

# SYSTEM OVERVIEW

**mp2**  
access 2000



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MP2 Access 2000 System Overview

# INTRODUCTION

MP2 Access is a computerized maintenance management system (CMMS) software application that controls maintenance operations. MP2 allows for long-term growth of any size operation. With MP2, either create work orders immediately, or completely build the database before creating work orders, optimizing the program's work order generation and reporting capabilities.

MP2 Access is a critical corporate asset for many reasons.

- Helps you to investigate equipment downtime
- Identifies hot maintenance spots in the facility
- Provides justification for additional resources
- Produces precise plant-level reports
- Generates high-level corporate roll-up reports

MP2 Access' features are powerful and comprehensive, and its graphical and intuitive user interface makes it one of the easiest CMMS packages to learn and use.

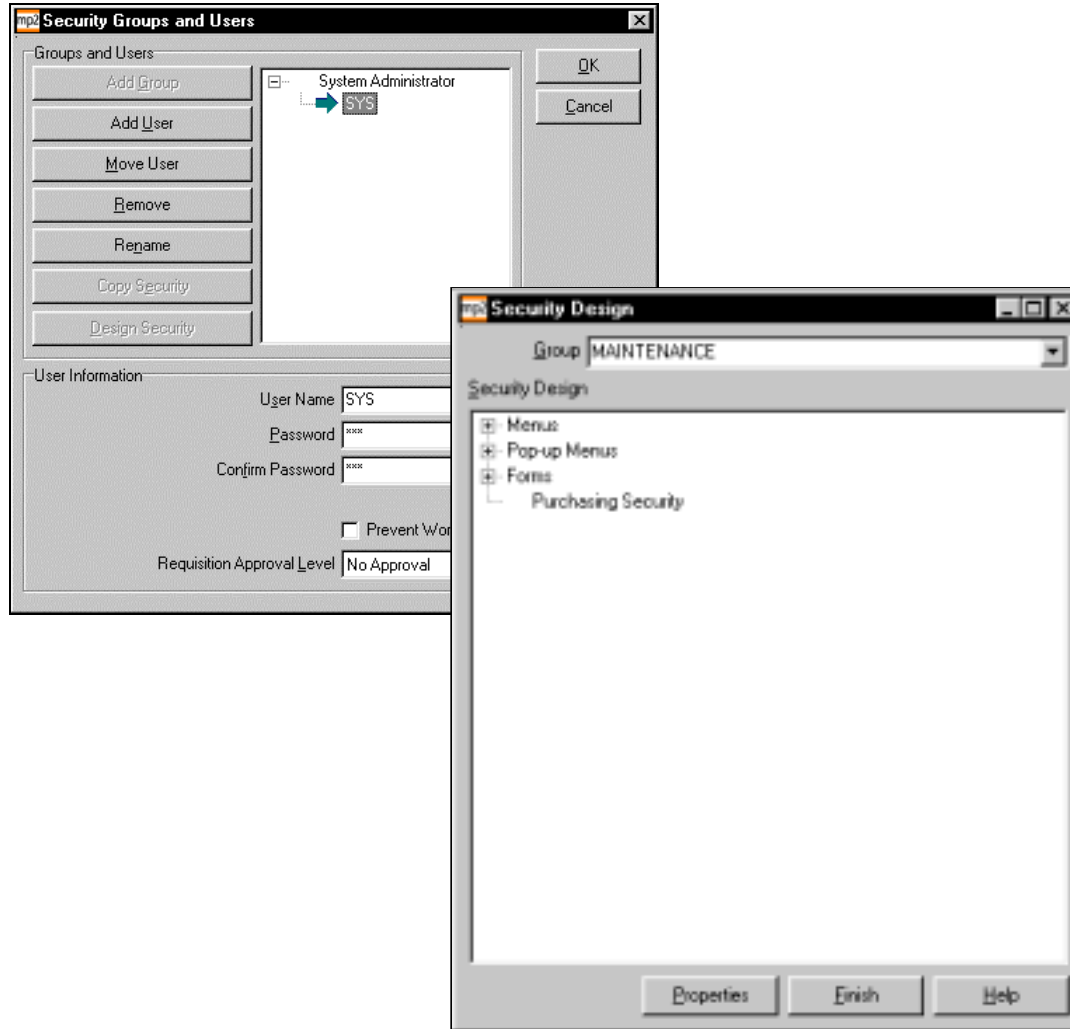


## SYSTEM FEATURES

- Delphi-designed interface
- Native 32-bit processing on Windows 95/98, Windows NT 4.0, or Windows 2000 Professional
- Microsoft Access database
- Microsoft Office compatible
- Uninstall function
- User-defined Quick Access bar
- Access to Datastream's web page from MP2 Help (Web browser, such as Internet Explorer or Netscape, required)
- Context-sensitive help for fields and forms
- Tutorial database
- Data Collection Forms within MP2 Help
- Wizards for tasks, work orders, and requisitions
- Sort and filter for all forms
- Customize fields
- Customize labels
- Save form layouts

# SECURITY

Set up security so that only authorized personnel can start MP2 and access data. Design the level of security necessary for the facility with multiple security options. Additionally, customize MP2 menu titles and field names so that they are more specific to the facility.



## FEATURES

- **Password Protection.** Create user accounts and passwords. Users may access MP2 only with their user ID and password.
- **Security Groups.** Create security groups and assign users to them. All users in a security group share the same restrictions. View the hierarchical structure of all groups and users.
- **Menu, Form, or Field Level Security.** Limit access at the menu, form, and/or field level. Hide menu options, forms, and fields, and designate forms and fields as read-only.
- **Menu and Field Customization.** Modify menu titles and/or field names. MP2 changes the names of these fields on related forms and reports.

# LABOR

Create employee records for all individuals involved in the maintenance process at your facility. Enter personal information, such as the address and telephone number, as well as work-related information, such as shift, craft, and hire date. Additionally, enter employee training and wage information. Hide private or sensitive information with MP2's security function.

The screenshot displays the 'mp2 Employees' software window. At the top, there are navigation buttons (back, forward, home, search, refresh) and dropdown menus for 'Sort By' (Default) and 'Filter' (None). Below these are tabs for 'List View', 'Record View', 'Training', and 'Wage Rates'. The main form is divided into two sections: 'Address' and 'Employee Information'. The 'Address' section includes fields for Address 1 (809 North Street), Address 2, Address 3, City (Greenville), State (SC), Postal Code (29673), Country (USA), and Telephone No. (864-422-0091). The 'Employee Information' section includes fields for Employee Code (AdkinsN), Last Name (Adkins), First Name (Neil), Shift (1), Craft (Maint), Crew, Class, Seniority, Skill Level (ADV), Hire Date (8/1/94), Raise Date (8/1/98), Social Security No., Accumulated Sick Hours, and Accumulated Vacation Hours.

## FEATURES

- **Training.** Enter training information, such as course descriptions, hours or CEUs earned, whether the employee earned a certificate and/or passed the course, and the cost of the course.
- **Wage Rates.** Enter multiple wage rates per employee, if necessary.
- **Timekeeping.** Specify exceptions to the normal working hours, such as vacation, sick time, etc.

# VENDORS AND MANUFACTURERS

Create vendor records for all the companies from which you purchase items. Create manufacturer records for the companies that produce the items and equipment located at your company. Enter basic information, such as address and contact information for each vendor and manufacturer. Additionally, enter payment, shipping, and freight information.

The image shows two overlapping software windows. The top window is titled 'mp2 Vendors' and displays a form for 'Aircomp-Prod'. The bottom window is titled 'Manufacturers' and displays a form for 'Ingersoll-Rand Compressors'.

**mp2 Vendors Form:**

- Vendor ID: Aircomp-Prod
- Name: Air Compressor Products, Inc.
- Address 1: 2362 Emerson Street
- City: Jacksonville
- State: FL
- Postal Code: 32207
- Country: USA
- Telephone No.: 1-800-394-5575
- Fax No.: 904-348-0939
- Specifications: Vendor Type: Supplier, Class: [blank], Federal Tax ID No.: [blank], Minimum Order Amount: [blank]

**Manufacturers Form:**

- Manufacturer ID: Ingersoll-Rand
- Name: Ingersoll-Rand Compressors
- Address 1: Box 1840
- City: Davidson
- State: NC
- Postal Code: 28036
- Country: USA
- Telephone No.: 704-896-4000
- Fax No.: 704-896-4366
- Specifications: Type: OEM, Class: [blank], Federal Tax ID No.: [blank], Customer ID: [blank], Payment Terms: [blank], Shipping Terms: [blank], Ship Via: [blank], Freight Terms: [blank], Freight Carrier: [blank]

## FEATURES

- **Items Supplied.** List all items supplied by each vendor. Entering items on a vendor's record automatically enters the vendor on the item's record, reducing data entry.
- **Blanket POs.** If your vendors agree to sell items or services at a certain costs and designate a specific purchase order number for the items or services, set up blanket purchase orders for these vendors.
- **Ordering.** Specify the preferred ordering method for each vendor.
- **Notes.** Enter information specific to each vendor or manufacturer. MP2 prints vendor notes on purchase orders.
- **Multiple Currency Support.** Enter the currency symbol and conversion factor for all of your international vendors.

# OSHA REGULATIONS

Link directly to the Occupational Safety and Health Administration's (OSHA) Web site. View the OSHA regulations or copy sections of the regulations that affect your organization and paste them into equipment, task, or work order records as reminders of regulatory requirements.

