



Matrix Processing For MAS 90/200

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Pre-Installation Checklist

Before beginning the installation of this enhancement:

- 1. Verify you have the following standard modules activated in your MAS system:
 - IM
 - AR
 - SO
 - PO
- Necessarily follow the steps described in the "MXP430_CD\Doc\Installation Instructions for MXP.txt" file

Instructions for Uninstalling MXP

- Run the SY068_MXPUninstall_utl program from File->Run menu
- 2. Re-Install AR, BM, IM, PO, RA, SO and WO modules
- 3. Re-Install Sage Service updates
- 4. Re-install third-party enhancements if any.
- 5. Run Library Master -> Utilities -> Rebuild Sort Files for Inventory Management module of each company you have.

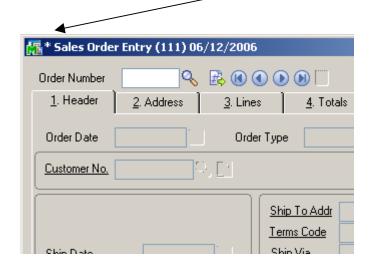
Installation Instructions and Cautions

PLEASE NOTE: MAS 90 must already be installed on your system before installing any IIG enhancement. If not already done, perform your MAS 90 installation and setup now; then allow any updating to be accomplished automatically. Once MAS 90 installation and file updating is complete, you may install your IIG enhancement product by following the procedure below.

Wait! Before You Install - Do You Use CUSTOM OFFICE?

THIS IS AN IMPORTANT CAUTION: If you have Custom Office installed, and if you have modified any MAS 90 screens, you must run Customizer Update after you do an enhancement installation.

But wait! BEFORE you run Customizer Update, it is very important that you print all of your tab lists. Running Customizer Update will clear all Tab settings; your printed tab list will help you to reset your Tabs in Customizer Update. Custom Office is installed on your system if there is an asterisk in the title bar of some of the screens. The asterisk indicates that the screen has been changed.



An *asterisk* in a window's title bar indicates that the screen has been modified. This means that **Custom Office** is installed.

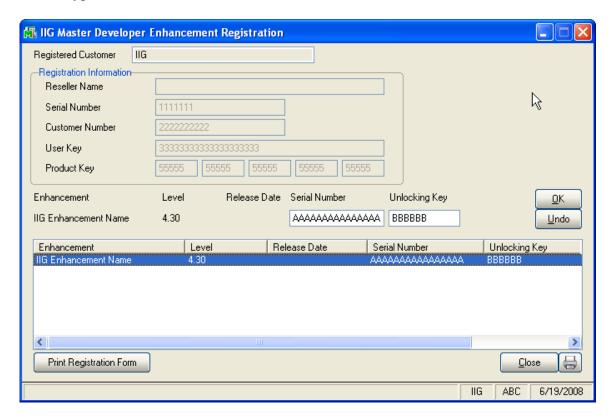
Follow all the instructions on this page before you run Customizer Update!

Registering IIG products

IIG Enhancement should be registered to be able to use it. If registration is not performed, the enhancement will work in a demo mode for a limited time period. The registration can be still done during the demo period.

Select the **IIG Product Registration** program under the **Library Master Setup** menu of the MAS 90.

If this option is not listed under the Library Master Setup menu, go to the main menu, and select **Run** from the **File** menu. Type in SVIIGR and click **OK**.



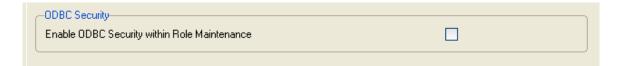
Enter **Serial Number** and **Unlocking Key** provided by IIG, and click **OK**.

If multiple IIG Enhancements are installed, Serial Numbers and Unlocking Keys should be entered for each enhancement.

Use the **Print Registration Form** button to print IIG Registration Form.

