FOURTH GENERATION SOFTWARE SOLUTIONS

Fitrix™ Material Planning • User Guide

Version 5.30

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Chapter

Introduction to Material Planning

his chapter contains basic information about Fitrix Material Planning. It is meant to give you a general picture of what the module can do and how it is used. The sections that address this are as follows:

- General description of the Fitrix Material Planning system
- Features of Fitrix Material Planning
- Overview of Material Planning

General Description

Material Planning enables the strategic planning of material production and purchases within an organization. It analyzes requirements for saleable, manufactured and purchased items, and creates a plan for production and purchasing to satisfy the requirements.

Planned orders are generated by analyzing demand for master-scheduled and non-master-scheduled items. Bills of material for the planned orders are expanded to analyze requirements for all lower level items, whether produced or purchased. Requirements at each level are netted against on hand inventory and scheduled receipts for active orders, to determine the need to generate additional planned orders.

Generated planned orders may then be reviewed, optionally consolidated, and released for manufacture or purchase.

Multiple reports and inquiries are also available to provide a comprehensive view of current and planned production and purchase activities.

This chapter is designed for readers who want to know how Material Planning. It describes the major functionality of Material Planning and provides brief descriptions of the features that are offered in the application.

Features

An effective material requirements planning application should allow you to effectively plan for future production and purchased, based on an identified demand from sales orders and/or sales forecast. It should consider existing inventory and open production and purchase orders, when determining if additional inventory is needed to support the production plan. It also make the planning information available to management in a straightforward and timely manner, to assist in decision-making activities.

To address these requirements, the following features are included in Material Planning

Multiple Demand Sources

Demand for either manufactured or purchased items can come from a variety of sources:

- Master Schedule Demand for non-master-scheduled itmes can come from master schedules form higher level items.
- Sales Orders Sales orders placed for saleable items will be included as demand
- **Forecast** Forecasts can be entered in the Master Schedule Planning module, for master-scheduled items
- Combinations Demand for items can be expressed as the greater of sales orders or forecast.

Multiple Order Policies

Demand is summarized and netted against available inventory and incoming receipts, to determine the quantitied to be planned. The planned quantities may need to be configured to match various materials management strategies:

- Some items (such as master scheduled items) may need to be ordered in quantities that match exactly to the forecast or sales orders.
- Some intermediate items should be ordered at some economic quantity, to optimize setup and labor costs. Thus the planned order

- quantities may be a summarization of multiple demand occurrences for a given time period.
- Some items (such as purchased items) may require that sufficient inventory exists on hand to support demand for a fixed period of time (for example, keep a 30-day supply on hand)

Material Planning allows you to setup an order policy method for each item to be planned. Each planned items can use one of the following order policies:

- **Discrete** Each occurrence of a forecast, sales order line item, master schedule requirement, or planned order requirement will create a discrete planned to exactly match the requirements. This results in the highest level of detail possible when analyzing demand. It can also cause a much higher number of planned orders to be created.
- **Economic Order Quantity** Causes the economic order quantity to be ordered. The economic order quantity can be calculated by the system for each planned item.
- Standard Order Quantity Causes a user-defined standard order quantity to be ordered. The standard order quantity can be manually entered for each planned item.
- Days of Supply Allows the user to indicate the number of days worth of inventory to be stocked, to satisfy actual demand for that time period.
- User-Defined Order Policy Additional order policies may be created for special circumstances, where a customized order policy must be created. This order policy can be identified for the appropriate items, but the program logic must be developed.

Multiple User-Defined Planning Intervals

Most planning systems typically generate large amounts of detail information which can be difficult to analyze effectively. Material Planning can generate such detail, depending on the order policies used. Fortunately, the information can be summarized into a variety of formats, for much easier review and analysis. The details of requirements and planned orders can be accumulated into user-defined time periods. The time periods can be analyzed for exceptions first, then details can be researched. The user has total control over how these time periods are defined. The time periods can be daily, weekly, bi-weekly, 4-weekly, monthly, quarterly, or combinations of these frequencies. In addition, multiple 'period interval templates' may be created to satisfy the needs of users at different levels within the organization.

Multiple Warehouse Planning

Many manufacturing organizations need planning systems that support MRP generations at multiple plants, not just one central plant. In addition, plants may want to consolidate inventory from multiple warehouses whose items can be included in the plants main inventory for netting purposes. Material Planning lets you define multiple warehouses as planning warehouses. Each planning warehouse can execute its own MRP generation.

In addition, items in one warehouse can be 'sourced' from a different warehouse. Demand for the item is transferred as demand to the sourcing warehouse, and the MRP Generation will automatically plan items in all associated sourcing warehouses.

Finally, item planning parameters (order polcies, order quantities, days of supply, etc) are defined at the item default level (in Update Inventory Information), but can be overridden for each warehouse in which an item is to be stocked and planned.

Planned Order Releases

The MRP generation creates one or more planned orders, based on the order policies set up for each item. Functions exist to allow the user to review these planned orders using a variety of selection criteria:

- Planned orders for all items in a warehouse
- Planned orders for specific planener code
- Planned orders for specific buyer codes
- Planned orders for specific vendor codes

The planned orders may then be 'released', to create active production and purchase orders, which can immediately be utilized to start manufacturing and purchase processes.

Open Order Recommentations

The MRP generation analyzes open production and purchase orders for available quantities and due dates, to determine if they can be used to satisfy planned requirements. When a requirement is identified, Material Planning attempts to use open orders before creating planned orders. If the open quantities of orders can be used, it compares the required date to the due date of the open order. If the due date is later, Material Planning recommends that the open order be expedited. If the due date is earlier, it recommends that the order be deferred. In addition, if open orders are encountered for which no demand exists, Material Planning recommends that the orders be cancelled.

Recommendations are created each time the MRP generation is executed. The recommendations can be displayed and/or printed for management review. Functions also exist to easily accept or reject the recommendations, from a single screen.

Inventory Control Integration

Material Planning works with Inventory Control in the following areas:

- Planning parameters are defined for each item in the Inventory Information table, in the Manufacturing Base and Planning screens.
- Planning parameters can also defined for each warehouse for an item in the Inventory Information table, in the Manufacturing/Warehouse Base and Warehouse Planning screens.
- MRP Generations use an item's on-hand and safety stock when netting requirements
- In cases where an item's on-hand falls below safety stock levels, planned orders are created to replenish the inventory, even if no other demand exists.

Bill of Materials Integration

Material Planning works with Bills of Material in the following areas:

- MRP generations use standard bills of material to compute demand for lower level items.
- Shrinkage factors defined in the bill of material is also used to adjust the demand for lower level items.

Master Schedule Planning Integration

Material Planning works with Master Schedule Planning in the following areas:

- Sales forecasts can be entered for Master-Scheduled Items. This
 forecast is one source of demend used by the MRP generation.
- The MRP Generation plans all items, both Master-Scheduled and non-Master-Scheduled.
- Planning reports in Material Planning can be printed for:
 - Master-Scheduled Items
 - Non-Master-Scheduled Items
 - Both

Production Order Processing Integration

Material Planning works with Production Order Processing in the following areas:

- Open production orders are analyzed when netting requirements against available inventory and scheduled receipts.
- The MRP generation makes recommendations to defer, expedite or cancel production orders, based on planned demand.
- Production orders can be created directly from Material Planning via the Order Release function.
- Components requirements for open production orders are included in the MRP generation as unsatisfied requirements.

Purchasing Integration

Material Planning works with Purchasing in the following areas:

- Open purchase orders are analyzed when netting requirements against available inventory and scheduled receipts.
- The MRP generation makes recommendations to defer, expedite or cancel purchase orders, based on planned demand.
- Purchase orders can be created directly from MRP via the Order Release function.

Sales Order Integration

Material Planning works with Sales Orders in the following areas:

- Open sales orders are included as demand in the MRP generation.
- Planned orders released to production or purchasing are directly linked to sales orders when the discrete order policy is used.

Overview

Before You Begin

Before you can use Material Planning, you must first complete "setup" of the module. Setup is the process by which you enter all of the information required to begin processing an MRP generation. Setup includes entry of basic "control" information that the programs need to run, and entry of special planning parameters for each item.

Material Planning-related activities can be divided into five broad categories: planning setup, MRP Generation, inquiry and report reviews, Order Release, and Recommendation Management. Each activity is associated with a specific menu option, and these options are listed for quick reference in this overview section. (The "keystroke path" to a menu option is indicated in parentheses following each option.)

Setup

There are three aspects of setup: Company Setup, Material Planning setup, and Item Planning Parameter setup. During setup, you enter all of the information the MRP Generation uses as it plans.

Company setup includes entering basic control information that the programs need to run, such as company information, and administrative information. This basic setup information is covered in Chapter 2, Company Setup, in this manual.

Because the menu options used for company and administration pertain to the company as a whole, the menu options used to do this initial company setup are located under the General/Administrative menu (option 7) in the Company Setup menu. You only need to perform this setup procedure once for the system.

Module-specific setup, on the other hand is required for each module you have installed. The following option, accessed from the Material Planning/File Maintenance menu, is used for module setup:

Planning Parameters (6-2-1-a)

In addition, you must use the following options, accessed from the Material Planning/File Maintenance menu, to enter reference information which will be used in Material Planning Reports

Period Intervals (6-2-1-b)

You must also enter planning parameters for each item to be processed by the MRP generation. These item and warehouse level options are accessed from the Inventory Control module:

Inventory Control – Update Inventory Information (2-2-1-a)

MRP Generation

After setup is complete, you can begin executing MRP Generations and reviewing trhe results. Depending on a number of factors, the MRP generation itself can be completed in a few minutes, or several hours. The factors that impact the length of the generation are:

- The total number of items being planned
- The number of levels in the standard bill of materials (the generation analyzes requirements, then creates planned orders for each level)
- The number of open sales order, production orders and purchase orders in the system (these orders are analyzed at the beginning of the generation)
- The number of sales forecasts entered into the future.
- The number of occurrences of items being 'sourced' from other warehouses.
- The number of items being planned with the discrete order policy (these types typically generate relatively more planned orders)
- Any items using the standard order quantity Order Policy, which also have a very low standard order quantity value in the Inventory Information Master.

The MRP generation is executed via:

■ MRP Fill Generation (6-2-2-a)

The generation does not create a printed report.

Inquiry and Report Review

The results of an MRP Generation can be reviewed in a variety of formats, groupings, and sequences. Groupings and sequences become valueable as the volume of detail to be reviewed increases. The groupings are defined by assigning items additional references in Inventory Information maintenance:

- Planner Codes manufactured and purchased items can be assigned to individual planners codes. These codes are predefined in the Planner Master, and can be designated as inventory categories, markets, or even individual employees.
- Buyer Codes purchased items can be assigned to individual buyers.
 These buyer codes can ten be used to create reports to be directed to specific individuals or groups.

- Vendor codes purchased items can be assigned to specific vendors.
 These vendor codes can ten be used to create reports to be directed to individuals responsible for working with specific vendors.
- Warehouses An MRP generation is executed against an initial warehouse.

The inquiries available are:

- Material Requirements Inquiry (6-2-3-a)
- Planned Orders by Warehouse (6-2-3-b)
- Planned Orders by Item/Warehouse (6-2-3-c)

The reports available are:

- Material Planning By Item (6-2-4-a)
- Material Planning By Buyer (6-2-4-b)
- Material Planning By Planner (6-2-4-c)
- Material Planning/Recommendation By Item (6-2-4-d)
- Material Planning/Recommendation By Buyer (6-2-4-e)
- Material Planning/Recommendation By Planner (6-2-4-f)
- Order Review/Release By Item (6-2-4-g)
- Order Review/Release By Buyer (6-2-4-h)
- Order Review/Release By Vendor (6-2-4-i)
- Order Review/Release By Planner (6-2-4-j)
- Order Recommendation By Item (6-2-4-k)
- Order Recommendation By Buyer (6-2-4-1)
- Order Recommendation By Vendor (6-2-4-m)
- Order Recommendation By Planner (6-2-4-n)

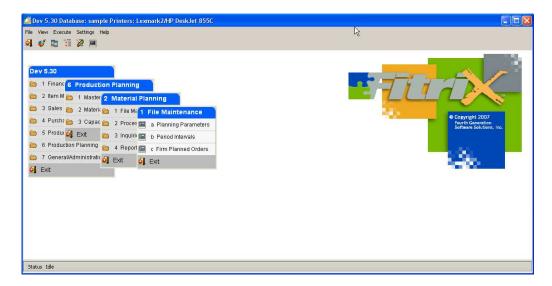
Chapter

Setup Material Planning

his chapter covers the options, screens, and fields you use to set up the Material Planning module. It is assumed that if you are reading this chapter for setup reference, you have already done the basic Company setup that is required before you can set up any Fitrix module. For a more complete discussion of the Company setup, see *Getting Started with Fitrix*.

File Maintenance Menu

This menu provides options for setting up the module, and entering reference and default information.