## FEATURES

- **Safety Procedures.** Copy OSHA regulations and paste them as safety notes on equipment records or as task instructions. MP2 prints the text on work orders.
- **Compliance.** Record OSHA compliance in Work Order History.



The screenshot shows the OSHA website header with the logo and text: "OSHA Occupational Safety & Health Administration U.S. Department of Labor". Navigation links for "Home", "Index", and "Search" are visible. The main heading is "OSHA Regulations (Standards - 29 CFR) Table of Contents". Below this is a search section with a text input field, a "Search" button, and a "Search Help" link. At the bottom, there are two buttons: "Construction" and "General Industry".

# EQUIPMENT

In MP2, *equipment* refers to any object on which you track maintenance. Equipment may be production related (presses, injection molders, etc.) or non-production related (air-handling units, vehicles, etc.). Equipment may also be any of the sub-assemblies, or components, of larger equipment.

The equipment number is the focal point for most MP2 functions. Enter basic equipment information, such as the equipment type, serial number, model number, manufacturer, and purchase date. Also, specify the exact location of the equipment by entering the location and sub-locations. Specify whether equipment requires special handling, and MP2 notifies you when creating a work order for this equipment.

The screenshot shows the 'mp2 Equipment' window with the following data entered:

Equipment No.	AIRCOMPRESSOR-1	Air compressor 1
Equipment Type	Aircomp	
Serial No.	102-9033	
Model No.	L75	
Manufacturer	Ing-Rand	
Vendor ID	AirCentersSc	
Spare-parts Code	Aircomp	
Priority	2.00	
Person Responsible	RobinsonT	
Operating Status	Good	
Locations		
Location	Bldg1-Plant	
Sub-location 1	Floor1	
Sub-location 2	South	
Sub-location 3	Compressor Room	
Purchase Date	6/1/97	
Startup Date	6/15/97	
Warranty Expiration Date	6/1/99	

Additional form elements include a toolbar with navigation icons, a 'Sort By' dropdown set to '(Default)', a 'Filter' dropdown set to '(None)', and a tabbed interface with 'Record View' selected. Checkboxes for 'In Service' (checked) and 'Notify when creating work orders' (unchecked) are also present.

## FEATURES

- **Financial Data.** Enter the general ledger number, department, and cost center associated with each equipment as well as the original and replacement costs.
- **Spares.** Enter the spare parts associated with each piece of equipment.
- **Safety Notes.** Enter or copy and paste safety information.
- **Meters.** Track meter readings by cumulative run time or usage cycles. Define the units of measure so that MP2 tracks the data that is most relevant to your operation.
- **Attachments.** Attach multimedia files, such as drawings or word processing documents, to equipment records.
- **Components.** View the hierarchical relationships between equipment and their components.
- **History.** View the work order history of each piece of equipment.
- **User-defined Fields.** Enter additional information (up to ten fields) for each piece of equipment, according to your needs.



mp2 Service Contracts

Contract | Equipment

Service Code: AC15937

Contract No.: 26-75RT6

Vendor ID: Aircomp-Prod

Starting Date: 1/10/0

Expiration Date: 1/10/0

Total Payment:

Next Due Date:

Rate:

Per:

mp2 Equipment Variables

Sort By: (Default) Filter: (None)

Equipment Type	Description	Variable Exists?
Aircomp	Air compressor	No
Autoload	Automatic loading system	No
Chill	Chiller	No
Cntrl	Control system	No
Comp	Air compressor	No
Conveyer	Conveyer	No
Cooltwr	Cooling tower	No
Die	Plastics die	No
Extruder	Extruder	No
Fan	Exhaust fan	No
Fltsys	Filter system	No
Forklift	Forklift	No

Buttons: Edit, Restructure, Create, Delete

mp2 Failure Analysis

List View | Tree View | Troubleshooting

Tree View:

- Root
  - Aircomp
    - Filters
    - Motor
      - FTS (Failure to start)
      - FTS-Hold (Will only start manually; overheats)
      - FTS-M (Will not start, but will run in either direction when started manually)
      - FTS-Stop (Failure to stop; motor blows fuse or will not stop)
      - Low-speed (Motor running at lower speed)
      - Noisy (Excessive mechanical noise)
      - Oil (Oil found in motor housing)
      - PM (Routine PM maintenance)
    - Autoload
    - Chill
    - Cntrl
    - Comp
    - Conveyer
    - Cooltwr
    - Die
    - Extruder

Reason for Outage:

Buttons: Add Reason, Add Solution, Edit, Remove, Expand All

## ADDITIONAL FEATURES

- **Service Contracts.** Create service contract records for equipment under warranty. When equipment under warranty requires maintenance, MP2 notifies you that an extended service contract covers the equipment.
- **Nameplates.** Create nameplates to store additional information about equipment types.
- **Variables.** Create variables for equipment types to help track changes to field values over time.
- **Failure Analysis.** Record equipment failure for each equipment type, including the reasons for outage and solutions. Then, with this information, track equipment breakdown trends and troubleshoot problems.

# INVENTORY

Create inventory records for all of your facility's maintenance parts, and then track parts usage and costs. Enter basic information about parts, such as item numbers, sites, stock locations, quantities on hand, and unit costs. Specify reorder points and reorder quantities. MP2's inventory reordering system reduces downtime resulting from emergency part ordering.

The screenshot shows the MP2 Inventory software interface. At the top, there are navigation buttons (back, forward, home, etc.) and a 'Procure' button. Below that, there are dropdown menus for 'Sort By' (Default) and 'Filter' (None). The main area has several tabs: 'List View', 'Record View', 'Substitute Items', 'Vendors', 'Specifications/Notes', 'Attachments', and 'User-defined Fields'. The 'Record View' tab is active, showing a form for an inventory item. The item number is 'BELT-MTR-AIRCOMP-625x49' and the description is 'Air compressor belt 5/8x49'. Other fields include Account Code (2000), Cost Center (5000), Type (Belt), Class, Weight, Volume, Date Added (6/1/97), Date Last Edited (1/30/01), Model, Manufacturer, Unit of Measure (each), and checkboxes for 'Taxable' (checked) and 'Single Source Vendor' (unchecked). Below the form, there are tabs for 'Stock', 'Ordering', 'Usage', 'History', and 'Costs'. The 'Stock' tab is active, showing a table with columns for Site, Stock Location, and Qty on Hand. The table contains one row: Bldg3-WH, Shelf2, 1.00.

Site	Stock Location	Qty on Hand
Bldg3-WH	Shelf2	1.00

## FEATURES

- **Substitute Items.** List all items that employees may use as substitutes for the inventory item.
- **Vendors.** Specify all vendors that supply the inventory item. Entering vendors on an item's record automatically enters the item on the vendor's record, reducing data entry.
- **Specifications/Notes.** List item specifications or additional information concerning the inventory item.
- **Attachments.** Attach multimedia files, such as drawings or word processing documents, to inventory records.
- **User-defined Fields.** Enter additional information (up to ten fields) for each inventory item, according to your needs.
- **Multiple Sites/Stock Locations.** Record the quantities and reorder points of each item for different stock rooms.
- **Reordering.** Enter the reorder quantity and specify whether to reorder items based on a reorder point or based on minimum and maximum values.
- **Usage.** For each site, calculate and graph items used month to date and year to date.
- **Transaction History.** View all check out, return, adjust, move, and physical inventory transactions.
- **Costs.** Calculate costs for items according to the costing method you choose (FIFO, LIFO, Weighted Averaging).

# PURCHASING

## SETUP

Specify the next quotation, requisition, and purchase order numbers. Indicate whether to order purchase order items alphanumerically or by the way in which they are inserted. Additionally, enter the heading to print at the top of each requisition.

The image displays three overlapping screenshots of the 'Purchasing Setup' software window, showing different configuration sections:

- Top Window (Numbering):** Shows 'Next PO No.' as 000000236 and 'PD Item Order' set to 'Alphanumeric'.
- Middle Window (Default Requisition Values):** Shows 'Default Requisition No.' as PUR\_DEPT, 'Requisition Grouping' as 'One for all vendors', and 'Non-stock items' as 'Mixed with stock items'.
- Bottom Window (Receive Options):** Shows checkboxes for 'Auto-fill Qty to Receive', 'Include Tax', 'Include Shipping Charge', and 'Include Miscellaneous Charge'. It also shows 'PO Status' as 'Completed', 'Next Receiver No.' as REC0000029, and a 'Label Layout File' field.