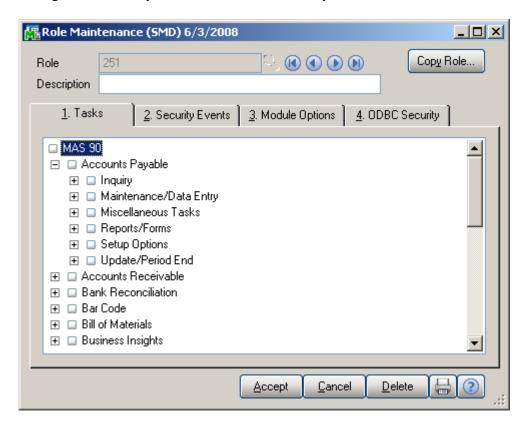
ODBC Security

After installing an **IIG Enhancement**; it is **very important to verify** whether or not the **Enable ODBC Security within Role Maintenance** check box is selected in the **System Configuration** window of your system. If it is selected you must assign ODBC security permissions and allow access to custom data tables/fields for the Roles defined in your system.



Role Maintenance

After installing an **IIG Enhancement**, permissions must be configured for newly created Tasks and Security Events.



Introduction

The Matrix Processing (MXP) enhancement provides the key functionality needed to fulfill the size and color requirements of the Apparel Industry.

A completely integrated solution, the MXP for Sage MAS 90 and 200 has an e-Apparel component which makes your web presence easy to manage and deploy.

This enhancement enables Size and Color Matrix Processing that makes it possible to handle Lot Number Names as pairs of two separate Category Codes (usually Size and Color), which allows presenting set of the Lot Numbers of the same item in Matrix form.

Items flagged as Matrix will use Matrix Distribution Grid instead of standard Lot/Serial Distribution screen. Programs to use the grid can be specified separately or grouped by module.

Matrix Distribution Grid is available in:

- Purchase Order Entry
- ➤ Receipt Of Goods Entry
- ➤ Sales Order Entry
- ➤ Invoice Data Entry
- > Shipping Data Entry
- ➤ Inventory Transaction Entry
- ➤ B/M Production Entry
- ➤ B/M Disassembly Entry
- ➤ W/O Transactions Entry
- > RMA Data Entry
- > RMA Receipts Entry

Matrix Items can use System Matrix Codes or have their own, item-specific Matrix Codes, to be used to construct Lot Numbers.

Prepacks by Matrix Codes can be defined for each Item to be used in sales orders.

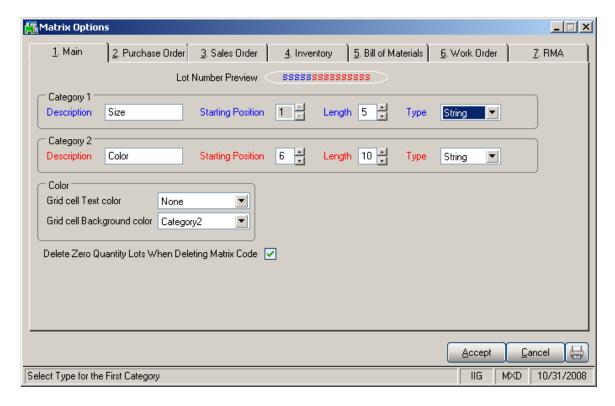
Several reports such as: Matrix Sales History Report,
Matrix Stock Status Report, Matrix Committed Report,
etc. have been provided for Matrix items.
The Matrix Grid printing form has been added to the
graphical printing Form Templates to allow printing the
Matrix Distribution grid information on the Sales Order,

S/O Invoice, Picking Sheet, Packing List and Purchase Order printings.

Setup

Matrix Options

Select the **Matrix Options** program under the **Inventory Management Setup** menu.



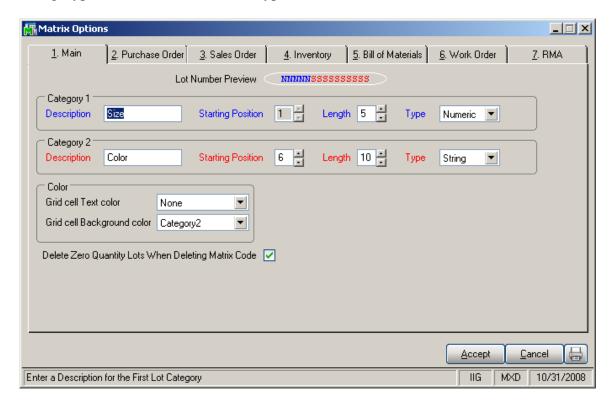
On the **Main** tab, select options for Matrix Code Categories and grid colors.

Enter **Descriptions** for **Categories** 1 and 2.