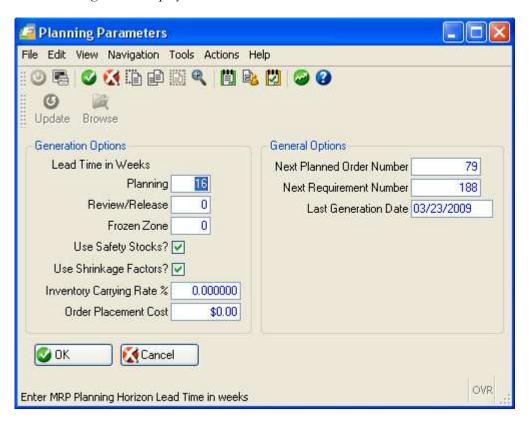
The Material Planning File Maintenance Menu provides options for updating module defaults, and creating entries in reference tables used when printing planning reports,

and working with planned orders. The options should be accessed in the following order, except where noted.

Planning Parameters

This menu option allows you to setup default values for the module, used primarily by the MRP Generation.

The following screen displays:



When you run an MRP Generation, many of the runtime parameters come from this screen.

The data in the Planning Parameters screen is unique to each company's database. Notice that the screen contains only one entry (the screen displays (1 of 1) at the bottom of the screen). Therefore, the commands on the command prompt are disabled, with the exception of Update and Quit. For example, you cannot Use Find because there is only one entry to find and it shows up automatically.

If your system is setup to run more than one company, you must enter defaults for each company.

The screen contains the following fields:

- Lead Time in Weeks Planning The default number of weeks into the future used by the MRP Generation to extract requirements. It is used with the Planning Horizon Start Date to calculate a date, after which requirements will not be included. This can reduce the overall processing time for an MRP Generation, by ignoring requirements too far into the future. This is the default value displayed when an MRP Generation is requested, but can be overridden.
- Lead Time in Weeks Review/Release- This field is reserved for future use.
- Lead Time in Weeks Frozen Zone- This field is reserved for future use.
- Use Safety Stocks? If you check this box, any item which has a safety stock quantity will be planned to maintain an on-hand which equals or exceeds its safety stock value. If you uncheck this box, items will be planned to maintain an on-hand balance which equals or exceeds zero. This is the default value displayed when an MRP Generation is requested, but can be overridden.
- Use Shrinkage Factors? If you check this box, the required quantity for any bill of material component defined with a shrinkage factor will be increased by the factor. If you uncheck this box, components will be planned assuming a zero shrinkage factor. This is the default value displayed when an MRP Generation is requested, but can be overridden.
- Inventory Carrying Rate Enter a percent rate which reflects your cost of carrying inventory. It is used when running the EOQ Calculation program in the Bill of Material module.
- Order Placement Cost Enter an amount which reflects your typilca cost to create a manufacturing or purchase order. It is used when running the EOQ Calculation program in the Bill of Material module.
- Next Planned Order Number- Enter the next order number to be assigned. Generated planned orders are assigned an internal number for more efficient processing.
- Next Requirement Number- Enter the next requirement number to be assigned. Generated requirements are assigned an internal number for more efficient processing.
- Last Generation Date- Displays the date of the last MRP Generation

Period Intervals

This menu option is used to setup and maintain the Period Intervals, used by MRP planning reports to place future activity into user-defined time periods. You can define multiple period invtervals, then assign them to items in the Inventory Information

master. When the planning reports execute, the Interval Code assigned to each item is used to print the period intervals along with their summarized activity.

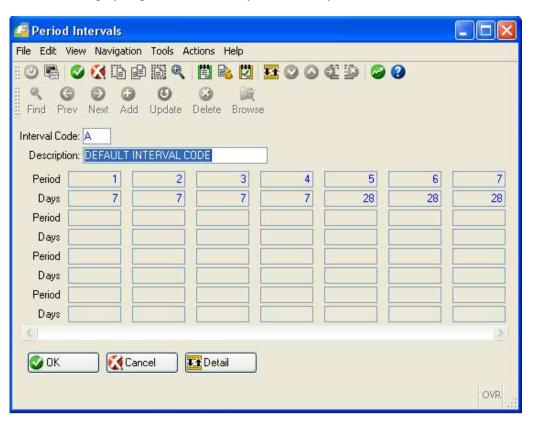
For example:

- Period interval code 'A' could use the following periods:
 - 8 weekly intervals
 - 4 biweekly intervals
 - 3 quarterly intervals

This setup would allow the user to view planned orders and requirements for the next year (approximately). The nearer term plan would be displayed in weekly intervals. The periods would then become larger as the activity moves farther out.

- Planning interval code 'B' could use the following periods:
 - 52 weekly buckets

This would display all plans for the next year on weekly intervals.



The Period Interval screen contains the following fields:

 Interval Code - This field stores a unique three-character order type code. • **Description** - You enter a description of this period interval (up to 30 characters) in this field.

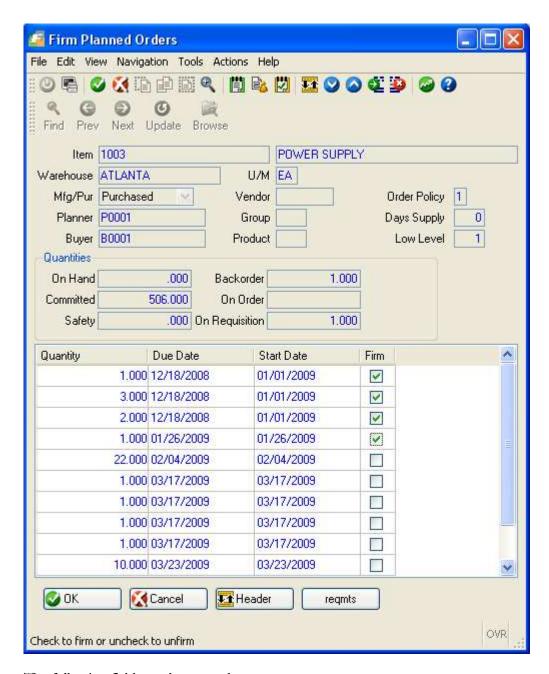
One or more periods must be defined:

- **Period** Period numbers are automatically assigned by the system. You are allowed to have up to 100 periods per period interval.
- **Days** Enter the number of days in for the period. This value should be entered in multiples of 7. This achieves a consistent division of time periods into multiples of weeks.

Firm Planned Orders

This menu option is used to change planned orders into firm planned orders. Planned orders are automatically created during the MRP generation. Each time the generation is run, planned orders which were not released to production or purchasing are dropped and re-created base on the most current requirements. If you want to retain certain planned orders, so that they will not be dropped and replanned, you can change them to firm planned orders.

Changing a planned order to a firm planned order is typically performed when orders fall within a 'frozen zone'. A frozen zone is a time period before orders are released, when you are solidifying an overall production schedule, aligning resources, and verifying lead times. During this time you may not want the system to continue replanning the orders, as it will potentially create a moving target that can be difficult to achieve.



The following fields can be entered:

- Item/Warehouse Summary planning information is displayed for quick reference
- Quantities Values are displayed for the item/warehouse, to assist in verifying that the planned orders are appropriate.

One or more planned orders is displayed for the item. For each planned order, you may enter:

Quantity – use the generated quantity, or change if needed

- **Due Date** use the generated due date, or change if needed.
- Start Date use the generated start date, or change if needed
- **Firm** Check to firm the order, or uncheck to change to a planned order.



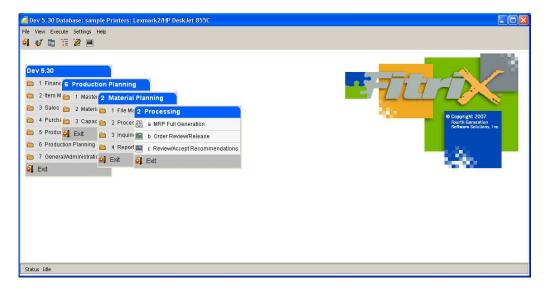
Processing

his chapter contains reference information about the different menu options on the Processing menu (option 2), and the screens and fields associated with these options. The information is organized by menu option MRP Generation (option 2-a) and working down.

For each menu option we briefly describe what the menu option does, show an example of the screen or report associated with the option, and describe each field on the data-entry screens.

The Processing Menu

Use the options on this menu to generate planned orders and order recommendations, and act on the plan and recommendations.



This menu contains the following options:

- MRP Full Generation Use this option to generate planned orders for a specific warehouse.
- Order Review/Release Use this option to review generated planned orders, and release them to production or purchasing.
- Review/Accept Recommendations Use this option to review recommendations made for open production and/or purchase orders, and to accept the recommendations (applying the changes to the affected orders)

MRP Full Generation

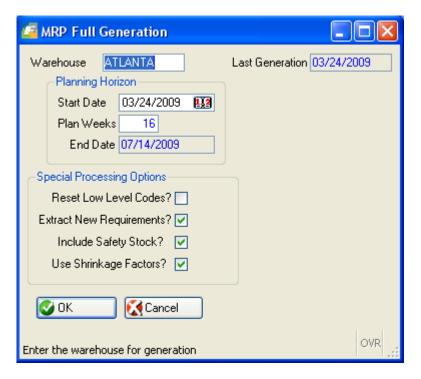
Use this option (2-a) to analyze material requirements for a given warehouse, and generate planned orders for production and/or purchase, to satisfy the requirements.

The MRP Generation is executed for a specific warehouse, and consists of multiple steps:

- Retrieve forecasts for items which allow forecasting.
- Retrieve allocations for booked sales orders which have not been shipped.
- Retrieve allocations for open production orders with un-issued components.
- Retrieve remaining quantities for production order end items and purchase order line items.
- For each level in the bills of material:
 - Get on hand balances and safety stock for each item.
 - Process requirements.
 - For each requirement not satisfied by on hand balance or scheduled receipt, create one or more planned orders.

MRP Full Generation – Options screen

When you select this menu option, you must first indicate the destination of the report on the 'Select Printer' window (see the *Getting Started with Fitrix* manual). The following screen will then display:



The following fields are displayed:

- **Warehouse** –Enter the warehouse for which the generation will be executed.
- Planning Horizon Start Date Enter the effective date for the generation. For example, the generation could be executed on a Friday afternoon, with a Start Date of the next Monday, for analysis purposes.
- Planning Horizon Plan Weeks The number of weeks into the future for which to analyze requirements. This value will automatically calculate the End Date.
- Planning Horizon End Date The planning end date for the generation. Any requirements later that this date will be ignored.
- Reset Low Level Codes ? Check to process all items to verify proper low level codes before the generation starts. Uncheck to skip this step.

- Extract New Requirements? Check to refresh all requirement s sinchde the last generation. Uncheck to use the requirements from the last generation.
- Include Safety Stock? Check to use any safety stock quantities enterd for items in the selected warehouse. Uncheck to ignore any safety stock settings.
- Use Shrinkage Factors? Check to use any shrinkage factors defined in the bills of material, when computing component required quantities. Uncheck to ignore any shrinkage factor settings..

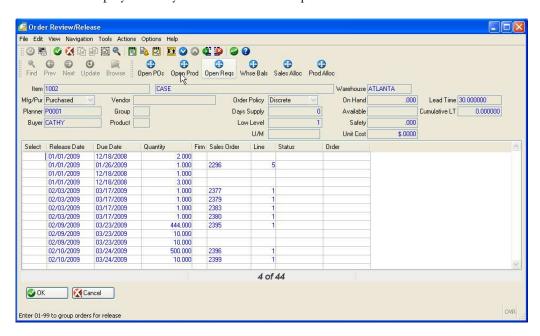
After selecting the appropriate options, click OK. The generation will notify you of the progress being made as it processes one or more bill of material levels for the items in the selected warehouse. Upon completion, a one page report will print indicating the completion of the generation.

Order Review/Release

Use this menu option (option 2-b) to review planned orders which have been created by the MRP Generation, and optionally release them for automatic creation of production and purchase orders.

Order Review/Release screen

This screen displays when you select the menu option:



You must first click the Find button, then enter the selection criteria for the items you wish to view. Click OK to see the list, then click Update when you want to release one or more planned orders for the item being viewed.

For each item, general planning information is displayed on the upper portion of the screen.

For each planned order the following fields can be entered:

- **Select** Enter a value of 01 to 99 to indicate how the orders should be released. Orders can be combined by entering the same select number on multiple orders. Combined orders will use the earliest due date in the group. Each unique select number will create one production/purchase order.
- Release Date The recommended release date for the planned order.
- Due Date The due date for the planned order.

- Quantity The recommended quantity to be ordered.
- Firm If this field is checked, it is a firm planned order.
- Sales Order/Line If the planned order was generated directly from a sales order, the order and line number will display.
- **Status** Prior to relese of the order, this column will remain blank. After it has been released, the column will change to 'Released'.
- **Order** Prior to relese of the order, this column will remain blank. After it has been released, the column will change to the order number which was created with the release.

Enter select number(s) next to the orders to be released. Remenber to use the same select number on multiple orders, if you wish to combine multiple planned orders into a single active order.

The following Action Buttons are available:

€

- If one or more orders were selected for release, the Confirm Releases screen displays. See below for details about this screen.
- Click this button to ignore the planned orders for the current item
- Open POs Click this button to review a list of open purchase orders to buy the current item
- Open Prod Click this button to review a list of open production orders to make the current item
- Open Reqs Click this button to review a list of open purchase requisitions for the current item
- Whse Bals Click this button to review the on-hand balances for the current item in all warehouses
- Sales Alloc Click this button to review the open sales allocations to sell the current item

Prod Alloc Click this button to review open production orders, where the current item is used as a component

Confirm Releases screen

This screen displays when you select the button from the Order Review/Release screen, and at least one order was selected for release.