## FEATURES

### Quotation and Requisition Setup

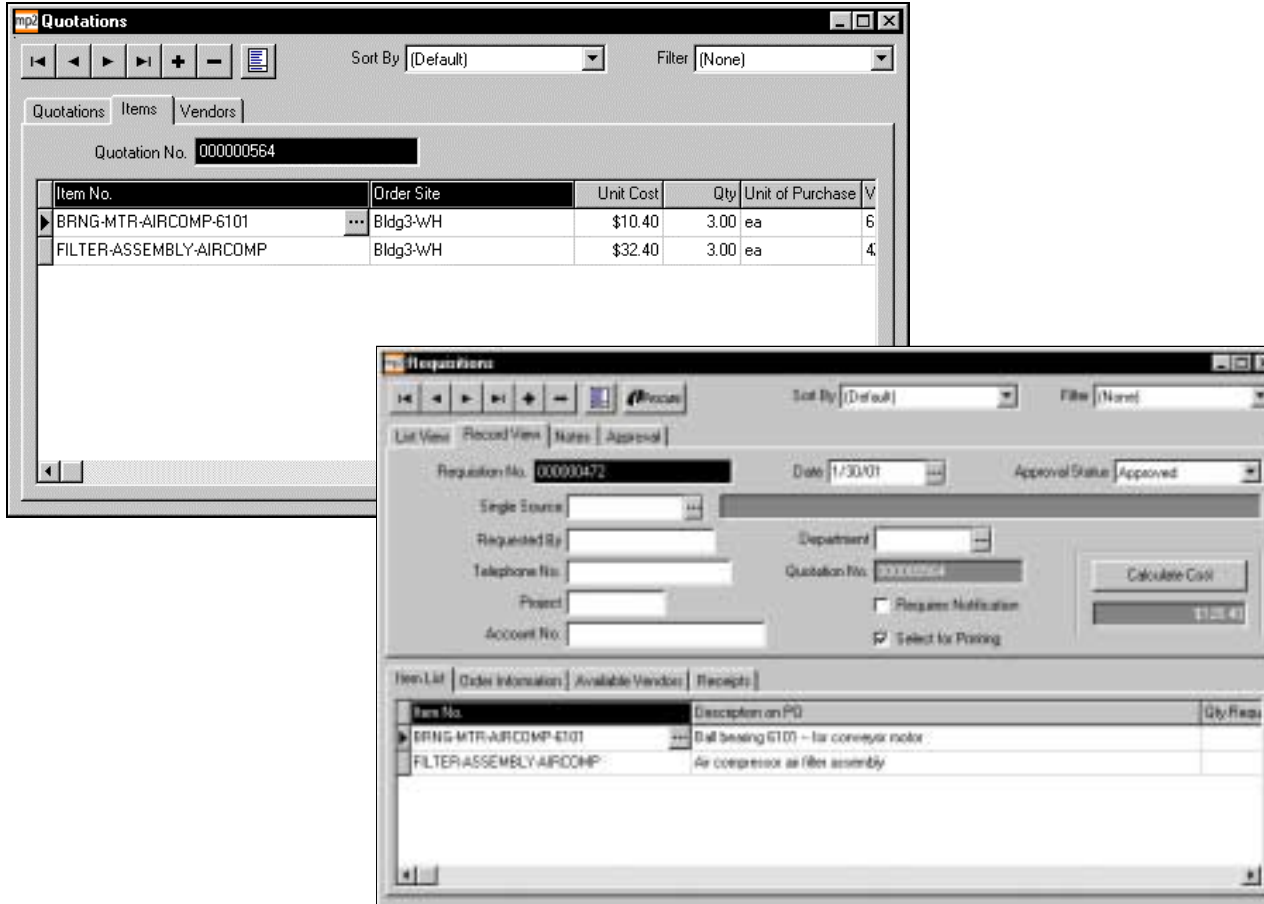
- **Single Source Letter.** Enter text to include on requisitions for your single source vendors.
- **Approval Levels.** Specify dollar amounts for four approval levels, and assign each MP2 user the appropriate level.
- **Generation Options.** Specify either to generate a different requisition for each vendor, to generate one requisition for all vendors, or to use the default requisition. Select whether to separate non-stock items from stock items.

### Purchase Order Setup

- **Addresses.** Specify the default confirm-to, ship-to, and invoice addresses to print on purchase orders.
- **Receive Options.** Specify a variety of receiving options, including whether to automatically fill the quantity to receive with the quantity ordered, whether to include tax and shipping charges, and whether to allow receiving of non-inventory items to stock.
- **Generation Options.** Specify whether to separate stock items from non-stock items when generating purchase orders and whether to automatically select purchase orders for printing so that you may batch print all purchase orders generated.
- **Electronic Media.** Enter the fax program name for faxing purchase orders to vendors.

# QUOTATIONS AND REQUISITIONS

Create quotations or requisitions for items that you must order. Create quotations to get availability and cost information from vendors. Then, choose a vendor, and create a requisition to get approval for the order.



## FEATURES

### Quotations

- **Quotation Generation.** Automatically generate quotations for inventory items that have reached their reorder points.
- **Items.** Add to or modify the list of items for which you want quotes.
- **Vendors.** List all vendors from whom you want quotes.
- **Requisition Generation (from Quotations).** After receiving price quotes from vendors, choose a vendor, and then generate a requisition from the quotation.

### Requisitions

- **Requisition Generation.** Automatically generate requisitions for inventory items that have reached their reorder points.
- **Purchase Order Generation.** Once approved, generate purchase orders from requisitions.
- **Item List.** List the items to include on the requisition.
- **Requisition Approval Process.** Allow pre-approval for users when you require approval by more than one person.
- **Available Vendors.** Select, from the list of available vendors, the vendor(s) to which to send requisitions.

## PURCHASE ORDERS

Generate purchase orders from requisitions, or manually create purchase orders for inventory and/or non-inventory items, and then send them to vendors for fulfillment. As vendors deliver items, receive the items into MP2. After you receive all of the items, close the purchase order.

MP2 maintains a complete history of purchase order transactions, which you may view and edit. Create new purchase order history records for transactions that occurred before you purchased MP2, and include that data in reports and graphs.

Item No.	Description on PO	Qty Req.
BRNG-MTR-AIRCOMP-6101	Ball bearing 6101 -- for conveyor motor	
FILTER-ASSEMBLY-AIRCOMP	Air compressor air filter assembly	

## FEATURES

- **Costs.** View the total amount paid, total amount received, and the total cost of purchase orders.
- **Order.** Specify payment terms and enter shipping information.
- **Addresses.** Specify the default confirm to, ship to, and invoice addresses for all purchase orders and enter addresses for each vendor. Modify the vendor, ship to, and confirm to addresses for each purchase order, if necessary.
- **Notes.** Enter additional information, which MP2 prints on the purchase order.
- **iProcure.** Electronically transmit purchase orders to iProcure vendors without generating paper copies.
- **Receipts.** Receive items to stock locations, work orders, equipment, cost centers, or employees. Additionally, you may order from one site and receive to another site.

# TASKS

Create task records for your facility's repetitive maintenance tasks, including the frequency with which you repeat each task. Schedule repetitive tasks by meter reading, date, or both. When equipment reaches the scheduled meter reading, or when the current date equals the due date for the task, MP2 generates a work order.

The screenshot shows the MP2 Tasks software interface. At the top, there are navigation buttons (back, forward, home, etc.) and dropdown menus for 'Sort By' (Default) and 'Filter' (None). Below this are tabs for 'List View', 'Schedule', 'Details', and 'Parts'. The main area displays task information: 'Task No. AIRCOMP-BELT-6M' and 'Replace air compressor belt - 6 month PM'. There are two sections with radio buttons: 'This task is for equipment that is' (In Service (normal use) selected, Out of Service (extended shutdown) unselected) and 'Schedule To' (Release as separate work orders selected, Release together as single work order unselected). A table lists equipment details:

Equipment No.	Location	Sub-location 1
AIRCOMPRESSOR-1	Bldg1-Plant	Floor1
AIRCOMPRESSOR-2	Bldg1-Plant	Floor1

At the bottom, there are tabs for 'Scheduling by Date', 'Scheduling by Meter', 'Shadowing', and 'Attachments'. The 'Scheduling by Date' tab is active, showing fields for 'Perform Every' (6 Month(s)), 'Schedule Type' (Floating), 'Must Be Down' (checked), 'Date Last Performed', 'Next Due Date' (1/30/01), 'Down Time' (3.00), 'Task Duration' (0.30), and 'No. of Times Completed' (2).

## FEATURES

- **In Service/Out of Service.** Specify whether to perform the work when the equipment is in service or when it is out of service.
- **Multiple Equipment Tasks.** Specify whether to release multiple equipment tasks as separate work orders or as a single work order.
- **Equipment or Location Tasks.** Schedule maintenance work for equipment-related or location-related tasks.
- **Scheduling.** Schedule maintenance work by date (every 90 days), by meter (every 3000 miles), or both (whichever occurs first).
- **Details.** Enter craft information and the individual responsible for the task.
- **Parts.** Enter the parts needed to complete the task, and specify whether the parts are required for the task.
- **Shadowing.** Avoid generating duplicate work orders by shadowing longer frequency tasks with shorter frequency tasks.
- **Attachments.** Attach multimedia files, such as drawings or word processing documents, to task records. Specify for MP2 to print these files with work orders.
- **Unlimited Task Instructions.** Enter instructions, safety procedures, specialized maintenance information, repair procedures, etc., for each task. MP2 prints task instructions on work orders.

# WORK REQUESTS

Work requests include two types of requests—call-in requests and on-site requests. Call-in requests reduce paperwork by enabling the property manager or maintenance manager to enter tenant requests as tenants phone them in. On-site requests reduce paperwork by enabling employees to enter their own maintenance requests.

The image displays two overlapping windows from the MP2 software. The top window is titled 'Call-in Requests' and contains the following fields: 'Requested By' (KennedyB), 'Tenant' (KENNEDY\_BARBARA), 'Requested Service', 'Description' (LEAK IN CEILING), 'Comments', 'Priority', 'Authorized Caller', 'Telephone No.', 'Fax No.', 'Location' (Bldg1-Plant), 'Sub-location 1' (Floor1), 'Sub-location 2' (Restroom-Women), and 'Sub-location 3'. The bottom window is titled 'On-site Requests' and contains: 'Request No.' (980212), 'Task No.', 'Requested By' (ThomasA), 'Description' (Can't close vent in my office), 'Telephone No.', 'Extension', 'Fax No.', 'WO Type', 'Priority', 'Assigned To', 'Batch Approve' checkbox, 'Date/Time' section with 'Request Date' (4/1/98), 'Starting Date', 'Request Time' (3:46:56 PM), 'Finish Date', and 'Est. Duration (days)'. It also features a table for 'Equipment and/or Location' with columns for 'Equipment No.', 'Location', and 'Sub-location 1', and a 'Comments' field at the bottom.

