediting firm orders when necessary. Various order quality policies may be use by this program.

MRP Inquiry (detail)

A display of all MRP demand and fulfillment in date sequence by part number. Used to spot check any questionable planned or firm orders or to reschedule.

MRP Report (detail)

A complete listing of all transactions used in the MRP Generation. This report is in low level code, part number sequence and is normally only printed when a problem is suspected.

MRP Planned Order Report

Two reports which list all of the planned work orders and planned purchase orders created during MRP Generation. These planned orders can be used in the Master Scheduling application to create firm planned orders (CONVERSION OF PLANNED TO FIRM ORDERS).

MRP Action Report

The Action Report indicated potential scheduling problems. The information is in detail and will allow personnel to determine if a firm planned order should be rescheduled to prevent a material shortage or missing a customer delivery date.

Pegging Requirements

An inquiry or report which shows what part numbers, at a higher level in the Bill of Materials, caused specific requirements in the MRP Generation. May be used to track customer or work orders which may be effected by material or manpower shortages.

Normalize Lead Times

A report and update that summarizes the lead time data from the routing, and updates the item master records. This allows the material requirements planning programs to schedule new orders without reading the whole routing.

MRP Net Change Task

Net Change is driven from a transaction file which accumulates all inventory activity (planned or actual). The task itself may be run on-line or as batch to "net" the effect of the transactions and issue "action" items to the Planned Order and Action Reports. The "netting" may be single or multilevel explosion of demand changes.

MRP Net Change Register

An audit trail of all inventory transactions (planned or actual) that have passed through the Net Change Task.

CAPACITY PLANNING

Capacity Loading

The planned work orders from MRP Generation, the firm planned orders from Master Scheduling and any released work orders are combined by date and work center into the man/machine hours needed for manufacturing.

Set-up time, run time and move time are extended by operation in date sequence. Special allowance is made for the manufacturer to schedule non-work days (holidays, vacations, etc.) and time fences may be set up by the planner.

Capacity Report (summary)

A report, generated by Capacity Loading, which shows graphically the load by day at each work center. There is also a cumulative load percentage which indicated to the manufacturing manager if a second shift, subcontracting or more equipment is called for.

BASIC FOUR MANUFACTURING SYSTEM

FINANCIAL PLANNING

The Financial Planning Module is an easy to use, flexible planning system. Used as a "stand alone" planning tool or used in conjunction with General Ledger and Budgeting, this "what if" function relieves the tedious hours of spreading and summarizing company information required for financial plans, sales forecasts, cash flow plans and even production plans in manufacturing environments.

Reduce Effort and Errors

o Automatic use of your General Ledger Account Descriptions.
o Automate calculations using multiple planning methods.
o Parameterized user report formats.
o Use of previously defined Financial Statement formats.
o Regeneration of all data following a data change.
o Use of terminology coinciding with General Ledger applications for Financial Statement formatting.
o Use of a pre-defined cash flow report and financial ratio report.

Increase Planning Ability

o Creation of report formats from existing formats.
o Easy maintenance of original premise, relationships and planning methods.
o Regeneration of planning data by company upon request.
o Creation of plans with or without General Ledger relationships.
o Use of 1 to 13 planning periods to produce plans such as a Five Year Plan, and Annual Budget, an 8 week sales forecast or a Quarterly Production Plan.

Faster Reaction to Business Changes

o Use of actual General Ledger activity as the premise for future plans.
o Regeneration of plans after alteration of data.
o Storage of planning information for budget reports.
o Graphic representation of account data for support of a business position.

Reports

o Description File Print
o User Formatted Planning Reports
o Projected Statement of Monthly Cash Flow
o Financial Ratios
o Graphic Displays by Account

Display/Print Account

Graphic representation, on the terminal or printer, by period for any account used in the Financial Module.

FINANCIAL PLANNING/CAPABILITIES

Transfer G/L Descriptions

Transfers the General Ledger Account Descriptions to Financial Planning for use as the basis of one or more planning functions.

Description File Print

The Financial Planning Account Descriptions may be printed for review of descriptions, planning relationships and other data pertinent to using the planning function.

Financial Planning Maintenance

New account descriptions may be added and existing account descriptions may be changed or deleted. Sources for Cash Flow and Minimum account relationships may be defined. This selection also sets up the planning functions and relationships. The planning methods available are: Duplicate actual period amounts from the General Ledger. Duplicate actual period amounts and increase/decrease by a fixed %. Set a total value and distribute evenly across the number of periods being used. Calculate, by period, as a % of another account. Calculate, by period, as a % of another account where the % is based upon a value range from the referenced account. Compound, by period, at a %.

Accounts may be used as sources for Cash Flow using planning methods such as: Fixed entry by period. A % of an actual account where the original value is spread over several periods. A % of another Cash Flow account. Minimum are used in Cash Flow planning to describe relationships like maintaining a minimum cash account balance by automatic generation/payment of Notes Payable (interest rate and interest expense account may also be noted).

Generate Data for Reports

Based upon the assumptions and planning methods created in F/P Maintenance, data is generated for each period for each account by company.

Report Formatter

Create any number of report formats or duplicate an existing report. Report formats are company independent any may be financial statement oriented or totally custom.

Reports

Select the reports, which were defined in the report formatter, to be printed an the number of copies of each. The reports will then be printed in the sequence selected. The standard Cash Flow spread and Financial Ratio report are pre-defined.

Update G/L Budgets

Transfer back to the General Ledger Budget Application, the planning data generated, for all accounts that are valid in the General Ledger.

Capacity Inquiry (summary)

This inquiry will allow managers to find the specific work orders which have caused an overload. It also indicates if any work has started for rescheduling purposes.

Work Order Reschedule

The Reschedule Program allows the rescheduling of any released work order. The program will check each operation (step) and work center and take into account any changed manpower, machine hours or routing. It will then calculate the total lead time in days and establish the schedule start date for each operation (step).

Work Center File Maintenance

All work center information may be changed in the on-line environment. An edit list is provided for.