This screen shows the results of the selected orders. Each line represents one order to be created.

The following fields can be entered:

- **Confirm** Leave this field checked if you want to continue with the release process. Uncheck if you want to skip the release.
- Seq (Sequence) This column shows the sequence in which the orders will be created.
- M/P This column will contain one of two values
 - Manufactured the created order will be a production order
 - Purchased the created order will be a purchase order, with one line item.
- Order If you leave this field blank, the system will automatically generate the next order number. If you enter a value, it will become the order number.
- **Item** This will be the end item created on the production order, or the single line item on the purchase order.
- Warehouse This will be the end item warehouse created on the production order, or the single line item warehouse on the purchase order.
- **Due Date** Use the default due date, or change it to a new date
- **Quantity** Use the default quantity, or changed it to a new quantity.

- **Vendor** Use the item's default vendor, or change it to another vendor. Use the zoom button to see a list of vendors.
- **Buyer** Use the item's default buyer, or change it to another buyer. Use the zoom button to see a list of buyers.

The following action buttons are available:

• Click to continue with the release of the confirmed orders. A window will display as follows, when the active orders have been created:



The first planned order screen will then redisplay, and any released orders in the list will be updated to indicate a Status of 'Released' and an order number.

■ Click Cancel to skip the creation of any new orders

Open Purchase Orders screen

This screen displays when you select the Open POs button from the Order Review/Release screen.

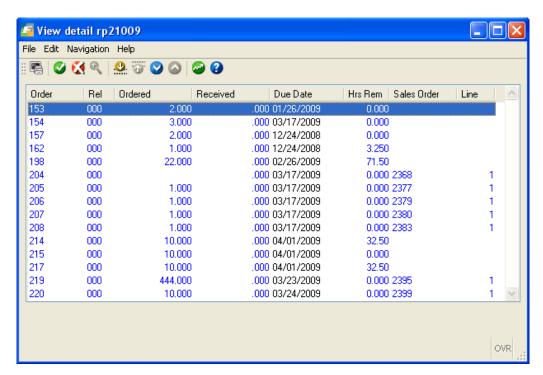


- Order the purchase order number
- **Line** the purchase order line number
- Ordered the quantity orderd for the item
- **Received** quantity received to inventory
- **Due Date** line item due date

Open Production Orders screen

This screen displays when you select the Open Prod button from the Order Review/Release screen.

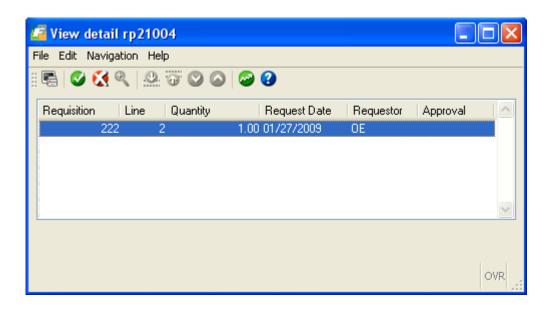
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- **Order** the production order number
- **Rel** the production order release number
- **Ordered** the quantity ordered to make the current item
- Received the quantity received
- **Due Date** the order due date
- Hrs Rem (Hours Remaining) estimated hours remaining to complete the order
- **Sales Order/Line** the sales order and line item to which this production order is linked.

Open Purchase Requisitions screen

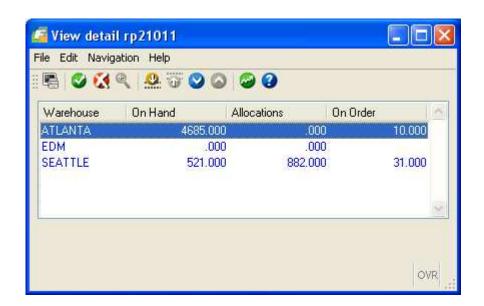
This screen displays when you select the Open Required button from the Order Review/Release screen.



- **Requisition** the requisition number
- **Line** the requisition line number
- **Quantity** the quantity requested for the item
- **Requestor** the person requesting the item
- **Approval** the authorization for the item

Warehouse Balances screen

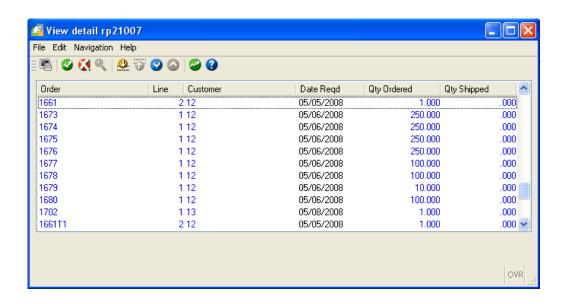
This screen displays when you select the Whse Bals button from the Order Review/Release screen.



- **Warehouse** the warehouse in which the balance exists
- On Hand the quantity on hand
- Allocations the quantity allocated to sales or production orders
- On Order the quantity on order from purchase or production orders

Sales Allocations screen

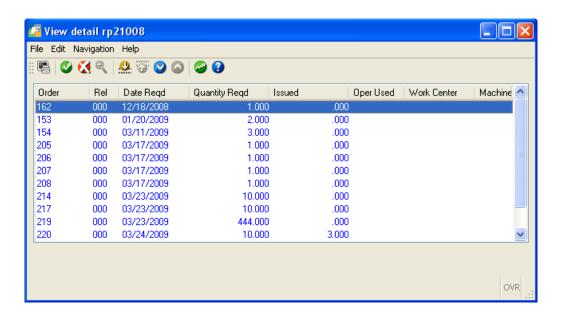
This screen displays when you select the Sales Alloc button from the Order Review/Release screen.



- Order the sales order number
- **Line** the sales order line number
- **Customer** the customer code for the order
- Date Reqd (Date Required) the date the line item is to be shipped
- Qty Ordered (Quantity Ordered) the quantity ordered on the line item
- Qty Shipped (Quantity Shipped) the quantity already shipped for the line item

Production Allocations screen

This screen displays when you select the Prod Alloc button from the Order Review/Release screen.

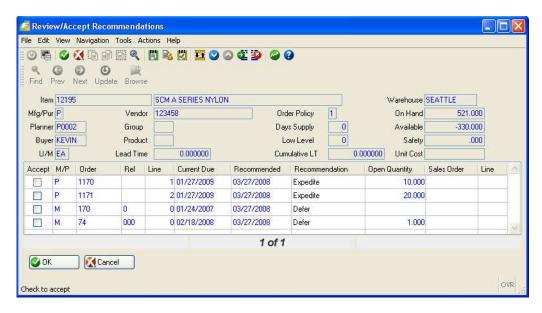


- Order the production order number
- Rel the productin order release number
- Date Reqd (Date Required) the date the item is to be used as a component
- Quantity Reqd (Quantity Required) the total quantity required for the item as a component
- **Issued (Quantity Issued)** the quantity already issued for the item
- Oper Used (First Operation Where-Used) the routing step where this item is to be used
- Work Center the current work center for the order
- **Machine** the machine for the order

Review/Accept Recommendations

Use this menu option (option 2-c) to review recommendations for active orders, which have been created by the MRP Generation, and optionally accept them for automatic update of production and purchase orders.

The following screen displays:



You must first click the Find button, then enter the selection criteria for the items you wish to view. Click OK to see the list, then click Update when you want to accept one or more recommendations for the item being viewed.

For each item, general planning information is displayed on the upper portion of the screen.

For each recommendation the following fields are displayed:

- Accept Check to accept the recommendation. Leave unchecked to ignore the recommendation.
- M/P This column will contain one of two values
 - Manufactured the recommended order is a production order
 - Purchased the recommended order is a purchase order.
- Order The production or purchase order being recommended
- Rel (Release) For production orders only, the release number of the order.
- Line For a purchase order only, the line number for this item.

- **Current Due** The current due date for the production order or purchase order line item.
- **Recommended Due** The recommended due date for the production order or purchase order line item.
- **Recommendation** This column contain one of three values:
 - **Defer** changes the current due date to a later date
 - **Expedite** chages the current due date to an earlier date
 - Cancel cancel the order
- **Open Quanttiy –** The quantity remaining on the production or purchase order.
- **Sales Order/Line** If this active order is directly associated with a sales order and line, it is displayed.

Select the recommendations desired, then click OK to make the changes.

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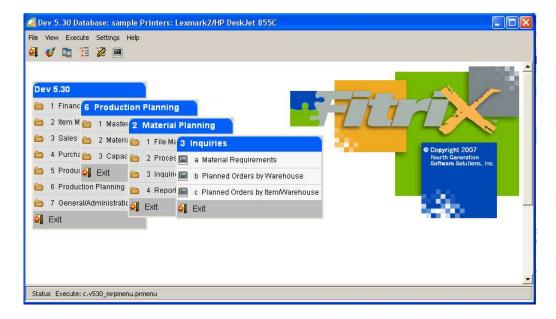
Inquiries

his chapter contains reference information about the different menu options on the Inquiries menu (option 3), and the screens and fields associated with these options. The information is organized by menu option.

For each menu option we briefly describe what the menu option does, show an example of the screen associated with the option, and describe each field on the screens.

Inquiries Menu

Use the options on this menu to review on screens the planned production and order recommendations.



This menu contains the following options:

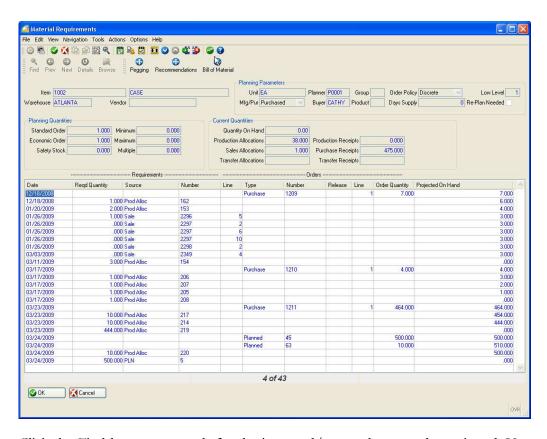
- Material Requirements Use this option to review summary planning information for specific items, as well as the details for planned orders, requirements and active orders. Details are displayed chronologically, and are used to compute projected on hand balances based on current and future activity.
- Planned Orders by Warehouse Use this option to review active and planned orders within a warehouse. Orders are sorted by item, then due date, to provide a quick review of active and planned activities within a production warehouse.
- Planned Orders by Item/Warehouse Use this option to review active and planned orders for specific items within a warehouse. Orders are sorted by item, then due date, to provide a quick review of active and planned activities for items in a production warehouse.

Material Requirements

Use this menu option (option 3-a) to display summary planning information for specific items, as well as the details for planned orders, requirements and active orders. Details are displayed chronologically, and are used to compute projected on hand balances based on current and future activity.

Material Requirements screen

When you select the menu option, the following screen displays:



Click the Find button to search for the item and/or warehouse to be reviewed. You can then click the Details button to access more options

General planning information is displayed for the item in the upper portion of the screen. The Quantity On Hand (in the Current Quantities box) is the starting point for the calculation of the Projected On Hand in the lower portion of the screen.

The detail rows are displayed in chronological order, starting with the oldest unfinished activity. This acitivity may include requirements and/or orders which are past due.

The columns with the sub-heading 'Requirements' reflect requirements for the current item. The required quantity for these requirements is subtracted from the Qty On Hand to compute the Projected On Hand.

- Reqd Quantity (Required Quantity) the quantity remaining to be used by the requirement
- **Source** this column can have one of four values:
 - Prod Alloc (Production Allocation) the requirement comes from an open production order which needs this item as a component
 - **Sale** the requirement comes from an open sales order for this item.
 - Planned the requirement comes from a planned order for a higher level parent item
 - **Forecast** the requirement comes from a sales forecast for this item
- **Number** The order number, for requirements coming from production or sales orders.
- Line The sales order line number, for requirements coming from a sales order.

The columns with the sub-heading 'Orders' reflect active or planned orders for the current item. The open quantities for the orders are added to the Qty On Hand to compute the Projected On Hand.

- **Type** this column can have one of three values:
 - **Production** a production order for this item
 - **Purchase** a purchase order for this item
 - Planned —a planned order for this item
- **Number** The order number, for production or purchase orders
- **Release** The release number, only for production orders
- **Line** The line number, for purchase orders
- **Order Quantity** the quantity remaining to be received on production or purchase orders, or the planned quantity for a planned order.

The columns above are used to calculate the Projected On Hand column to the far right.

Pegging screen



This screen displays when you click the Requirements screen:

button from the Material



The Pegging screen allows you to view requirements for parent items at multiple levels in the bill of material, to see the chain of demand.