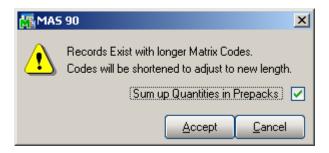
Enter Starting **Position**, **Length** and **Type** of the Matrix Codes for Categories 1 and 2. The program will interpret the part of the Lot Number from the Starting Position with the number of symbols equal to Length as Matrix Code of the corresponding Category. Type can be Numeric or String. Code parts of the Lot Numbers will be checked against the Type. The Code of a Category with Numeric Type can contain only digits. The Category 2 Code cannot be positioned before the Category 1 Code.

The **Lot Number preview** displays the format of the Lot Number with the selected settings. The symbols written in

blue represent a **Category 1** Code; symbols written in **red** represent a **Category 2** Code. Code symbols are: "S" for String Type Code, "N" for Numeric Type Code.



If the **Length** of a Category is reduced, and longer Matrix Codes exist, the following message box is displayed:



On clicking Accept, all existing Codes will be shortened. If there are Matrix Codes, beginning with the same symbols, only one of them will be retained when shortening. For example, when reducing the Length from 3 to 2, of the two following Codes: GRE and GRY, only the first – GRE, will be retained under the new name GR (along with all of its options). If such two Codes are used in the same Prepack, there are two ways to treat the quantities in the Prepack. Check the **Sum up Quantities in Prepacks** box to add up the quantities of all the initial Codes to be shortened to the

new Code. If the **Sum up Quantities in Prepacks** box is cleared, only the quantities of the first one will be retained.

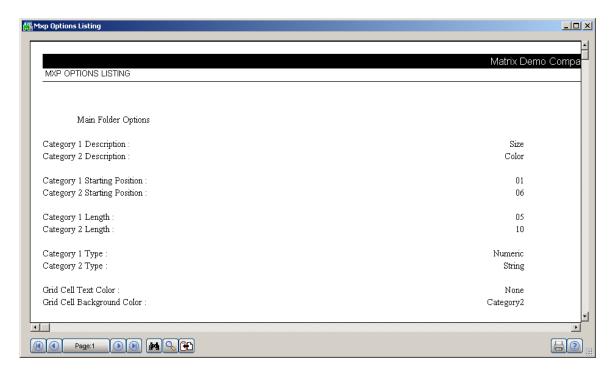
If the **Type** of a Category is changed from **String** to **Numeric**, the Matrix Codes, containing other symbols beside digits, will be displayed in red on the **Matrix Codes Maintenance** screen.

Select a Category in the **Grid cell Text color** field. The text in the cells of the matrix distribution grid will be displayed in the colors assigned to the Codes of the selected Category. Colors are assigned in the **Matrix Code Maintenance** program.

Select a Category in the **Grid cell Background color** field. The cells of the matrix distribution grid will have the background of the colors assigned to the Codes of the selected Category. Colors are assigned in the **Matrix Code Maintenance** program.

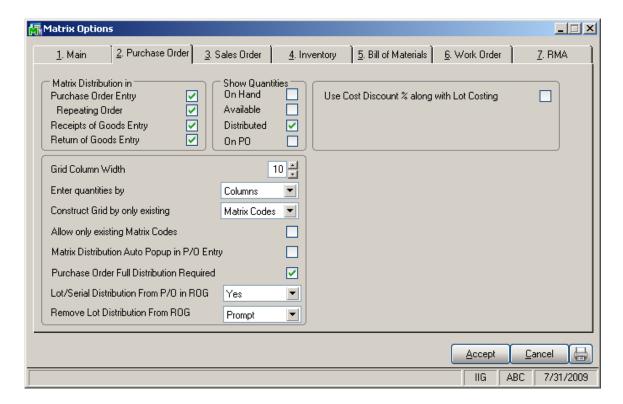
Check the **Delete Zero Quantity Lots When Deleting Matrix Code** box to have deleted the Lot Numbers, which do not have Quantity, corresponding to the Matrix Code being deleted for the item from the **Matrix Code Maintenance**. This option does not affect deletion of the System Matrix Codes.

Click the **Print** button to print the MXP Options Listing:



On the other tabs of the **Matrix Options** screen, select module specific options.

On the **Purchase Order** tab, select options for **Matrix Distribution** in the programs of the **Purchase Order** module.



In the **Matrix Distribution in** section, check the boxes to display the **Matrix Distribution** screen instead of the standard **Lot/Serial Distribution** screen for the Matrix Items in the corresponding programs.