## FEATURES

### Call-in Requests

- **Tenants.** Create records for all tenants, including such basic information as addresses and telephone numbers as well as markup percentages for materials and labor.
- **Quick-Entry and Work Order Creation.** Quickly enter requests that tenants call in, and then immediately create work orders from the requests.
- **Status and History.** View the status of all open requests, and view information for all requests closed to history.

### On-site Requests

- **Equipment or Location Requests.** Create requests for equipment-related and/or location-related maintenance work.
- **Request Approval.** Approve requests as employees enter them or approve a group of requests at one time.
- **Work Order Creation and Request History.** MP2 creates work orders for all approved requests and saves the request information in history.

# SCHEDULING

Specify the normal working days and exceptions to those days for your facility and for each employee. Then, use the normal working days, exceptions, and equipment downtime to schedule maintenance work. Scheduling work and labor increases the efficiency of the maintenance operation.

View the current work order and task scheduling workload by day, week, or month; assign additional work for under-utilized days; and reduce the workload for over-utilized days.

The screenshots illustrate the software's scheduling capabilities. The top window, 'Employee and Facility Scheduling', allows users to define normal working days for a facility (Monday through Friday) and a table of exceptions to these days. The middle window shows a table of normal working hours for several employees, including FisherS, KennedyB, NatinS, and NichellG, with columns for each day of the week. The bottom window, 'Work Order Scheduling', displays a table of scheduled work orders and a calendar for January 2001, where the 30th is highlighted in green.

## FEATURES

- **Facility Schedule.** Specify the days that the facility normally operates each week and the days it does not operate. MP2 does not generate work orders for days that the facility does not operate; instead, MP2 generates those work orders on the next working day.
- **Employee Schedules.** Schedule the daily available hours for each employee. MP2 computes available labor hours for tasks with this information. Record employees' extra work hours or missed work hours. Specify scheduling exceptions for employees that span multiple days without entering the exception for each individual day.
- **Production Schedule.** Record equipment downtime information for reference when scheduling maintenance work.
- **Work Order Schedule.** View all due tasks and work orders for a certain day, week, or month. View all backlogged and unscheduled work orders and all unapproved on-site requests. View work orders for a certain craft or employee.
- **Drag-and-Drop Scheduling.** Re-schedule backlogged work orders, schedule unscheduled work orders, and approve and create work orders for unapproved on-site requests by dragging and dropping them onto the calendar.
- **Employee or Craft Utilization.** Hover the cursor over a calendar day to view the utilization percentage.
- **Drag-and-Drop Printing.** Quickly print a scheduled work order by dragging and dropping it onto the printer button.



# WORK ORDERS

Generate work orders for scheduled maintenance work, or manually create work orders for emergency maintenance or repair, and then print work orders for reference when performing the work. After completing the work, update parts and labor information, enter meter information, add comments, and then close the work order. MP2 transfers the information to work order history and updates all relevant equipment and task records.

The image shows two screenshots of the MP2 software interface. The top screenshot is the 'Generate Work Orders' dialog box. It features a 'Saved Generation' dropdown menu set to '(Default)', 'Save', and 'Delete' buttons, and tabs for 'Options', 'Equipment Selection', 'Location Selection', 'Task Selection', and 'Sort'. The 'Generate Through' date is set to 1/30/01, and there is an 'Assigned By' field. Under 'Create Work Orders For', several options are checked: 'Multiple Equipment Tasks', 'Single Equipment Tasks', 'Ready or Hold Work Orders', 'Location-based Tasks/Work Orders', and 'Equipment-based Tasks/Work Orders'. Other options include 'Equipment Readings outside SPM Limits', 'Preview Work Orders Before Release', and 'Print Work Orders after Generating Them'. 'Generate' and 'Labor' buttons are at the bottom.

The bottom screenshot is the 'mp2 Work Orders' main window. It has a 'Sort By' dropdown set to '(Default)' and a 'Filter' dropdown set to '(None)'. It includes tabs for 'List View', 'Record View', 'Equipment and Details', 'Schedule', and 'Attachments'. The 'Record View' is active, showing details for Work Order No. 00000682 and Task No. AIRCDMP-BELT-6M. The description is 'Replace air compressor belt - 6 month PM'. Other fields include W/O Type (PM), Status (Open), Priority (3.00), Work Priority (1.00), Originator, Last Name, First Name, Telephone No., Fax No., Request Date (1/30/01), Request Time (1:03:12 PM), and checkboxes for 'Perform by Warranty', 'Billable', 'Pick List', and 'Select for Printing'. There are also fields for Tenant, Estimated Cost, Expense Class (MECH), Labor Markup (%), Material Markup (%), Labor Tax Rate (%), and Material Tax Rate (%).

## FEATURES

- **Work Order Generation.** Generate work orders for all multiple equipment tasks, all single equipment tasks, all "Ready" or "Hold" work orders, all location-based tasks, all equipment-based tasks, and/or all equipment with readings outside the SPM limits. Additionally, generate work orders for specific tasks, equipment, or locations.
- **Equipment or Location Work Orders.** Create work orders for equipment-related and/or location-related maintenance work.
- **Attachments.** Attach multimedia files, such as drawings or word processing documents, to work order records. Specify for MP2 to print these files with work orders.

# STATISTICAL PREDICTIVE MAINTENANCE

Move beyond preventive maintenance by setting up a *predictive* maintenance program in MP2. MP2's statistical predictive maintenance (SPM) module identifies equipment readings outside the control limits, alerting you to schedule maintenance before the equipment fails. Set controls according to either manufacturer's specifications or the equipment's historical performance.

For example, create a SPM record for an injection molder, and then monitor its temperature readings. Enter the minimum and maximum possible readings for the injection molder, obtained from the manufacturer's specifications, and then enter each equipment meter reading. Periodically generate reports and graphs to view readings that fall outside the specified range.

mp2 Statistical Predictive Maintenance

Sort By (Default) Filter (None)

Calculate Mean and Std. Deviation

List View Record View Readings Daily Averages

Equipment No. EXTRUDER1-LINE1 Mean

Measurement AMP Units ~A Std. Deviation

Description Amperage

Use Manufacturer's Specifications

Min. Value 50.00

Max. Value 75.00

Use Daily Average

Use 1 Std. Deviation

Use 2 Std. Deviations

Use 3 Std. Deviations

If you select the following checkbox, MP2 calculates the Mean and Standard Deviation using the control dates you specify.

Use Control Dates

Starting Date

Ending Date

Consecutive Points is the number of consecutive times the equipment meter reading is higher or lower than the mean. Readings higher or lower than the mean for this number of times may indicate a trend toward equipment failure.

Consecutive Points 5

Repair Date

Repair Time

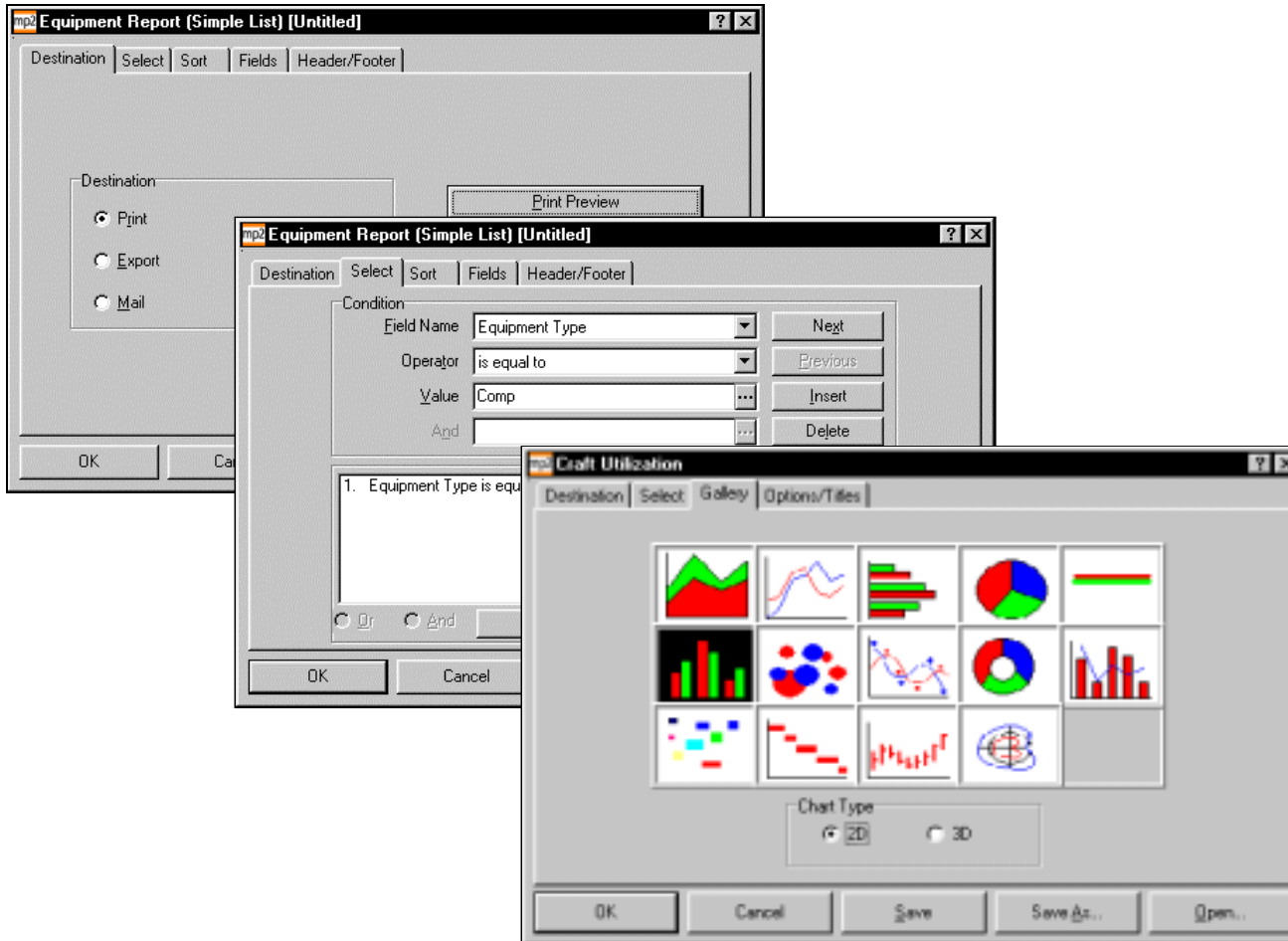
Repair WO No.