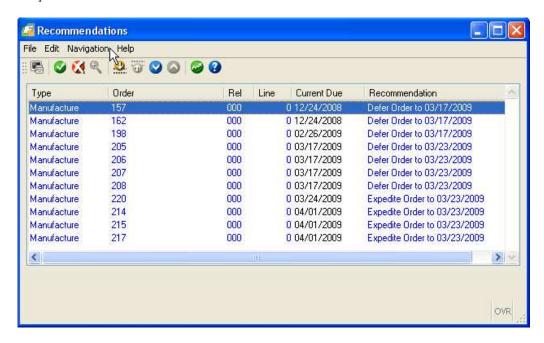
The following columns are displayed:

- Lvl (Level)— the relative level above the requirement being pegged. For example, a requirement for the item's immediate parent is '1'. The level for the next level parent is '.2', and the next level parent is '..3', and so on.
- **Item** the parent item at the relative level being displayed
- Type the the source of the requirement
- **Due** the due date of the requirement
- Quantity the quantity required for the displayed item
- **Type** the type of the order that generated the requirement
- **Order** the sales order or production order number that generated the requirement
- **Due** the order due date
- Quantity the order quantity

Recommendations screen

This screen displays when you click the Recommendations button from the Material Requirements screen:

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The following columns are displayed

- **Type** on of the following values:
 - Manufacture the order is a production order
 - Purchase the order is a purchase order
- Order the production or purchase order number
- **Rel (Release)** for production orders, the release number
- **Line** for purchase orders, the line numbe
- Current Due the current due date for the order
- **Recommendation** text indicating if the order should be:
 - Expedited or Deferred, with the new due date
 - Cancelled

Bill of Material screen

This Bill of Material Maintenance screen displays for the current item, when you click

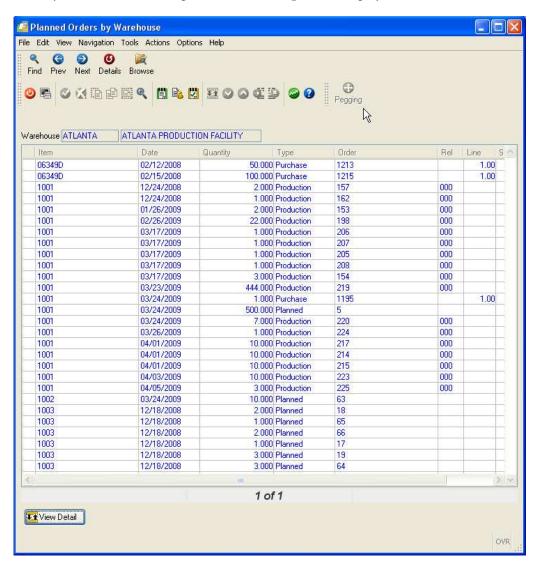
the Bill of Material button from the Material Requirements screen. See the Bill of Material User Guide for details on how to use this program.

Planned Orders by Warehouse

Use this menu option (option 3-b) to review active and planned orders within a warehouse. Orders are sorted by item, then due date, to provide a quick review of active and planned activities within a production warehouse.

Planned Orders by Warehouse screen

When you select the menu option, the following screen displays:



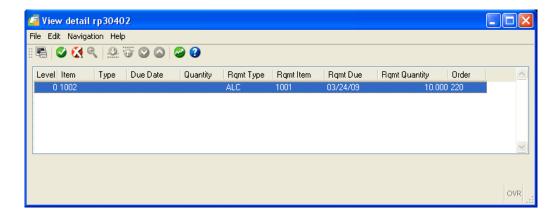
Click the Find button to search for one or more warehouses. You can then click the Details button to access more options

The following columns are displayed:

- **Item** the item with the orders
- **Date** the due date of the order
- **Quantity** the order quantity
- **Type** this column will contain one of 3 values
 - **Production** this is a production order
 - Purchase this is a purchase order
 - **Planned** this is a planned order
- Order for Production and Purchase Order types, the order number
- Rel (Release) for Production Order types, the order release
- **Line** for Purchase Order types, the line number

Pegging screen

This screen displays when you click the Pegging button from the Planned Orders by Warehouse screen:



The Pegging screen allows you to view requirements for the parent item at the next level in the bill of material, to see the immediate demand for the current item.

The following columns are displayed:

- Lvl (Level)— the relative level above the requirement being pegged. For example, a requirement for the item's immediate parent is '1'. The level for the next level parent is '.2', and the next level parent is '..3', and so on.
- **Item** the parent item at the relative level being displayed

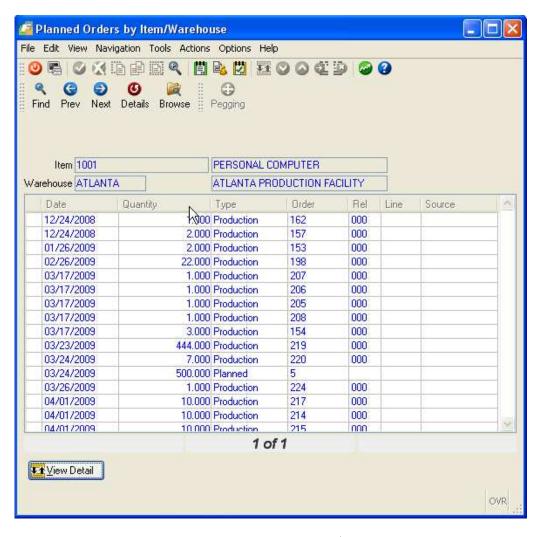
- **Type** the the source of the requirement
- **Due Date** the due date of the requirement
- Quantity the quantity required for the displayed item
- **Rqmt Type** the type of the order that generated the requirement
- **Rqmt Item** the parent item which generated the demand
- Rqmt Due the order due date
- **Rqmt Quantity** the order quantity
- **Order** the order number

Planned Orders by Item/Warehouse

Use this menu option (option 3-c) to review active and planned orders for specific item/warehouse combinations. Orders are sorted by due date, to provide a quick review of active and planned activities for item within production warehouses.

Planned Orders by Item/Warehouse screen

When you select the menu option, the following screen displays:



Click the Find button to search for one or more items/warehouses. You can then click the Details button to access more options

The following columns are displayed:

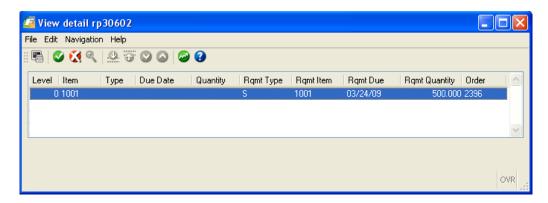
■ **Date** – the due date of the order

- Quantity the order quantity
- **Type** this column will contain one of 3 values
 - **Production** this is a production order
 - **Purchase** this is a purchase order
 - Planned this is a planned order
- Order for Production and Purchase Order types, the order number
- **Rel (Release)** for Production Order types, the order release
- Line for Purchase Order types, the line number
- **Source** the source of demand for the order

Pegging screen

This screen displays when you click the Pegging button from the Planned Orders by Warehouse screen:





The Pegging screen allows you to view requirements for the parent item at the next level in the bill of material, to see the immediate demand for the current item.

The following columns are displayed:

- LvI (Level)— the relative level above the requirement being pegged. For example, a requirement for the item's immediate parent is '1'. The level for the next level parent is '.2', and the next level parent is '..3', and so
- Item the parent item at the relative level being displayed
- **Type** the the source of the requirement
- **Due Date** the due date of the requirement
- **Quantity** the quantity required for the displayed item
- **Rqmt Type** the type of the order that generated the requirement
- Rqmt Item the parent item which generated the demand
- Rqmt Due the order due date
- **Rqmt Quantity** the order quantity
- **Order** the order number

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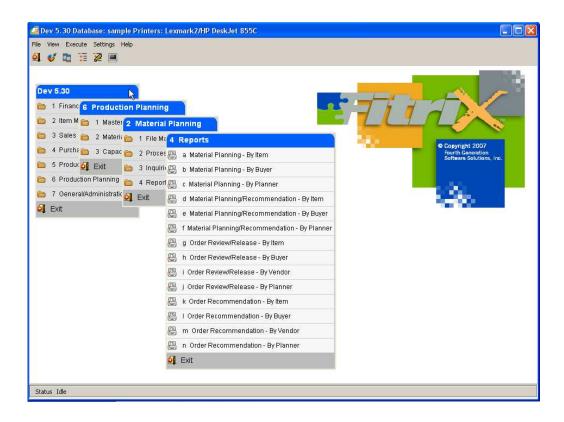
Reports

his chapter contains reference information about the different menu options on the Reports menu (option 4), and the screens and fields associated with these options. The information is organized by menu option.

For each menu option we briefly describe what the menu option does, show an example of the screen or report associated with the option, and describe each field on the data-entry screens.

Reports Menu

Use the options on this menu to review on screens the status of open and closed production orders



This menu contains the following options:

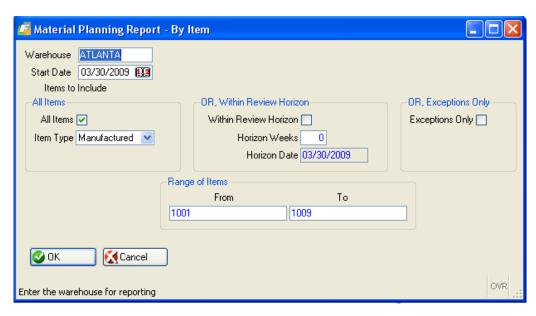
- Material Planning By Item Use this option to print time-phased planning activity by item, for a specific warehouse.
- Material Planning By Buyer Use this option to print time-phased planning activity by item within a range of buyers, for a specific warehouse.
- Material Planning By Planner Use this option to print time-phased planning activity by item within a range of planner codes, for a specific warehouse.
- Material Planning/Recommendation By Item Use this option to print time-phased planning activity and plan details/recommendations, by item, for a specific warehouse.
- Material Planning/Recommendation By Buyer Use this option to print time-phased planning activity and plan details/recommendations, by item within a range of buyers, for a specific warehouse.
- Material Planning/Recommendation By Planner Use this option to print time-phased planning activity and plan details/recommendations, by item within a range of planners, for a specific warehouse.

- Order Review/Release By Item Use this option to print a list of planned orders to be released by item, for a specific warehouse.
- Order Review/Release By Buyer Use this option to print a list of planned orders to be released by item within a range of buyers, for a specific warehouse.
- Order Review/Release By Vendor Use this option to print a list of planned orders to be released by item within a range of vendors, for a specific warehouse.
- Order Review/Release By Planner Use this option to print a list of planned orders to be released by item within a range of planners, for a specific warehouse.
- Order Recommendation By Item Use this option to print a list of recommendations to change or cancel active orders by item, for a specific warehouse.
- Order Recommendation By Buyer Use this option to print a list of recommendations to change or cancel active orders by item within a range of buyers, for a specific warehouse.
- Order Recommendation By Vendor Use this option to print a list
 of recommendations to change or cancel active orders by item within a
 range of vendors, for a specific warehouse.
- Order Recommendation By Planner Use this option to print a list
 of recommendations to change or cancel active orders by item within a
 range of planners, for a specific warehouse.

Material Planning - by Item

You use this menu option (4-a) to print time-phased planning activity by item, for a specific warehouse. The report consolidates future and past due activity into user-defined periods (see File Maintenance/Period Interval – option 1-b). It uses the activity to compute a projected on hand balance at the end of each time period. This report is often used by material planners and master schedulers to decide when to release planned orders. The future and past due activities are categorized as:

- **Fcst** sales forecast for the period. These are optional, and are defined in the Master Schedule Planning module. If sales orders AND forecast are used together, the forecast quantity will be reduced by the sales orders placed in the same period.
- Sales open sales orders
- Plan planned orders due in the period
- Rels planned orders to be released in the period
- **Schd** active orders (Scheduled Receipts) due in the period
- Proj the projected on hand of the end or the period. It is calculated as:
 - Previous period on hand
 - MINUS Forecast
 - MINUS Sales
 - PLUS Planned Orders
 - PLUS active orders

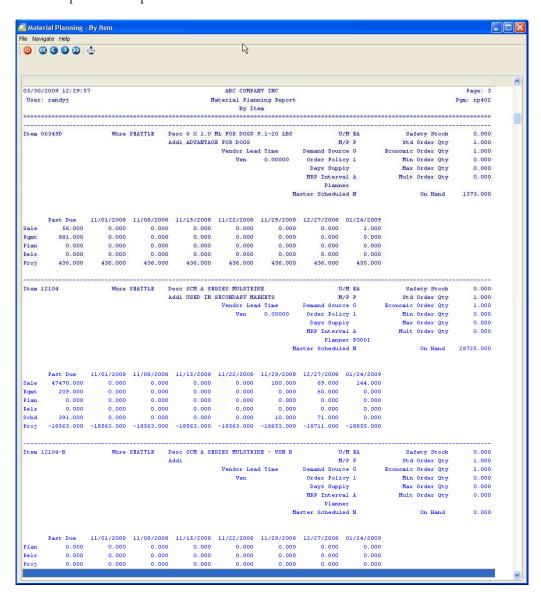


- **Warehouse** enter the desired desired warehouse
- **Start Date** Enter the date to be used for the first time period. Each time period prints with its starting date. Any activity with dates before the 'Start Date' will be placed in a time period labeled 'Past Due'.
- Items to Include You must check one, and only one of the following boxes:
 - All Items process all items for the warehouse
 - Within Review Horizon process only items with future activity on or before the Horizon Date
 - Exceptions Only process only items which have recommendations
- **All Items** additional selections when you check the 'All Items' box:
 - **Item Type** Select one of the following:
 - Manufactured manufactured items only
 - o **Purchased** purchased items only
 - o **All** all items
- Within Review Horizon
 - Horizon Weeks then number of weeks into the future which should be included in the time period analysis. This value is used

to calculate a 'Horizon Date'. Any activity scheduled to occur after this date will not be included in the report.