## FEATURES

- **Multiple Measurement Standards.** Determine potential equipment failure with manufacturer's specifications, means, standard deviations, and/or consecutive points.
- **Multiple Readings per Equipment.** Enter multiple readings for each equipment record, if necessary.
- **Numeric or Text Meter Readings.** Record a numeric or a text value for meter readings. MP2 tracks the number of consecutive occurrences of each text value.
- **Recalculation of Means/Standard Deviations.** Recalculate the means and standard deviations for all SPM records at one time.
- **Work Order Generation using SPM Limits.** Automatically generate work orders for equipment with readings outside the specified statistical predictive maintenance (SPM) limits.

# REPORTS AND GRAPHS

Analyze your data with MP2's reports and graphs. View reports and graphs on the screen, print them, export them to spreadsheet files, or e-mail them. Create custom reports and graphs by changing the order of fields, hiding fields, selecting page setup and font options, and by sorting and filtering records. Save customized reports and graphs for future use.



## FEATURES

### Reports and Graphs

- **Output Options.** Print, export, or send reports and graphs via e-mail.
- **Preview.** Preview data on-screen in report/graph format or in tabular format.
- **Record Selection.** Select records to include in the report or graph with query operators (*is equal to, does not contain, is greater than, etc.*).
- **Font Modification.** Select the font with which to print reports and graphs.
- **Titles.** Change the default report/graph titles and/or include footers on reports.
- **Custom Settings.** Save record selections, field selections, sort criteria, and format options for future use. Save the report/graph by a specified name, and then attach the saved file to the Quick Access bar for easy access.

### Reports

- **Sort.** Sort reports by certain fields in either ascending or descending order. The sort may include up to three fields.
- **Field Selection.** Choose the fields to include on reports.
- **Adjustable Fields.** Change the width of fields on tabular reports.

### Graphs

- **2D/3D.** Select to display either a 2-dimensional or 3-dimensional graph.
- **Gallery.** Choose from a variety of types of graphs (bar, line, pie, etc.).

# LIST OF REPORTS

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## Assets

Report Name	Description
Assets	Detailed asset information, including the asset type, type description, location, and quantity for each asset.
Locations	Asset locations and descriptions.
Types	Asset types and descriptions.
Numbers	Asset numbers, types, and locations.
Counting Sheets	Worksheet on which to record asset counts.
Adjustments	Quantities adjusted when posting physical asset counts.

## Equipment

Report Name	Description
Equipment Report (Simple List)	Basic equipment information, including the description, serial number, equipment type, and location for each equipment.
Equipment Report (Full List)	Detailed equipment information, including the manufacturer, vendor, spare parts, components, task information, safety notes, user-defined fields, and nameplate information for each piece of equipment.
Locations	Sub-locations, cost center, department, and general ledger number for each location.
Equipment Drawings	Equipment with attached multimedia files, including the path, file name, and description of each multimedia file, and whether you selected to attach this file to work orders.
Component Report	Equipment families in outline form, including components and component descriptions for each piece of equipment.
Component Costs	Cost information for each equipment family, grouped by the parent equipment record. This report includes the labor hours, labor cost, material cost, and total cost for each equipment and component as well as grand totals for each parent equipment record.
Spare Codes Master List	Spare parts information, grouped by spare-parts code. This report includes the description, quantity, and site for each item.
Equipment Spare Parts List	Spare parts information, grouped by equipment. This report includes the spare-parts code description, item number, item description, quantity, and site for each spare-parts code.
Nameplates	Nameplate information for each piece of equipment for the selected equipment type.
Equipment Variables	Variable information for each piece of equipment for the selected equipment type.
Work Order Cost Summary	Cost information for equipment on all open and closed work orders, grouped by work order type. This report includes the number of work orders, employee labor hours, material cost, employee labor cost, vendor cost, and total cost for each equipment as well as grand totals for each value listed above.

## LIST OF REPORTS (CONTINUED)

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### Equipment (Continued)

Report Name	Description
Service Contracts	Service contract information, grouped by service code. This report includes the service contract number, vendor ID, contract expiration date, total payment, last payment date, next due date, and the total amount paid for each equipment.
Equipment Meters	Basic meter information, including the meter name, average meter units per day, current meter reading, and unit of measure for each equipment.
Meter History	Equipment meter reading history, grouped by equipment. This report includes the date and time entered, meter reading value, and unit of measure for each meter name.
Maintenance Cost per Meter Unit	Labor, material, and total costs per meter name and per meter unit for each piece of equipment.
Assets	Costs for equipment assets, including the asset number, replacement cost, original cost, material cost, labor cost, current value, and annual depreciation for each piece of equipment.
Equipment Types	Equipment types and descriptions.
Reasons for Outage	Reasons for outage and descriptions by equipment type.
Departments	Departments and descriptions.
Cost Centers	Cost centers and descriptions.
General Ledgers	General ledger numbers and descriptions.
Activity on Equipment Requiring Special Handling	History of all work orders created for equipment requiring special handling.
Failure Summary	Basic equipment failure information, grouped by equipment type. This report includes the RFO code, solution, and number of failures for each equipment.
Mean Time between Failure	Grouped by equipment type, this report includes the RFO code, solution, number of work orders, mean time between failure (MTBF), mean time to repair (MTTR), days from last failure, and days to repair for each equipment. MTBF is calculated from non-task work orders and MTTR is calculated from work orders with associated tasks or work orders with a scheduled start date.
Failure-Solution Cost	Equipment repair cost information, grouped by equipment type. This report includes the employee labor cost, contractor labor cost, material cost, and total cost for each equipment.
Solutions	List of solutions for equipment failure, grouped by equipment type.

## LIST OF REPORTS (CONTINUED)

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### Inventory

Report Name	Description
<b>Inventory Standard</b>	Basic inventory item information, including the type, manufacturer, average unit cost, unit of measure, reorder quantity, reorder method, location, and quantity on hand for each item.
<b>Vendors</b>	Basic vendor information, including the vendor type (Supplier, Contractor, or OEM/Mfg) and notes for each vendor.
<b>Manufacturers</b>	Basic manufacturer information, including the type and notes for each manufacturer.
<b>Stock Level Summary</b>	Basic stock information, grouped by site. This report includes the type, account code, description, quantity on hand, average unit cost, and total cost for each item.
<b>Stock Level Summary with Cumulative Totals</b>	Stock information and cumulative totals, grouped by site. This report includes the last received date, quantity on hand, and total cost for each item.
<b>Stock Level Details</b>	Detailed stock information, including the type, account code, average unit cost, site, location, quantity on hand, and total cost for each item.
<b>Stock Level Min/Max</b>	Min/Max reordering information, including the average unit cost, site, quantity on hand, minimum stock level, maximum stock level, quantity on order, reorder point, reorder quantity, and total cost for each item.
<b>Physical Inventory Counting Sheets</b>	Worksheet on which to record inventory counts.
<b>In-transit Receiving Worksheet</b>	Worksheet on which to record the actual quantities received.
<b>Physical Inventory Adjustment</b>	Quantities adjusted when posting physical inventory counts. This report lists the old and new quantities for each modified record.
<b>Item Reserved by Work Order</b>	Inventory items reserved for work orders, including the site, work order number, and quantity reserved for each item.
<b>Inventory Types</b>	Inventory types and descriptions.
<b>Item Labels</b>	Labels for inventory items.
<b>Suppliers for Each Item</b>	Vendor ID, vendor name, unit cost, vendor's item number, minimum order quantity, unit of purchase, lead time, and contract information for each item.
<b>Supplied by Vendors</b>	Grouped by vendor, this report includes the unit cost, quantity per unit of purchase, minimum order quantity, blanket purchase order number, vendor's item number, unit of purchase, lead time, and contract information for each item.
<b>Item Drawings</b>	Inventory items with attached multimedia files, including the path, file name, and description of each multimedia file.
<b>Status</b>	Status information, including the quantity on hand, adjusted unit cost, quantity reserved, quantity on order, reorder method, reorder quantity, and value on hand for each item.

## LIST OF REPORTS (CONTINUED)

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### Inventory (Continued)

Report Name	Description
Stock Movement	Inventory transactions, grouped by item number. This report includes the site, location, quantity moved, unit cost, reason for movement, transaction type, date and time of the transaction, issue to and charge to information, and extended cost.
Usages	Quantity on hand, unit cost, quantity on order, quantity and value for the previous year, quantity and value for the current year-to-date, and value on hand for each item.
Issues and Receipts	Current quantities, including the quantity on hand, quantity received per unit of purchase, quantity issued, and quantity adjusted for each item.
N - Usage	Inventory items issued (used) a specified number of times (N) or less during a certain period of time, including the quantity on hand, quantity issued, total issue cost, and total value on hand.
Where Used	Equipment and/or locations for which employees used inventory items and the maximum number of items issued in a single checkout.
Forecasting	Forecast future inventory usage by viewing the monthly usage history for a one-year period.

### Labor

Report Name	Description
Employees	Employee information, including craft, class, shift, hire date, and raise date for each employee.
Employee Training	Training information, grouped by employee. This report includes the course description, the purpose of the training, the hours and/or units earned, the cost, and whether the employee completed the course.
Employee Attendance	Attendance history, grouped by employee/attendance code, including sick, vacation, overtime, and other exceptions to the normal working hours.
Attendance Codes	Attendance codes and descriptions.
Craft Codes	Craft codes and descriptions.
Employee Productivity	Total estimated hours, total hours worked, and productivity percentage for each employee.
Craft Productivity	Total estimated hours, total hours worked, and productivity percentage for each craft.

### Purchasing

Report Name	Description
Purchasing Item Journal	Ordering information, grouped by item. This report includes the number of inventory items to be ordered (based on the current stock level and the number items reserved by work orders), unit cost, unit of purchase, total cost, and vendor information for each item.
Blanket PO List	Blanket purchase order information, grouped by vendor. This report includes the blanket purchase order number, description, release number, and item information for each vendor.

## LIST OF REPORTS (CONTINUED)

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### Purchasing (Continued)

<b>Report Name</b>	<b>Description</b>
<b>Purchasing Item List</b>	Items currently on requisitions or purchase orders, including the quantity requested, unit cost, unit of purchase, total cost, purchase order number, release number, requisition number, and vendor information for each item.
<b>Item Purchasing History</b>	Purchasing history information, grouped by item, purchase order number, and release number. This report includes the purchase order status, item type, requisition number, quantity requested, and all receiving information.
<b>Requisition Status List</b>	Status and approval information for each requisition.
<b>Purchase Order Status</b>	Status information, grouped by purchase order number. This report includes the quantity requested, quantity received, unit cost, backorder quantity, and extended cost for each item.
<b>Purchasing History Cost</b>	Cost information for closed purchase orders, grouped by purchase order number, release number, and close date. This report includes the account number, quantity received, and total cost for each item.
<b>Purchase Order History</b>	Request and receiving totals for closed purchase orders, grouped by purchase order number, release number, and close date. This report includes the quantity requested, total quantity received, unit cost, total cost of requested quantities, and total cost of received quantities for each item.
<b>Number of Receipts</b>	Receiving information for closed purchase orders, including the inventory type, date first received, date last received, total quantity received, number of receipts, average quantity received per month, and average receipts per month for each item.
<b>Receiver Reprint</b>	Reprint of selected receivers.
<b>Receiver Summary</b>	Summary of generated receivers, grouped by receiver number. This report includes the vendor information, purchase order number, release number, date received, quantity received, adjusted unit cost, and total cost for each item.
<b>Vendor Performance</b>	Performance information, including the number of orders, average number of days late, and average number of days early for each vendor.
<b>Details</b>	Detailed item purchasing history summary, including the date received, quantity received, total cost, vendor information, account code, account description, and inventory type for each item.
<b>Account Code Summary</b>	Total received costs for each account code.
<b>Inventory Type Summary</b>	Total received costs for each inventory type.
<b>Vendor Summary</b>	Total received cost for each vendor.



## LIST OF REPORTS (CONTINUED)

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### Scheduling

Report Name	Description
Facility Schedule	Exceptions to the normal facility working days.
Employee Schedule	Daily, weekly, or monthly schedule for the employee. This report includes the craft, shift, and utilization percentage for the employee and the location and estimated hours for each piece of equipment.
Employee Scheduling Exceptions	Exceptions to the employee's normal working hours, including the date, attendance code, reduced hours, and increased hours for each exception.
Daily Craft Schedule	Daily schedule for a specific date or range of dates. Report up to three months of daily schedules. This report includes available craft hours, scheduled craft hours, utilization percentage, and excess or shortage hours for each craft.
Weekly Craft Schedule	Weekly schedule for a specific range of dates. This report includes available craft hours, scheduled craft hours, utilization percentage, excess or shortage hours, weekly totals, grand totals for each craft.
Production Schedule	Downtime information, including the date and time you will take the equipment down, the date and time you will bring equipment back up, and the reason for outage.

### Statistical Predictive Maintenance

Report Name	Description
Out of Limit Variables	Grouped by equipment, variables that currently exceed or fall below the specified limit.
Variable Description	Variable descriptions, including the measurement, description, unit, mean, and standard deviation for each equipment.
Variable Readings	Variable readings, grouped by equipment. This report includes the date, time, numeric and/or text reading, and work order number for each reading.

### Tasks

Report Name	Description
Tasks (Simple List)	Basic task information, grouped by task. This report includes the location, next due date, last performed date, task duration, and task frequency for each piece of equipment.
Tasks (Full List)	Detailed task information, including craft information, equipment/location information, required parts, and task instructions.
Required Parts	Required parts, including the item number, site, item description, quantity, and unit of measure for each task.
Instructions	Task instructions, including the date last edited and instructions for each instruction code.
Instructions (One per Page)	Task instructions, including the date last edited and instructions for each instruction code (one per page).
Shadowing	Shadowing information, including the equipment number, equipment description, shadowed task, and shadowed task description for each task.

## LIST OF REPORTS (CONTINUED)

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### Tasks (Continued)

Report Name	Description
Tasks Requiring Downtime	Tasks that require equipment to be down when employees perform the task. This report includes the equipment number, equipment description, operating status, next due date, and downtime duration for each task.
Projected Equipment Downtime	Estimated downtime for equipment on which you perform maintenance.

### Work Requests

Report Name	Description
Tenant	Basic tenant information, including the exact location for maintenance work and contact information for each tenant.
Tenant Summary	Cost summary, grouped by tenant. This report includes the number of requests, labor hours, employee labor cost, contract labor cost, material cost, and total cost for each requested service.
Tenant Detail	Cost summary, grouped by tenant. This report includes the priority, labor hours, employee labor cost, contract labor cost, material cost, and total cost for each requested service.
Requested Service Summary	Cost summary, grouped by requested service. This report includes the priority, number of requests, labor hours, employee labor cost, contract labor cost, material cost, and total.
Call-in Requests	Work orders submitted as call-in requests.
Call-in Request (Simple List)	Submitted call-in requests, including the requested service, request date/time, requester (tenant), authorized caller, location, priority, and status of each work order.
Completed Call-in Requests	Work orders submitted as call-in requests and closed to history.
Call-in Request Average Response Time	Average response time, grouped by tenant/requested service. This report includes the priority, response time in hours and number of calls for each tenant/requested service.
Call-in Request Time Detail	Response and process times, grouped by tenant. This report includes the requested service, description, response time, process time, and total time for each closed request.
Call-in Request Invoice	Invoice for each call-in request, including the starting date/time, completion date/time, comments, labor information, and parts information for each request.
Call-in Request Labor	Craft and labor information for each call-in request, including costs.
Call-in Request Parts	Parts information, grouped by tenant. This report includes the requested service, item number, item description, quantity, average unit cost, and total cost for each request.
Call-in Request Comments	Comments for each call-in request.
Call-in Request Craft Summary	Summary of call-in request information, grouped by craft. This report includes the number of requests, labor hours, and labor cost for each requested service.
Call-in Request Location Summary	Cost summary, grouped by location, sub-location 1, sub-location 2, or sub-location 3. This report includes the number of requests, labor hours, employee labor cost, contract labor cost, material cost, and total cost for each requested service.

## LIST OF REPORTS (CONTINUED)

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### Work Requests (Continued)

Report Name	Description
<b>Call-in Request Location Detail</b>	Cost summary, grouped by location, sub-location 1, sub-location 2, or sub-location 3. This report includes the priority, labor hours, employee labor cost, contract labor cost, material cost, and total cost for each requested service.
<b>On-site Requests</b>	Basic on-site request information, grouped by request number/request date. This report includes the approve date/time, individual requesting the work, individual assigned the work, starting date, task description, equipment number, equipment description, location, and comments.

### Work Orders

Report Name	Description
<b>Summary Simple</b>	Basic work order information, including the task number, task description, work order type, status, scheduled start date, scheduled finish date, priority, equipment number, craft, and estimated labor hours for each work order (open or closed).
<b>Summary Comprehensive</b>	Detailed information for current work orders, including the task number, scheduling information, equipment information, labor information, parts, and comments for each work order.
<b>Summary Comprehensive with Cost</b>	Detailed information for current work orders, including the task number, scheduling information, cost information, equipment information, labor information, parts, and comments for each work order.
<b>Craft Summary</b>	Grouped by craft, the number of requests, total labor hours, and labor cost for each task.
<b>Pick Lists</b>	List of inventory items required for work orders.
<b>History Comprehensive</b>	Detailed information for closed work orders, including the task number, scheduling information, equipment information, labor information, parts, and comments for each work order.
<b>History Comprehensive with Cost</b>	Detailed information for closed work orders, including the task number, scheduling information, cost information, equipment information, labor information, parts, and comments for each work order.
<b>History Weekly Summary</b>	Number of closed work orders for each week of the specified month and year for each work order type.
<b>Mean Time between Work Orders</b>	Failure information, grouped by equipment and work order type. This report includes the number of work orders, mean time between failure, mean time to repair, failure date, days from last failure, repair date, and days to repair.
<b>Inventory Usage</b>	Quantities and costs of inventory items used for maintenance work for 6 months beginning with the specified month.
<b>Response Times</b>	Response times for all closed work orders.
<b>Work Orders Performed by Warranty</b>	Work orders that were completed under warranty. This report includes the equipment number, work order number, comments, labor information, required parts, labor costs, and material costs.
<b>Work Order Backlog</b>	Summary of labor and equipment information for overdue tasks and work orders. This report includes the estimated hours, crew size, hours worked, hours remaining, starting date, equipment, and location for each task.