■ Range of Items — In addition to selecting one of the three 'Items to Include' above, you may select a range of item codes.

An example of the report follows:



For each item, general planning information is printed.

Time-period analysis prints, including the period beginning date, along with the activity types defined above, and the projected on hand balance at the end of each period.

Material Planning – by Buyer

You use this menu option (4-b) to print time-phased planning activity by item within a range of buyers, for a specific warehouse. The report consolidates future and past due activity into user-defined periods (see File Maintenance/Period Interval – option 1-b). It uses the activity to compute a projected on hand balance at the end of each time period. This report is often used by material planners and master schedulers to decide when to release planned orders. The future and past due activities are categorized as:

- **Fcst** sales forecast for the period. These are optional, and are defined in the Master Schedule Planning module. If sales orders AND forecast are used together, the forecast quantity will be reduced by the sales orders placed in the same period.
- Sales open sales orders
- Plan planned orders due in the period
- Rels planned orders to be released in the period
- **Schd** active orders (Scheduled Receipts) due in the period
- Proj the projected on hand of the end or the period. It is calculated as:
 - Previous period on hand
 - MINUS Forecast
 - MINUS Sales
 - PLUS Planned Orders
 - PLUS active orders



- **Warehouse** enter the desired desired warehouse
- **Start Date** Enter the date to be used for the first time period. Each time period prints with its starting date. Any activity with dates before the 'Start Date' will be placed in a time period labeled 'Past Due'.
- Items to Include You must check one, and only one of the following boxes:
 - All Items process all items for the warehouse
 - Within Review Horizon process only items with future activity on or before the Horizon Date
 - Exceptions Only process only items which have recommendations
- All Items additional selections when you check the 'All Items' box:
 - **Item Type** Select one of the following:
 - Manufactured manufactured items only
 - o **Purchased** purchased items only
 - o All all items
- Within Review Horizon
 - **Horizon Weeks** then number of weeks into the future which should be included in the time period analysis. This value is used

to calculate a 'Horizon Date'. Any activity scheduled to occur after this date will not be included in the report.

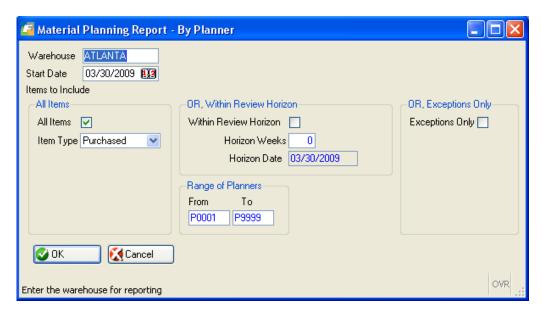
■ Range of Buyers — In addition to selecting one of the three 'Items to Include' above, you may select a range of buyer codes.

The report detail is the same as the Material Planning – by Item report, except that the items are sorted by Buyer, then Item.

Material Planning – by Planner

You use this menu option (4-c) to print time-phased planning activity by item within a range of planners, for a specific warehouse. The report consolidates future and past due activity into user-defined periods (see File Maintenance/Period Interval – option 1-b). It uses the activity to compute a projected on hand balance at the end of each time period. This report is often used by material planners and master schedulers to decide when to release planned orders. The future and past due activities are categorized as:

- **Fest** sales forecast for the period. These are optional, and are defined in the Master Schedule Planning module. If sales orders AND forecast are used together, the forecast quantity will be reduced by the sales orders placed in the same period.
- Sales open sales orders
- Plan planned orders due in the period
- Rels planned orders to be released in the period
- **Schd** active orders (Scheduled Receipts) due in the period
- Proj the projected on hand of the end or the period. It is calculated as:
 - Previous period on hand
 - MINUS Forecast
 - MINUS Sales
 - PLUS Planned Orders
 - PLUS active orders



- **Warehouse** enter the desired desired warehouse
- **Start Date** Enter the date to be used for the first time period. Each time period prints with its starting date. Any activity with dates before the 'Start Date' will be placed in a time period labeled 'Past Due'.
- Items to Include You must check one, and only one of the following boxes:
 - All Items process all items for the warehouse
 - Within Review Horizon process only items with future activity on or before the Horizon Date
 - Exceptions Only process only items which have recommendations
- All Items additional selections when you check the 'All Items' box:
 - **Item Type** Select one of the following:
 - Manufactured manufactured items only
 - o **Purchased** purchased items only
 - \circ **All** all items
- Within Review Horizon
 - Horizon Weeks then number of weeks into the future which should be included in the time period analysis. This value is used

to calculate a 'Horizon Date'. Any activity scheduled to occur after this date will not be included in the report.

■ Range of Planners – In addition to selecting one of the three 'Items to Include' above, you may select a range of planner codes.

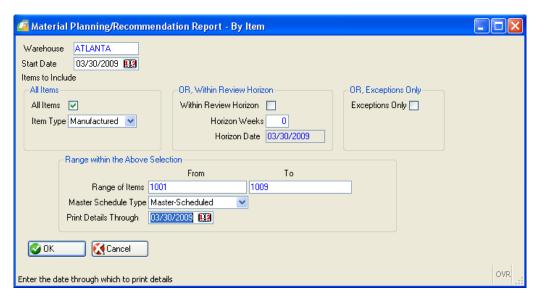
The report detail is the same as the Material Planning – by Item report, except that the items are sorted by Planner, then Item.

Material Planning/Recommendation - by Item

You use this menu option (4-d) to print time-phased planning activity and activity/recommendation details by item, for a specific warehouse. The report consolidates future and past due activity into user-defined periods (see File Maintenance/Period Interval – option 1-b). It uses the activity to compute a projected on hand balance at the end of each time period. This report is often used by material planners and master schedulers to decide when to release planned orders. The future and past due activities are categorized as:

- **Fest** sales forecast for the period. These are optional, and are defined in the Master Schedule Planning module. If sales orders AND forecast are used together, the forecast quantity will be reduced by the sales orders placed in the same period.
- Sales open sales orders
- Plan planned orders due in the period
- Rels planned orders to be released in the period
- **Schd** active orders (Scheduled Receipts) due in the period
- Proj the projected on hand of the end or the period. It is calculated as:
 - Previous period on hand
 - MINUS Forecast
 - MINUS Sales
 - PLUS Planned Orders
 - PLUS active orders

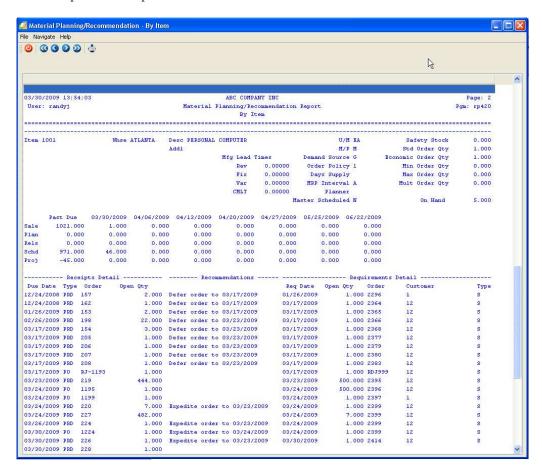
In addition, the details for the time-period activity can be printed based on a user-defined 'Print Details Through' date. This date can be entered such that details for more near-term periods can be reviewed, but details for longer-term periods can be ignored.



- **Warehouse** enter the desired desired warehouse
- **Start Date** Enter the date to be used for the first time period. Each time period prints with its starting date. Any activity with dates before the 'Start Date' will be placed in a time period labeled 'Past Due'.
- Items to Include You must check one, and only one of the following boxes:
 - All Items process all items for the warehouse
 - **Within Review Horizon** process only items with future activity on or before the Horizon Date
 - Exceptions Only process only items which have recommendations
- All Items additional selections when you check the 'All Items' box:
 - **Item Type** Select one of the following:
 - Manufactured manufactured items only
 - o **Purchased** purchased items only
 - \circ **All** all items
- Within Review Horizon
 - Horizon Weeks then number of weeks into the future which should be included in the time period analysis. This value is used to calculate a 'Horizon Date'. Any activity scheduled to occur after this date will not be included in the report.

- Range within Above Selection In addition to selecting one of the three 'Items to Include' above, you may select additional ranges of item codes.
 - Range of Items
 - Master Schedule Type select one of the following values:
 - Master Schedule process only items with Master Schedule
 Item = Y, in the Item/Warehouse master file
 - Non-Master Schedule process only items with Master Schedule Item = N, in the Item/Warehouse master file
 - o All process both type of items
 - Print Details Through enter a date through which to print details for orders and requirements. Any details with dates after this date will not be included in the details. The time-period analysis will, however, include these data from the details.

An example of the report follows:



For each item, general planning information is printed.

Time-period analysis prints, including the period beginning date, along with the activity types defined above, and the projected on hand balance at the end of each period.

Receipts details also print up to the selected date. The columns included are:

- **Due Date** the scheduled due date for the order
- **Type** one of the following values
 - **PRD** Production order
 - **PO** Purchase order
- Order the order number
- **Open Qty (Open Quantity)** the remaining quantity for the order. This quantity is order quantity, reduced by any partial receipts
- **Recommendations** if the MRP Generation created a recommendation for the order, it is included here

Requirements details also print up to the selected date. The columns included are:

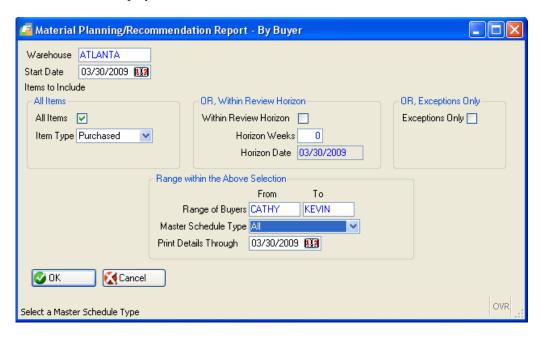
- Req Date (Required Date) the date the item is needed
- Open Qty (Open Quantity) the remaining quantity for the requirement. This quantity is the original required quantity, reduced by any partial issues or shipments
- Order the order containing the needed item
- Customer for sales orders, the customer code for the order
- **Type** one of the following values:
 - **S** Sales Order
 - **ALC** Production Order component allocation

Material Planning/Recommendation – by Buyer

You use this menu option (4-e) to print time-phased planning activity and activity/recommendation details by item within a range of buyers, for a specific warehouse. The report consolidates future and past due activity into user-defined periods (see File Maintenance/Period Interval – option 1-b). It uses the activity to compute a projected on hand balance at the end of each time period. This report is often used by material planners and master schedulers to decide when to release planned orders. The future and past due activities are categorized as:

- **Fest** sales forecast for the period. These are optional, and are defined in the Master Schedule Planning module. If sales orders AND forecast are used together, the forecast quantity will be reduced by the sales orders placed in the same period.
- Sales open sales orders
- Plan planned orders due in the period
- Rels planned orders to be released in the period
- **Schd** active orders (Scheduled Receipts) due in the period
- Proj the projected on hand of the end or the period. It is calculated as:
 - Previous period on hand
 - MINUS Forecast
 - MINUS Sales
 - PLUS Planned Orders
 - PLUS active orders

In addition, the details for the time-period activity can be printed based on a user-defined 'Print Details Through' date. This date can be entered such that details for more near-term periods can be reviewed, but details for longer-term periods can be ignored.



- **Warehouse** enter the desired desired warehouse
- **Start Date** Enter the date to be used for the first time period. Each time period prints with its starting date. Any activity with dates before the 'Start Date' will be placed in a time period labeled 'Past Due'.
- Items to Include You must check one, and only one of the following boxes:
 - All Items process all items for the warehouse
 - **Within Review Horizon** process only items with future activity on or before the Horizon Date
 - Exceptions Only process only items which have recommendations
- **All Items** additional selections when you check the 'All Items' box:
 - Item Type Select one of the following:
 - Manufactured manufactured items only
 - o **Purchased** purchased items only
 - \circ **All** all items
- Within Review Horizon
 - Horizon Weeks then number of weeks into the future which should be included in the time period analysis. This value is used

- to calculate a 'Horizon Date'. Any activity scheduled to occur after this date will not be included in the report.
- Range within Above Selection In addition to selecting one of the three 'Items to Include' above, you may select additional ranges of item codes.
 - Range of Buyers
 - Master Schedule Type select one of the following values:
 - Master Schedule process only items with Master Schedule
 Item = Y, in the Item/Warehouse master file
 - O **Non-Master Schedule** process only items with Master Schedule Item = N, in the Item/Warehouse master file
 - o All process both type of items
 - **Print Details Through** enter a date through which to print details for orders and requirements. Any details with dates after this date will not be included in the details. The time-period analysis will, however, include these data from the details.

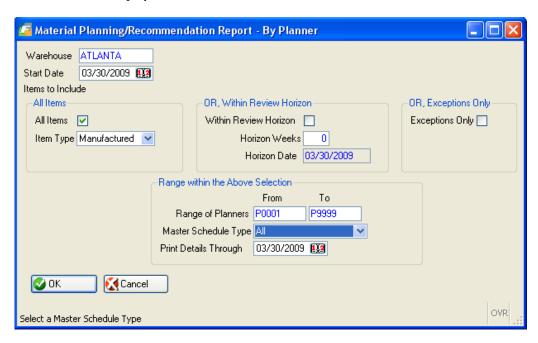
The report detail is the same as the Material Planning/Recommendation – by Item report, except that the items are sorted by Buyer, then Item.

Material Planning/Recommendation – by Planner

You use this menu option (4-e) to print time-phased planning activity and activity/recommendation details by item within a range of planners, for a specific warehouse. The report consolidates future and past due activity into user-defined periods (see File Maintenance/Period Interval – option 1-b). It uses the activity to compute a projected on hand balance at the end of each time period. This report is often used by material planners and master schedulers to decide when to release planned orders. The future and past due activities are categorized as:

- **Fest** sales forecast for the period. These are optional, and are defined in the Master Schedule Planning module. If sales orders AND forecast are used together, the forecast quantity will be reduced by the sales orders placed in the same period.
- Sales open sales orders
- Plan planned orders due in the period
- Rels planned orders to be released in the period
- **Schd** active orders (Scheduled Receipts) due in the period
- Proj the projected on hand of the end or the period. It is calculated as:
 - Previous period on hand
 - MINUS Forecast
 - MINUS Sales
 - PLUS Planned Orders
 - PLUS active orders

In addition, the details for the time-period activity can be printed based on a user-defined 'Print Details Through' date. This date can be entered such that details for more near-term periods can be reviewed, but details for longer-term periods can be ignored.



- Warehouse enter the desired desired warehouse
- **Start Date** Enter the date to be used for the first time period. Each time period prints with its starting date. Any activity with dates before the 'Start Date' will be placed in a time period labeled 'Past Due'.
- Items to Include You must check one, and only one of the following boxes:
 - **All Items** process all items for the warehouse
 - Within Review Horizon process only items with future activity on or before the Horizon Date
 - Exceptions Only process only items which have recommendations
- **All Items** additional selections when you check the 'All Items' box:
 - **Item Type** Select one of the following:
 - o Manufactured manufactured items only
 - o **Purchased** purchased items only
 - \circ **All** all items
- Within Review Horizon

- Horizon Weeks then number of weeks into the future which should be included in the time period analysis. This value is used to calculate a 'Horizon Date'. Any activity scheduled to occur after this date will not be included in the report.
- Range within Above Selection In addition to selecting one of the three 'Items to Include' above, you may select additional ranges of item codes.
 - Range of Planners
 - Master Schedule Type select one of the following values:
 - Master Schedule process only items with Master Schedule
 Item = Y, in the Item/Warehouse master file
 - O **Non-Master Schedule** process only items with Master Schedule Item = N, in the Item/Warehouse master file
 - o All process both type of items
 - **Print Details Through** enter a date through which to print details for orders and requirements. Any details with dates after this date will not be included in the details. The time-period analysis will, however, include these data from the details.

The report detail is the same as the Material Planning/Recommendation – by Item report, except that the items are sorted by Planner, then Item.

Order Review/Release - by Item

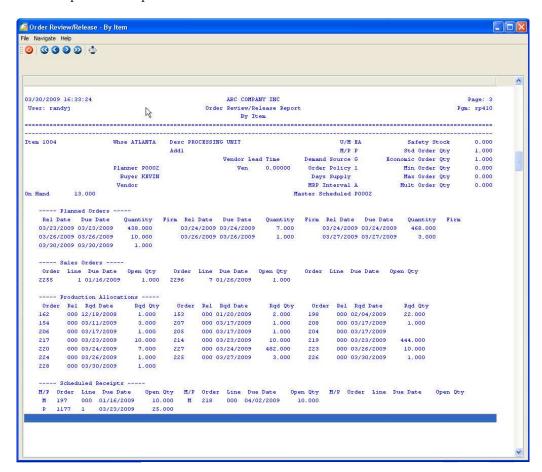
You use this menu option (4-g) to print a list of planned orders to be released by item, for a specific warehouse.



- Warehouse enter the desired desired warehouse
- Start Date enter the date after which planned orders are to be included. Any planned orders with release dates before the 'Start Date' will be ignored.
- **Item Type** select one of the following values:
 - **Manufactured** select items where item type = M (manufactured) in the Item/Warehouse master record.
 - **Purchased** select items where item type = P (purchased) in the Item/Warehouse master record.
 - **All** select both item types
- Range of Items enter an optional range of item codes, or leave blank to process all items.
- Review Horizon Weeks enter a number of weeks to calculate a Review Horizon Date, before which planned orders are to be

- included. Any planned orders release dates before the Review Horizon Date will be ignored
- Include Details for Forecast check to include a section on the report which lists sales forecast details for the date range selected.
- Include Details for Sales Orders check to include a section on the report which lists sales order line items for the date range selected
- Include Details for Scheduled Receipts check to include a section
 on the report which lists open production and purchase orders for the
 date range selected.
- Include Production Allocations check to include a section on the report which lists component allocations from open production order for the date reange selected.

An example of the report follows:



For each item, general planning information is printed.

Planned orders whose release dates are between the Start Date and Review Horizon Date are included. This section prints up to 3 sets of planned orders across the page. The columns included for each planned order are:

- Rel Date (Release Date) the date for the planned order should be released
- **Due Date** the date the planned order is planned to be completed
- Quantity the planned quantity for the order
- **Firm** if the planned orders has been converted to a Firm Planned Order, 'F' will print

If the Forecast section was also requested, forecast dates and quantities will print with up to 5 sets of forecast details. The columns for each forecast are:

- **Demand Date** the date the forecast indicates the quantity will be needed
- Quantity the forecast quantity

If the Sales Order section was requested, up to 3 sets of sales order line item detail will print across the page. The columns for sales order detail are:

- Order the sales order number
- **Line** the sales order line item
- **Due Date** the order or line item due date
- Rqd Qty (Required Quantity) the quantity remaining to be shipped

If the Production Allocation section was requested, up to 3 sets of production order component item detail will print across the page. The columns for production order detail are:

- Order the production order
- Rel (Release) the production order release number
- Rqd Date (Required Date) the component required date
- Rqd Qty (Required Quantity) the unissued component quantity

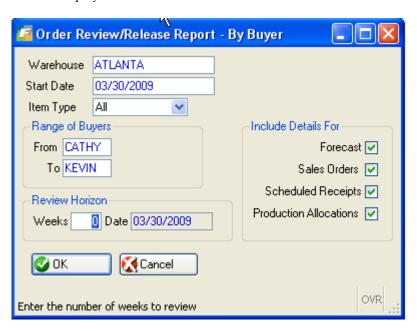
If the Scheduled Receipts section was requested, up to 3 sets of production and/or purchase orders detail will print across the page. The columns for these order are:

- M/P (Order Type) prints M for Production Order, or P for Purchase Order
- Order the production or purchase order number
- **Rel (Release)** for a production order, prints the Relesase number
- **Line** for a purchase order, prints the line item number

- **Due Date** the date the item is due to be received
- Open Qty (Open Quantity) the quantity remaining to be received into inventory.s

Order Review/Release – by Buyer

You use this menu option (4-h) to print a list of planned orders to be released by item within a range of buyers, for a specific warehouse.



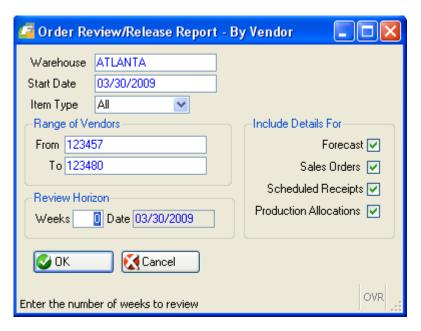
- **Warehouse** enter the desired desired warehouse
- Start Date enter the date after which planned orders are to be included. Any planned orders with release dates before the 'Start Date' will be ignored.
- **Item Type** select one of the following values:
 - Manufactured select items where item type = M (manufactured) in the Item/Warehouse master record.
 - Purchased select items where item type = P (purchased) in the Item/Warehouse master record.
 - All select both item types
- Range of Buyers enter an optional range of buyer codes, or leave blank to process all buyers.
- Review Horizon Weeks enter a number of weeks to calculate a Review Horizon Date, before which planned orders are to be

- included. Any planned orders release dates before the Review Horizon Date will be ignored
- **Include Details for Forecast** check to include a section on the report which lists sales forecast details for the date range selected.
- **Include Details for Sales Orders** check to include a section on the report which lists sales order line items for the date range selected
- Include Details for Scheduled Receipts check to include a section on the report which lists open production and purchase orders for the date range selected.
- Include Production Allocations check to include a section on the report which lists component allocations from open production order for the date reange selected.

The report details are the same as the Order Review/Release report by Item.

Order Review/Release – by Vendor

You use this menu option (4-i) to print a list of planned orders to be released by item within a range of vendors, for a specific warehouse.



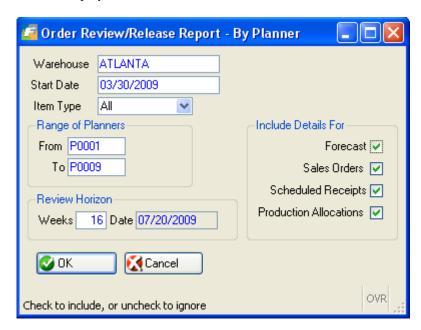
- Warehouse enter the desired desired warehouse
- Start Date enter the date after which planned orders are to be included. Any planned orders with release dates before the 'Start Date' will be ignored.
- **Item Type** select one of the following values:
 - **Manufactured** select items where item type = M (manufactured) in the Item/Warehouse master record.
 - Purchased select items where item type = P (purchased) in the Item/Warehouse master record.
 - All select both item types
- Range of Vendors enter an optional range of vendor codes, or leave blank to process all vendors.
- Review Horizon Weeks enter a number of weeks to calculate a Review Horizon Date, before which planned orders are to be

- included. Any planned orders release dates before the Review Horizon Date will be ignored
- Include Details for Forecast check to include a section on the report which lists sales forecast details for the date range selected.
- **Include Details for Sales Orders** check to include a section on the report which lists sales order line items for the date range selected
- Include Details for Scheduled Receipts check to include a section
 on the report which lists open production and purchase orders for the
 date range selected.
- Include Production Allocations check to include a section on the report which lists component allocations from open production order for the date reange selected.

The report details are the same as the Order Review/Release report by Item.

Order Review/Release – by Planner

You use this menu option (4-j) to print a list of planned orders to be released by item within a range of planners, for a specific warehouse.

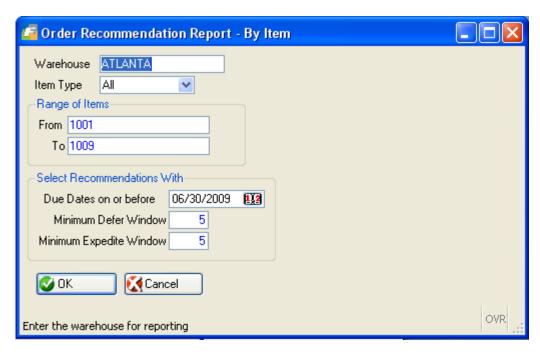


- **Warehouse** enter the desired desired warehouse
- Start Date enter the date after which planned orders are to be included. Any planned orders with release dates before the 'Start Date' will be ignored.
- Item Type select one of the following values:
 - **Manufactured** select items where item type = M (manufactured) in the Item/Warehouse master record.
 - Purchased select items where item type = P (purchased) in the Item/Warehouse master record.
 - All select both item types
- Range of Planners enter an optional range of planner codes, or leave blank to process all planners.
- Review Horizon Weeks enter a number of weeks to calculate a Review Horizon Date, before which planned orders are to be included. Any planned orders release dates before the Review Horizon Date will be ignored
- Include Details for Forecast check to include a section on the report which lists sales forecast details for the date range selected.
- **Include Details for Sales Orders** check to include a section on the report which lists sales order line items for the date range selected
- Include Details for Scheduled Receipts check to include a section
 on the report which lists open production and purchase orders for the
 date range selected.
- Include Production Allocations check to include a section on the report which lists component allocations from open production order for the date reange selected.

The report details are the same as the Order Review/Release report by Item.

Order Recommendation – by Item

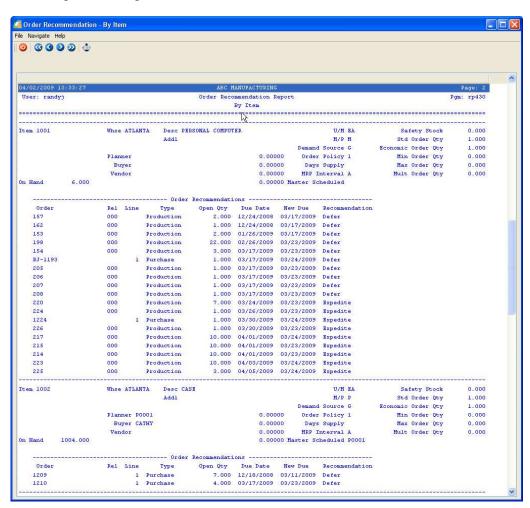
You use this menu option (4-k) to print a list of recommendations to change or cancel active orders by item, for a specific warehouse.