## LIST OF REPORTS (CONTINUED)

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### Work Orders (Continued)

<b>Report Name</b>	<b>Description</b>
<b>Craft Backlog</b>	Compares the estimated number of crew hours with the actual number of hours already logged for each task/work order.
<b>Aging Report</b>	Number of work orders per work order type that are 1-10, 11-30, 31-60, 61-90, or over 90 days overdue.
<b>Statistics</b>	Statistical backlog information, including the number of work orders (1) backlogged at the specified starting date, (2) scheduled to begin within the date range, (3) backlogged at the specified starting date, but completed within the date range, and (4) scheduled to begin within the date range and completed within the date range.
<b>Slack Time</b>	Number of hours for a specified time period that each employee did not work.
<b>Projection</b>	Projected estimates for work orders, grouped by week, month, or summarized (no grouping by time span).
<b>Work Order Types</b>	Work order types and descriptions.
<b>Expense Classes</b>	Expense classes and descriptions.
<b>Invoices</b>	Invoice for current and closed call-in requests and closed work orders, including the starting date/time, completion date/time, comments, labor information, and parts information for each request.

# LIST OF GRAPHS

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## Scheduling

Graph Name	Description
Craft Utilization	Average utilization percentage for each craft during a specified date range.
Employee Utilization	Average utilization percentage for each employee during a specified date range.

## Statistical Predictive Maintenance

Graph Name	Description
Numeric Information	Readings taken from equipment and any additional analysis information that has been established.
Text Information	Occurrences of text values for the equipment. For instance, if you are using low, medium, and high for data values, this graph displays the number of occurrences found of low, medium, or high values.

## Work Requests

Graph Name	Description
Total Cost	Total costs of works requests. Select to group this graph by tenant, location, sub-location 1, sub-location 2, sub-location 3, requested service, month completed, priority, or completion date.
Material Cost	Material costs (cost of inventory parts) of work requests. Select to group this graph by tenant, location, sub-location 1, sub-location 2, sub-location 3, requested service, month completed, priority, or completion date.
Labor Cost	Labor costs of work requests. Select to group this graph by tenant, location, sub-location 1, sub-location 2, sub-location 3, requested service, month completed, priority, or completion date.
Labor Hours	Labor hours used in work requests. Select to group this graph by tenant, location, sub-location 1, sub-location 2, sub-location 3, requested service, month completed, priority, or completion date.
Number of Call-in Requests	Number of call-in requests. Select to group this graph by tenant, location, sub-location 1, sub-location 2, sub-location 3, requested service, month completed, priority, or completion date.
Response Time	Response times of work requests. MP2 calculates response time by subtracting the time an employee receives the request from the time it is first entered into MP2. Select to group this graph by tenant, location, sub-location 1, sub-location 2, sub-location 3, requested service, month completed, priority, or completion date.
Projection	Projected number of craft labor hours required to complete work orders, grouped by week and month or summarized (no grouping by time span).
Craft Backlog	Compares the estimated number of craft labor hours required to complete overdue tasks or work orders to the actual number of hours already logged for these tasks and work orders.

# LIST OF GRAPHS (CONTINUED)

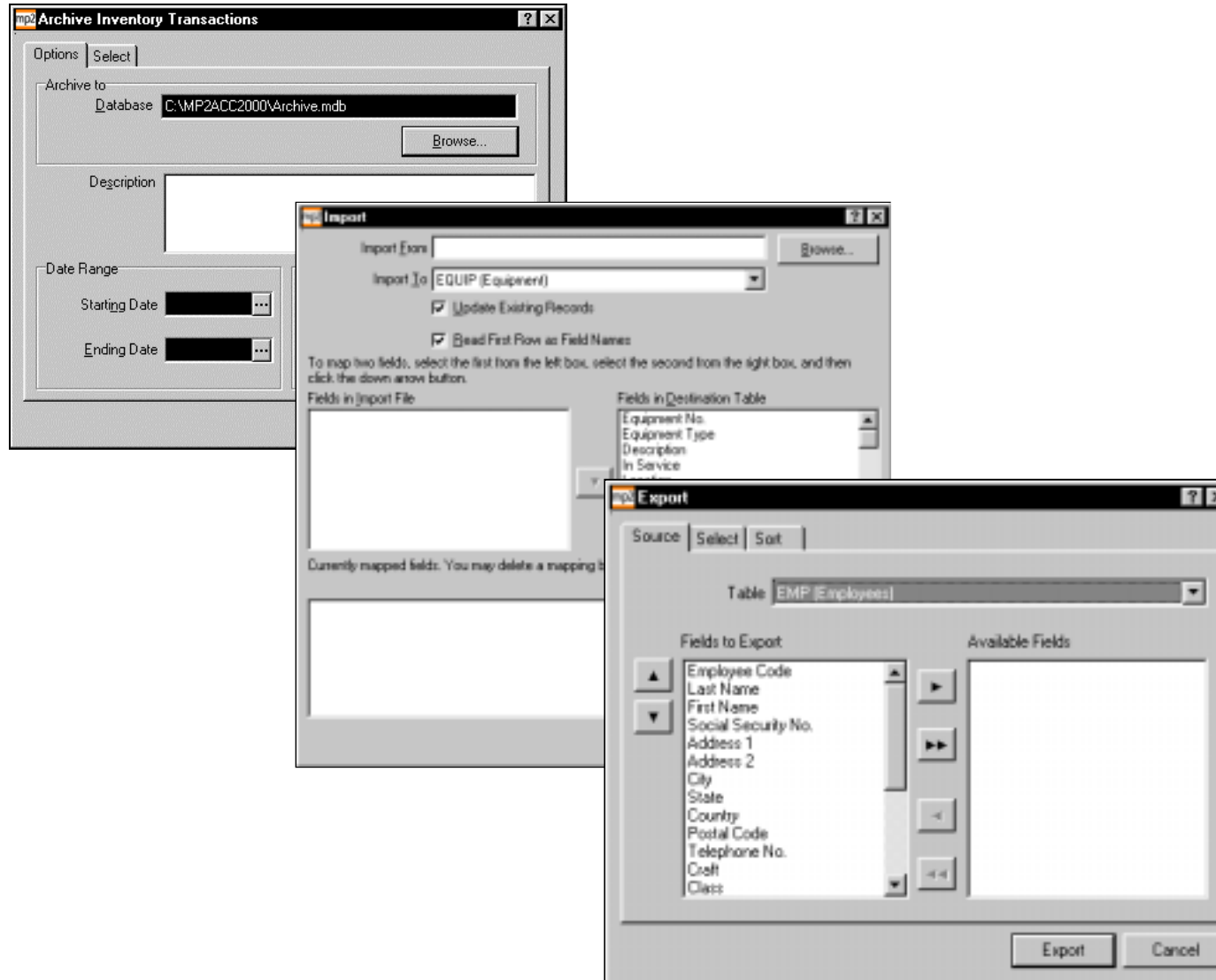
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## Work Order Analysis and Inventory Analysis

Graph Name	Description
<b>Work Order Analysis</b>	Analysis of work order data according to four analysis measures: Pareto, Time Series, Histogram, and Categorical.
<b>Inventory Analysis</b>	Analysis of inventory data according to four analysis measures: Pareto, Time Series, Histogram, and Categorical.

# UTILITIES

Control administrative functions using MP2 utilities. Back up and restore data; archive and restore historical data; import and export data; and view and manage system functions.

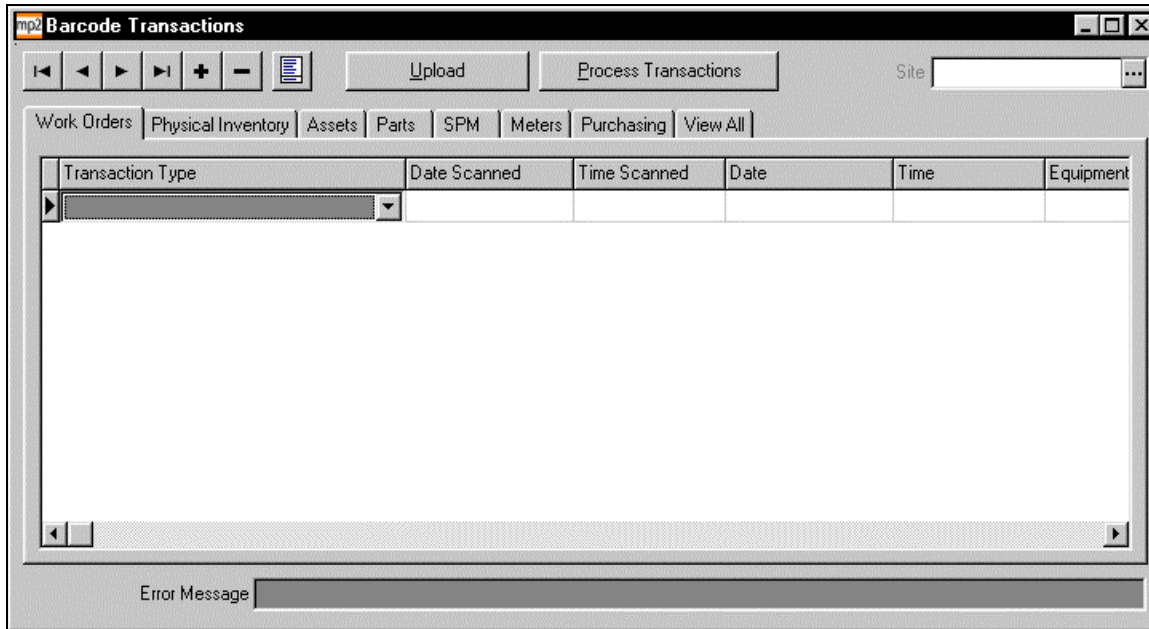


## FEATURES

- **Data Conversion.** Convert data from other Datastream products using the Data Conversion Wizard.
- **Data Backup/Restore.** Back up and restore data easily with MP2's built-in utility.
- **Data Archive/Restore.** Archive inventory transaction history, purchase order history, and work order history periodically to free system resources and speed up procedures.
- **Data Import.** Import data for equipment, inventory, inventory site, and stock records from a variety of database formats, including ASCII, Dbase, Excel, Lotus, and Symphony.
- **Data Export.** Export data from MP2 into a variety of database formats, including ASCII, Dbase, Excel, Lotus, Quattro, Symphony, and Microsoft Access.
- **Description Synchronization.** Synchronize changes to equipment and inventory descriptions.

# BARCODE

Identify almost any item with a barcode, from assets to employee badge numbers. With a barcode scanner, you may accurately and reliably collect information and transfer it to MP2.



## FEATURES

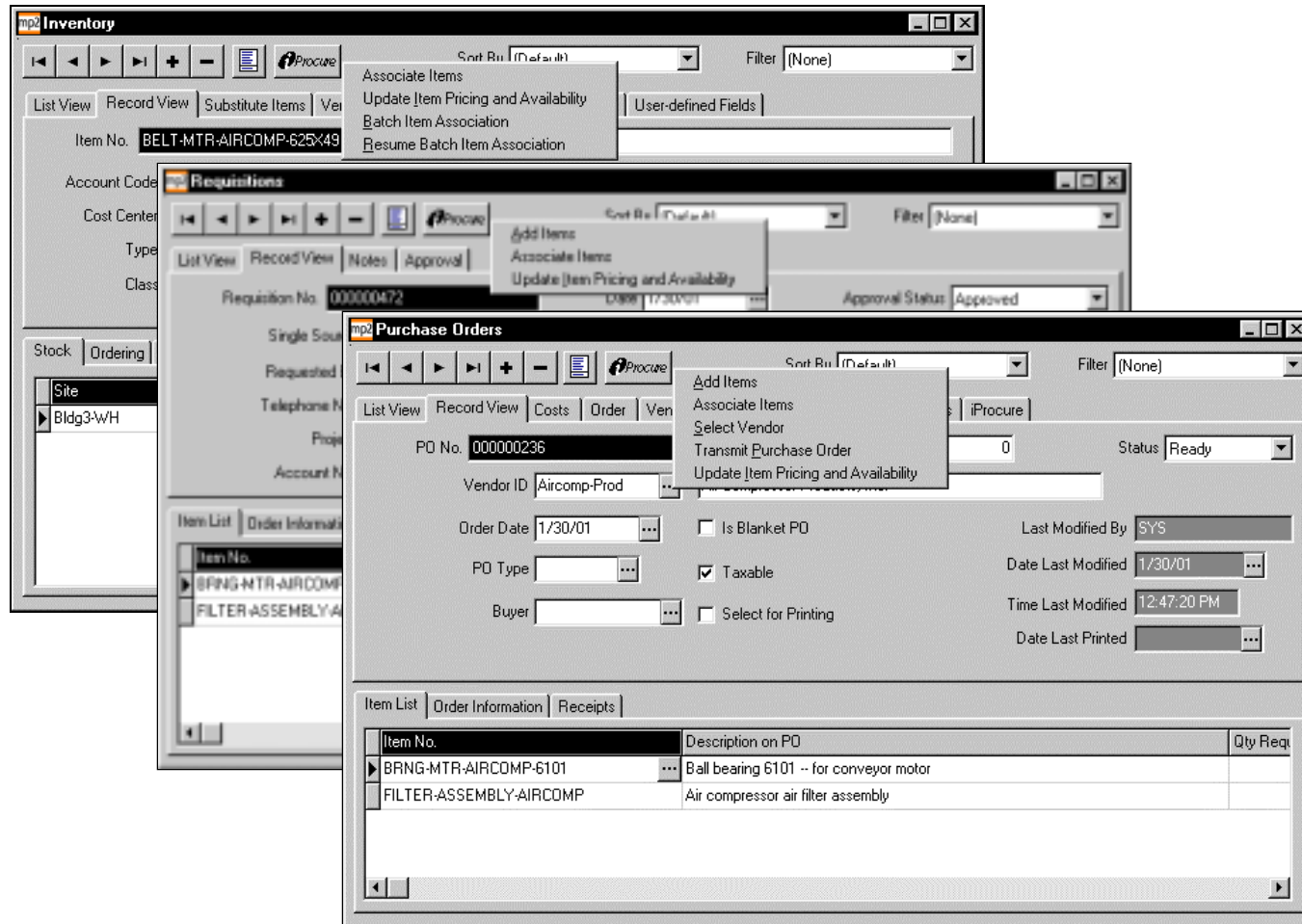
- **Data Transfer.** Transfer barcode information directly to MP2.
- **Inventory Management and Checkout.** Issue parts efficiently and accurately, cutting down on parts shortages and increasing the overall productivity of the maintenance department.
- **Scanners.** Reduce data entry time and improve accuracy for many procedures.
- **Reports.** View and print barcode reports: Transactions, Labels, Asset Types, Work Order Comment Codes, Check-out/Return Cards, RFO Codes, Cost Centers, Purchase Orders.



# iPROCURE

MP2 contains an e-commerce interface. The Datastream e-commerce solution, iProcure, enables you to search for and order maintenance, repair, and operations (MRO) parts electronically from within MP2.

iProcure uses the Internet to facilitate unprecedented communication opportunities between buyers and sellers by providing direct access 24 hours a day to the parts catalogs of the nation's leading MRO suppliers. iProcure automates MRO purchasing and eliminates paperwork, which speeds up the procurement process and saves money on transactions.



## FEATURES

### Inventory

- **Item Association.** Associate MP2 inventory items with iProcure supplier items, either one item at a time or in a batch, to associate multiple items simultaneously.
- **Item Updates.** Update price and availability information for selected inventory items.

### Requisitions

- **Item Additions.** Add items from iProcure supplier catalogs to existing requisitions.
- **Item Association.** Associate MP2 requisition items with iProcure supplier items.
- **Item Updates.** Update price and availability information for all line items on selected requisitions.

### Purchase Orders

- **Vendor Selection.** Select an iProcure supplier from whose catalog you wish to add items to a purchase order.
- **Item Additions.** Add items from iProcure supplier catalogs to existing purchase orders.
- **Item Association.** Associate MP2 purchase order items with iProcure supplier items.
- **Item Updates.** Update price and availability information for all line items on selected purchase orders.
- **Purchase Order Transmissions.** Transmit purchase orders to iProcure vendors.
- **Audit Trail.** View and print all purchasing transactions via the electronic order audit trail.

# REQUIREMENTS AND RECOMMENDATIONS

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This table outlines the hardware and operating system requirements and recommendations to achieve MP2's optimum speed and performance.

## Workstation

Operating System	Windows 95, Windows 98, Windows NT 4.0 SP6a, or Windows 2000 Professional SP1
Processor	Pentium 166 (minimum) Pentium 233 (recommended)
RAM	32 MB for Windows 95/98 (minimum) 64 MB for Windows 95/98 (recommended) 64 MB for Windows NT 4.0 or Windows 2000 Professional (minimum) 128 MB for Windows NT 4.0 or Windows 2000 Professional (recommended)
Hard Disk Space	340 MB with 11 ms or faster access time 90 MB for installation
Monitor	SVGA color with 800 x 600 resolution
Graphics Adapter	1 MB RAM
Parallel port for printer output	recommended
Communication port and modem	recommended
Laser Printer	recommended
Mouse	required
Network card speed	10 Mbps (minimum) 100 Mbps (recommended)
CD-ROM drive	recommended

## Server

Operating System	Windows 95, Windows 98, Windows NT Server 4.0 SP6a, Windows 2000 Professional, Windows 2000 Server, or Novell
Processor	Pentium 166 (minimum) Pentium 400 or equivalent (recommended)
RAM	128 MB (minimum) for 10 users or fewer; add 4 MB per user after 10 256 MB (recommended) for 10 users or fewer; add 4 MB per user after 10
Hard Disk Space	1 Gig with 11 ms or faster access time (minimum) 4 Gig SCSI with PCI Controller (recommended)
Protocols	TCP/IP, IPX/SPX
Network Interface Card	10 Mbps (minimum) 100 Mbps (recommended)
Bus Architecture	EISA or PCI
CD-ROM drive	required for installation