- **Warehouse** enter the desired desired warehouse
- **Item Type** select one of the following values:
 - Manufactured select items where item type = M (manufactured) in the Item/Warehouse master record.
 - Purchased select items where item type = P (purchased) in the Item/Warehouse master record.
 - All select both item types
- Range of Items enter an optional range of item codes, or leave blank to process all items.
- **Select Recommendations with Due Dates on or before** enter a date for recommendations to print. Any orders with due dates after the entered will not print associated recommendations.
- Minimum Defer Window enter a number of days used to include 'Defer' recommendations. Any recommendations to defer orders for a

- number of working days less than this number will NOT print. Use this window to ignore defer recommendations which are relatively insignificant.
- Minimum Expedite Window enter a number of days used to include 'Expedite' recommendations. Any recommendations to expedite orders for a number of working days less than this number will NOT print. Use this window to ignore expedite recommendations which are relatively insignificant.

An example of the report follows:



For each item, general planning information is printed.

Recommendations within the selected date and defer/expedite windows print for each selected item in the warehouse:

■ **Order** – the production or purchase order number

- **Rel (Release)** for a production order, prints the Relesase number
- **Line** for a purchase order, prints the line item number
- **Type** one of the following values:
 - **Production** a production order
 - Purchase a purchase order
- Open Qty (Open Quantity) the quantity remaining to be received into inventory.
- **Due Date** the date the item is due to be received
- **New Due** for 'Defer' or 'Expedite recommendations, the new recommended date.
- **Recommendation** one of the following values:
 - **Defer** change the order due date to the later 'New Due' date. This indicates the items on the order do have requirements, but are not needed as early as the current order due date.
 - **Expedite** change the order due date to the earlier 'New Due' date. This indicates the items on the order have requirements, but they are needed earlier than the current order due date.
 - **Cancel** cancel the order. This indicates the quantity being orders has no associated demand.

Order Recommendation – by Buyer

You use this menu option (4-l) to print a list of recommendations to change or cancel active orders by item within a range of buyer codes, for a specific warehouse.



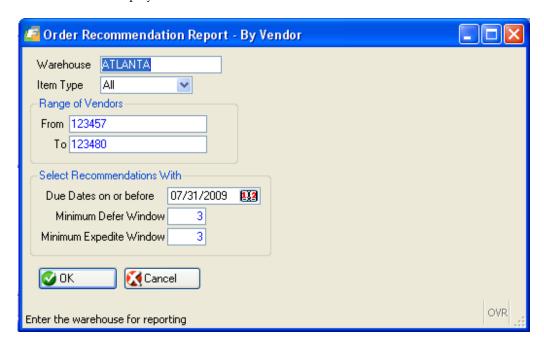
- **Warehouse** enter the desired desired warehouse
- **Item Type** select one of the following values:
 - **Manufactured** select items where item type = M (manufactured) in the Item/Warehouse master record.
 - Purchased select items where item type = P (purchased) in the Item/Warehouse master record.
 - All select both item types
- Range of Buyers enter an optional range of buyer codes, or leave blank to process all buyers.
- Select Recommendations with Due Dates on or before enter a date for recommendations to print. Any orders with due dates after the entered will not print associated recommendations.
- Minimum Defer Window enter a number of days used to include 'Defer' recommendations. Any recommendations to defer orders for a

- number of working days less than this number will NOT print. Use this window to ignore defer recommendations which are relatively insignificant.
- Minimum Expedite Window enter a number of days used to include 'Expedite' recommendations. Any recommendations to expedite orders for a number of working days less than this number will NOT print. Use this window to ignore expedite recommendations which are relatively insignificant.

The report details are the same as the Order Recommendation report by Item.

Order Recommendation – by Vendor

You use this menu option (4-m) to print a list of recommendations to change or cancel active orders by item within a range of vendors, for a specific warehouse.



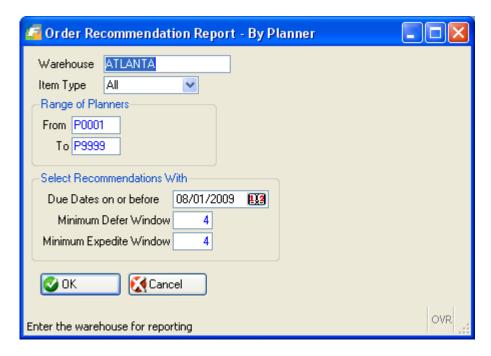
- **Warehouse** enter the desired desired warehouse
- **Item Type** select one of the following values:
 - **Manufactured** select items where item type = M (manufactured) in the Item/Warehouse master record.
 - Purchased select items where item type = P (purchased) in the Item/Warehouse master record.
 - All select both item types
- Range of Vendors enter an optional range of vendors, or leave blank to process all vendors.
- Select Recommendations with Due Dates on or before enter a date for recommendations to print. Any orders with due dates after the entered will not print associated recommendations.
- Minimum Defer Window enter a number of days used to include 'Defer' recommendations. Any recommendations to defer orders for a number of working days less than this number will NOT print. Use

- this window to ignore defer recommendations which are relatively insignificant.
- Minimum Expedite Window enter a number of days used to include 'Expedite' recommendations. Any recommendations to expedite orders for a number of working days less than this number will NOT print. Use this window to ignore expedite recommendations which are relatively insignificant.

The report details are the same as the Order Recommendation report by Item.

Order Recommendation – by Planner

You use this menu option (4-n) to print a list of recommendations to change or cancel active orders by item within a range of planner codes, for a specific warehouse.



- **Warehouse** enter the desired desired warehouse
- **Item Type** select one of the following values:
 - **Manufactured** select items where item type = M (manufactured) in the Item/Warehouse master record.
 - Purchased select items where item type = P (purchased) in the Item/Warehouse master record.
 - All select both item types
- Range of Planners enter an optional range of planners, or leave blank to process all planners.
- Select Recommendations with Due Dates on or before enter a date for recommendations to print. Any orders with due dates after the entered will not print associated recommendations.
- Minimum Defer Window enter a number of days used to include 'Defer' recommendations. Any recommendations to defer orders for a

- number of working days less than this number will NOT print. Use this window to ignore defer recommendations which are relatively insignificant.
- Minimum Expedite Window enter a number of days used to include 'Expedite' recommendations. Any recommendations to expedite orders for a number of working days less than this number will NOT print. Use this window to ignore expedite recommendations which are relatively insignificant.

The report details are the same as the Order Recommendation report by Item.

Appendix |

Glossary

Account – An account is a classifying or summarizing device. It represents a category of transactions that a business entity has decided to track. All transactions recorded in a journal are subsequently posted to two or more accounts. A transaction is posted as a debit or credit entry to an account. The difference between the total of all debit entries and the total of all credit entries posted to a single account is referred to as the account's "balance." Depending on the type of account, an account's balance is either increased or decreased by a debit or credit entry (see Debits and Credits).

Account Number – Each account in the Chart of Accounts is identified by a unique number, up to nine digits long. Accounts of a given type usually are grouped by account number. For example, all asset accounts might begin with a "1" followed by up to eight numbers.

Example: a basic Chart of Accounts

A Basic Chart of Accounts

Number	Account Description	Туре
100000000	CASH ACCOUNT	ASSET
200000000	ACCOUNTS PAYABLE	LIABILITY
300000000	EQUITY	CAPITAL
400000000	PRODUCT SALES	INCOME
500000000	COST OF GOODS	EXPENSE
600000000	GENERAL EXPENSE	EXPENSE

Account Types – There are three basic types of accounts: asset, liability, and capital. Capital is also referred to as owners' equity. Income and expense accounts are a subset of retained earnings, which is a capital account.

Accounting Periods (General Ledger Periods) – Each business transaction is time-sensitive. In this system, a new accounting period is created every time you close out the existing period. You are not limited to any given number of periods during the course of a year. A transaction that takes place in the current year falls into one of these possible periods.

Accrual Method – A method of accounting which records revenues and expenses in the period in which they are earned or incurred and not in the period in which they are received or paid. Compared to the cash method of accounting, the accrual method of accounting is more accurate, but tends to be more complex.

Adding a Row – Adding a row means creating a new row and adding it to the table. For example, when you add a new account to the account table, you are adding a row to that table.

Adjusting Entries – Entries that adjust the balances of ledger accounts. Adjusting entries are usually made for one of two reasons. One reason is to record unrecorded events such as revenue earned but not received. The other reason is to correct accounting errors.

Age – The number of days between the date on a particular document and the "aging date." When processing an aging report, the system prompts for the aging date; the user determines which date to use as an aging date. (See Customer Aging. See also Vendor Aging.)

Alphanumeric field – An alphanumeric field is a field whose entries can consist of any combination of letters and numbers.

Asset Account – Assets are things of value possessed by a business. Cash in a bank account is an asset, as is accounts receivable (the money owed a business by its customers). Assets need not be paid for to be considered assets. Asset accounts are increased by a debit and decreased by a credit.

Audit Trail – The ability to verify and track accounting transactions or ledger balances.

Automatic Reorder – The process of generating purchase orders for inventory items whose quantity falls below the reorder point.

Average Cost – Average cost is a method of calculating the cost of inventory items by averaging the per unit cost of all items currently in stock.

Backorder – If items are out of stock, these items can be put on back order. When the item comes in, it is usually shipped. The backorder document is a modified version of

the original sales order and represents an agreement to ship the item as soon as the item becomes available.

Backup – In computer terms, backup refers to the process of copying computer files. These copies are usually made to diskette or tape. File backups are insurance against system failure.

Balance – The balance of an account is equal to the sum of the debit and credit postings to the account. Accounts are in balance if the total debits are equal to the total credits.

Balance Forward Customers – Statements for "balance forward" customers show only the transactions that affect the current period. For balance forward customers, payments are applied to the oldest invoices first. In contrast, "open item" statements show each outstanding invoice, and payments may be applied to a particular invoice.

Balance Sheet – The balance sheet shows the current financial condition of a company. The balance sheet lists assets, liabilities, and capital. It is usually totaled in two main sections. The first section totals assets. The second totals liabilities and capital. Assets must always equal liabilities plus capital.

Blanket Order – This is a large order that is split into more than one shipment, possibly to different locations.

Blanket Release – A blanket release is a document that is a subset of a larger blanket order. It represents a single shipment for an order that comprises multiple shipments.

Capital Accounts – (Also called owners' equity accounts.) These accounts record the difference between what is owned (assets) and what is owed (liabilities). They are also called proprietorship or net worth. Capital accounts are increased by a credit and decreased by a debit.

Cash Method – A method of accounting which records revenues and expenses in the period in which they are received or paid and not in the period in which they are earned or incurred. Compared to the accrual method of accounting, the cash method is less complex and often used by smaller businesses.

Cash Receipt – Money received as payment for goods or services. An A/R cash receipt is a payment that applies to an outstanding invoice. A non-A/R cash receipt is a payment that does not apply to an outstanding invoice. A non-A/R receipt may not even apply to a customer's account.

Cash Receipts Journal – The cash receipts journal is the journal into which all cash receipts activity is recorded, thus affecting the balances of accounts in the receivable ledger.

Chart of Accounts – A "chart" is a list of accounts. A chart of accounts includes all the different accounts used in summarizing the transactions and current condition of a business.

Check Journal/Cash Disbursement Journal – This is the journal into which all cash disbursements activity is recorded, thus affecting the balances of accounts in the payable ledger.

Column – A column is a category slot into which you enter information in a table. For example, if the computer puts "Enter Company:" on the form, the space following the colon is the "column" into which information is entered. This is the "Company" column.

Cost of Goods (COG) Accounts – These are expense accounts; they track the cost of the same products whose revenues are recorded in sales accounts. In other words, these accounts record the cost of those products which the company sells. This cost is recorded at the time of sale. The balance of these accounts is increased with a debit and decreased with a credit.

Count Adjustment Account – This is a balancing account that is posted to when the inventory quantity-on-hand is adjusted—in this case there is no corresponding sale or purchase of inventory.

Count Sheet – This is a list of items and their physical locations in a warehouse(s) to be used by personnel counting inventory.

Credit – The term credit can refer to two different things depending on its usage. If used in reference to ledger accounts, credit refers to an entry that increases or decreases a ledger account. Some accounts are increased by a credit while others are decreased by a credit. How a credit or debit affects the balance of an account depends on the type of account involved. If used in reference to customer accounts, a credit refers to an acknowledgment of payment. When a customer pays you, you credit that customer's account. When you pay a vendor, that vendor credits your account.

Credit Memo – If referring to customer accounts, a credit memo refers to a document notifying a customer that his account has been credited (reduced). When dealing with vendor accounts you enter a credit memo to increase the amount you owe the vendor.

Creditor – A person or company to whom you owe money. Your vendors are creditors when you owe them money.

Current Accounting Period or General Ledger Period – This is the accounting period for which you are currently posting transactions.

Current Assets – Current assets are assets that are normally used up during the operating cycle of a business (usually one year). Cash and inventory are typical examples of current assets.

Customer Accounts – Though not an account in the general ledger sense, a customer account is used to summarize what a given customer owes or is owed at a particular point in time. A customer's account is summarized by a statement.

Customer Activity – Activity refers to any transaction that affects the balance of a customer or ledger account. A summary of activity shows all transactions affecting those balances in the current period.

Customer Aging – The customer aging shows how long any open items have been on the books and how much of a customer's debt falls into various aging categories. Those aging categories reflect progressively more serious levels of overdue payment.

Customer Balance – The customer balance is the amount owed by or owed to a customer. If the customer owes you money, he is said to have a debit balance. If you owe him money, he is said to have a credit balance. A customer balance is the total of his current open items.

Customer Terms – Customer terms are the conditions under which you expect payment from the customer. Customer terms typically include the period of time within which you expect to be paid, any discounts allowed for early payment, and the time frame within which such discounts are allowed.

Database – A database is all the related information within a computer system to which you have access in one form or another.

Debit – The term debit can refer to two different things depending on its usage. If used in reference to ledger accounts, a debit refers to an entry that increases or decreases a ledger account. Some accounts are increased by debits while others are decreased by debits. How a credit or debit affects the balance of an account depends on the type of account involved. If used in reference to customer accounts, when a customer purchases goods from you, you debit that customer's account. When you purchase goods from a vendor, the vendor debits your account.

Debit Memo – If used in reference to a customer account, a debit memo refers to a document notifying the customer that his account has been debited (increased).

Debits and Credits – Each transaction entered into a journal, and eventually posted to the subsidiary and general ledgers, consists of debit and credit entries to two or more accounts. A ledger account balance is the difference between all debit postings to that account and all credit postings. Whether a debit or credit posting to an account increases or decreases the account balance depends on the type of account.

The basic accounting equation is: assets = liabilities + capital. Accounts (assets) on the left side of the accounting equation are increased with a debit. Those on the right side (liabilities and capital) are increased with a credit. Retained earnings is a type of capital account; revenue and expense ac-counts are a subset of retained earnings. Revenues increase retained earnings, and because capital accounts are increased with a credit,

revenue accounts are increased with a credit. Similarly, ex-pense accounts decrease retained earnings and capital accounts are decreased with a debit. There-fore, expense accounts are increased with a debit.

Deleting a Row – Deleting a row is the process of removing it from the computer database after it has been added or updated.

Department Code – A three-character department code identifies which "profit center" an account belongs to. If you are not using profit centers, the default department code is "000." Refer to the entry for Profit Centers for an example of the use of department codes to set up profit centers within a company.

Document – Transactions entered in the Fourth Generation Business system are referred to as "documents." Different journals (accounts receivable, accounts payable, for example) may be used to record different types of documents. Documents consist of debit and credit entries to two or more ledger accounts. In order to save a document, that document must be in balance; that is, the total of all debit entries must equal the total of all credit entries.

Drop Ship Order – This is an order that is shipped directly to your customer. The items ordered never enter your warehouse. The items go directly from your vendor to your customer.

Employee Code – Each employee in the Payroll system is identified by a unique six-character code. Although an employee's name and social security number can be used to sort and view data on an employee, the employee code is the key used throughout the Payroll system to uniquely identify an employee.

Employee Type – Each employee in the Payroll system can be associated with an employee type which is identified by a unique six-character code. The employee type provides access to default setup values for the employee, and provides a means for grouping employees.

Expense Accounts – Expense accounts are used to track the cost of doing business. They are a subset of retained earnings (a capital account). At the end of a period of time (usually a year) the difference between the total of all income account balances and the total of all expense account balances is calculated and that balance is transferred to retained earnings. After transferring this figure to retained earnings, the balance of each income and expense account is set to zero. Capital accounts are decreased with a debit. Because expenses decrease capital, expense accounts are increased with a debit.

Field – A field is a data-entry or display area on a form. A field may or may not correspond to what is actually stored in a table in the database.

FIFO - First-In First-Out"—One of several methods of determining the value of inventory and calculating the cost of goods sold. Using the FIFO method, it is

assumed that the "first inventory items in" (the oldest inventory items) are the "first inventory items out" (the first items to be shipped).

Finance Charges – Finance charges are charges made by a vendor against you, or made by you against a customer, for non-payment of an amount due. Finance charges are new charges made against the account because the payment was not made according to the established terms.

Flat Rate – A value applied on a per-payment basis. Unlike a percentage rate, which calculates a specified proportion of an amount, a flat rate ignores the exact value of the amount, treating it as a single payment to which a single unit of the "rate" value is applied. Thus the "calculated" value due to a flat rate is the same each time it is applied.

FOB – FOB stands for "free on board" or "freight on board." The FOB point determines when the title to a product changes hands; that is, it determines at what point the buyer assumes ownership of a product. FOB sometimes—but does not necessarily—affects who pays the freight charges for shipping a product. In some businesses the seller pays freight up to the FOB point and the buyer pays from the FOB point. Similarly, in some businesses the FOB point determines who pays insurance on the shipment.

Form – A form is the template into which information is entered. A form may combine information from several different tables, usually lines of information from a "header" table at the top of the form and several rows from a "detail" table at the bottom.

General Journal – The most basic type of journal in an accounting system is the general journal. It may be the only journal. Transactions which consist of a debit to at least one account and a credit to at least one (different) account are entered in such a journal. Ultimately each transaction is posted from the general journal to a general ledger account.

General Ledger – The general ledger includes each account listed in the chart of accounts, along with debit and credit transaction entries that add up to the account balance.

Income Accounts – These accounts are used to track revenues. Sales accounts, for example, are a type of income account. They are a subset of retained earnings (a capital account). At the end of a period of time (usually a year) the difference between the total of all income account balances and the total of all expense account balances is calculated and that balance is transferred to retained earnings. After transferring this figure to retained earnings, the balance of each income and expense account is set to zero. Capital accounts are increased with a credit and decreased with a debit. Because revenue increases capital, income accounts are increased with a credit.

Income/Deduction/Obligation Codes – Each type of income, deduction, and incurred employer obligation is identified by a unique six-character code. When the income,

deduction, or obligation is used in a payroll entry it is referred to by this code. The code provides access to default values and basic information required to calculate the income, deduction, or obligation amount.

Income Statement – The income statement (also referred to as a "profit and loss" statement) records the changes in equity associated with business operations for a specified period of time. This statement lists the revenues and expenses and the difference between them for a period of time. The difference between revenues and expenses is referred to as a net profit or a net loss.

Inventory Account – This is the current assets account that represents the value of the goods in stock.

Inventory Adjustment Account – This is the ledger account that balances changes made to the inventory account balance that do not result from sales, returns, or purchases.

Inventory Control (I/C) – This is the system for tracking goods stored for sale to customers, including calculation of costs and prices.

Inventory Item – This is a single unit of merchandise from inventory.

Item Code – An item code is a unique alphanumeric string identifying a type of inventory item.

Journal – Journals are used to sequentially record business transactions. Each transaction consists of a debit to at least one account and a credit to at least one (different) account. Journal entries are posted to ledger accounts; therefore, every entry made in a journal ultimately has an effect on the balance of two or more ledger accounts. An accounting system may include multiple journals, each used to record a specific type of transaction. The most basic type of journal is the general journal. In addition there may be an accounts receivable journal, an accounts payable journal, and so on.

Ledger – A ledger consists of a group of accounts and debit and credit entries representing transactions that affect the account balance. A group of accounts is called a ledger. The general ledger includes all accounts listed in the chart of accounts. Subsidiary ledgers comprise subsets of the chart of accounts. The accounts receivable ledger, for example, comprises all customer accounts. The total of all customer account balances equals the balance in the accounts receivable ledger account.

Liability Accounts – Liabilities are debts or anything that is owed. Liability accounts are increased by a credit and decreased by a debit.

LIFO – "Last-In First-Out" is one of several methods of calculating the cost of inventory items. With the LIFO method those inventory items "last in" (most recently purchased) are considered the "first out" (first to be sold).

Open Item Customers – Statements for open item customers show each outstanding invoice and payments are applied to a specific invoice. In contrast, balance forward statements show only the transactions that affect the current period. For balance forward customers, payments are applied to the oldest invoices first.

Open Items – Open items are posted invoices that contain outstanding balances representing amounts owed by customers or due to vendors. A document is considered an open item until that balance is zero.

Order Acknowledgment – An order acknowledgment is a hardcopy version of a sales order. Order acknowledgments may be sent to customers so that they have a record of the sales transaction.

Payable Document – There are four common types of payable documents: a vendor invoice, a cash disbursement, a vendor credit, and a vendor debit.

Payable Ledger – A payable ledger is the ledger that includes all the accounts affected by accounts payable transactions—invoices, cash disbursements, and vendor credits and debits.

Payroll Deduction – A payroll deduction is any amount withheld from an employee's check. For every deduction there is typically an employer liability incurred.

Payroll Document – A payroll document is the complete record of a payroll disbursement. This document includes an employee's gross income, deductions, net income, and employer obligations, as well as the related accounting data for the document.

Payroll Income – Payroll income comprises wages, reimbursements, and cash outlays recorded as part of a payroll entry. Payroll income normally is an operating expense.

Payroll Journal – The payroll journal is the journal into which all payroll activity—paychecks, income, deductions, and employer obligations—is recorded. When posted, this activity affects the balance of accounts in the payroll ledger.

Payroll Ledger – A payroll ledger is the ledger that includes all the accounts affected by posted payroll transactions—paychecks, income, withholding, and incurred obligations.

Payroll Obligation – An employer liability resulting from a payroll transaction, such as withholding federal taxes from an employee's paycheck.

Posting – Posting is the process of transferring transactions (documents) from the journal to the ledger.

Posting Sequence Numbers – All processes which "post" entered data into a storage area for completed documents have reports that feature a posting sequence number. These numbers are used to keep track of reports that should be permanently stored in your records. Each of these reports has its own sequence of posting numbers.

Prepaid Asset – This is an asset that you have paid for, but not yet received.

Profit Center – A "profit center" identifies a part of a company for which profits can be calculated separately. Sales and expenses for that division are designated with a "Department" number.

Simple Account Chart with Two Profit Centers

Number	Dept	Account Description	Туре
100000000		CASH IN BANK	ASET
200000000		ACCOUNTS PAYABLE	LIABILITY
300000000		EQUITY	CAPITAL
400000000	100	PRODUCT SALES	INCOME
400000000	200	PRODUCT SALES	INCOME
450000000	100	SERVICE SALES	INCOME
450000000	200	SERVICE SALES	INCOME
500000000	100	COST OF GOODS	EXPENSE
500000000	200	COST OF GOODS	EXPENSE
600000000	100	GENERAL EXPENSE	EXPENSE
600000000	200	GENREXPENSE	EXPENSE

Purchase Order – A purchase order represents the purchase of merchandise from a vendor.

Purchasing – The purchasing system is one of several Fitrix modules. It provides an automated method for tracking purchases, tracking receiving, and projecting cash requirements.

Receivable Documents – There are four common types of receivable documents: a customer invoice, a customer cash receipt, a customer credit, and a customer debit.

Receivable Journal – The receivable journal is the journal into which all accounts receivable transactions—invoicing, credits, and debits—are recorded. When posted, these transactions affect the balance of accounts in the receivable ledger.

Receivable Ledger – A receivable ledger is the ledger that includes all the accounts affected by accounts receivable transactions—invoices, cash receipts, and customer credits and debits.

Retained Earnings – Retained earnings is the increase in equity that has resulted from profitable operations; net income to date minus dividends to date.

Row – A row is one set of specific information within a table. For example, an account table contains all the information about a single account in an account row. An account table contains as many rows as there are different accounts.

Statement – The customer statement shows the current activity for a given customer. The statement shows outstanding invoices, recent payments, credits, and debits to the customer's account.

Store or Record – Recording or storing a row is the process of saving it in the computer database after it has been added or updated.

Table – A table is where information is stored in a computer. A given table contains only a specific type of information. For example, an account table contains the different sales and expense accounts used by the system.

Transaction – A transaction is an event that is recorded in the accounting records. Typically, such an event involves the transfer of money, product, or services. Each transaction entered in the Business system is referred to as a "document."

Trial Balance – This is a work sheet used as a preliminary step to generating a Balance Sheet. The trial balance is a listing of every ledger account, along with its debit and credit balance. The total of all debit balances should equal the total of all credit balances.

Update – Updating a table is the process of changing rows within it. Whenever you change a description in the account table, for example, you are updating a row within that table.

Vendor Accounts – Though not an "account" in the general ledger sense, a vendor account is used to summarize what a vendor is owed at a particular point in time. A vendor's account is summarized by an aging statement.

Vendor Activity – Activity refers to any transaction involving a vendor that affects the balance of a vendor or ledger account. A summary of activity shows all transactions affecting those balances over a specified period of time.

Vendor Aging – A vendor aging report lists outstanding vendor invoices categorized by number of days from the vendor invoice date or due date.

Vendor aging reports can be setup to "age" in two different ways. In the first, an aging report can put outstanding vendor invoices into categories, ranging from those

currently due to those past due. With this method, the aging categories reflect ever more serious levels of overdue payment.

In the second, an aging report can arrange outstanding vendor invoices into categories, ranging from those currently due to those that will be due in the future. This report is a projection of cash requirements. In this case, the aging categories reflect amounts due farther in the future.

Vendor Balance – The vendor balance is the amount owed to or owed by a vendor. If you owe a vendor money, the vendor's account has a credit balance. If the vendor owes you money, the vendor's account has a debit balance. A vendor's balance is the sum of all open items pertaining to that vendor.

Vendor Terms – Vendor "terms" are the conditions under which the vendor expects payment from you. Vendor terms typically include the period of time within which you expect to pay that vendor's invoices, any discounts allowed for early payment, and the time frame within which such discounts are allowed.

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