In the **Show Quantities** section, check the boxes to display corresponding quantities in the matrix distribution grid. Quantities **On Hand, Available, Distributed and On PO** can be selected. Each cell of the grid will display the selected quantities, separated by slashes. *Note that at least one of these boxes should be checked, so that at least one quantity is displayed in each cell.*

Enter **Grid column Width**. Each column in the matrix distribution grid will have the entered width.

From the **Enter quantities by** drop-down list, select **Rows** or **Columns**. This option specifies the direction of moving the selection in the Grid when entering quantities. You can choose to enter all the quantities in the first row, then move to the second, and so on (by **Rows**). The selection moves to the left, when accepting the quantity. If you want to enter

all the quantities in the first column, then in the second, and so on, select the **Columns** option. In this case, the selection moves down, when accepting the quantity.

From the **Construct Grid by only existing** drop-down list, select the **Lot Numbers** to display already existing Lot Numbers for item Matrix Code in the matrix distribution grid. Select **Matrix Codes** to display item Matrix Codes from the **Matrix Code Maintenance**.

Check the **Allow only existing Matrix Codes** box to allow entering only the Lot Numbers containing existing Matrix Codes in the Matrix Distribution screen. Clear the check box to be able to enter Lot Numbers with new Matrix Codes. If the Grid is constructed by Matrix Codes, the new Codes will not be displayed.

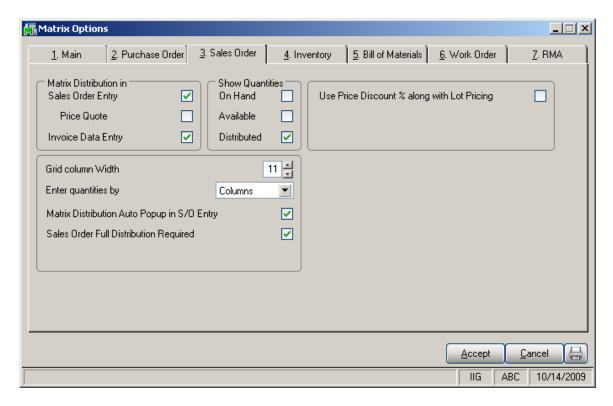
Check the Matrix Distribution Auto Popup in P/O Entry box to auto display the Matrix Distribution screen when clicking in the Quantity field. The Matrix Distribution screen is displayed when the quantity is zero regardless of this setting. If the box is checked, it appears for non-zero quantities as well. In this case, the Ordered quantity cannot be entered on the line, and is set equal to the Quantity Distributed displayed on the Matrix Distribution screen. If the box is cleared, the screen appears only for zero quantities. In this case, the Quantity Distributed field is not displayed on the Matrix Distribution screen, and the distribution will be balanced against the quantity entered in the Ordered field of the line.

Check the **Purchase Order Full Distribution Required** box to require full distribution for all lines of the purchase order when accepting the order. If this check box is cleared, orders can be accepted without distributing all the lines completely.

From the **Lot/Serial Distribution from P/O in ROG** dropdown list, select **Yes** to pass the distribution of Purchase Order to Receipt Of Goods, **No** not to use the distribution, or **Prompt** to ask user in each Receipt Of Goods.

From the **Remove Lot Distribution from ROG** dropdown list, select **Yes** to remove lot distribution information if Received Quantity is changed to zero in the **Receipt of Goods Entry**. **No** not to remove the distribution, or **Prompt** to ask user in each Receipt Of Goods. If the Use Cost Discount % with Lot Costing box is checked the standard Vendor Cost Discount % along with MXP Lot Costing will be used in Purchase Order Entry and Receipt of Goods Entry. Otherwise only the MXP Lot Costing for the selected item, if there is such specified in the MXP Lot Price/ Cost maintenance, will be used.

On the **Sales Order** tab, select options for **Matrix Distribution** in the programs of the **Sales Order** module.



In the **Matrix Distribution in** section, check the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen will be displayed instead of the standard **Lot/Serial Distribution** screen.

If the Matrix Distribution in Sales Order Entry is enabled, the Distribution for Matrix items can be also allowed for **Price Quotes**. When the **Price Quote** box is checked, the Matrix Distribution of the Price Quote will be preserved, when converting it to Standard Order.

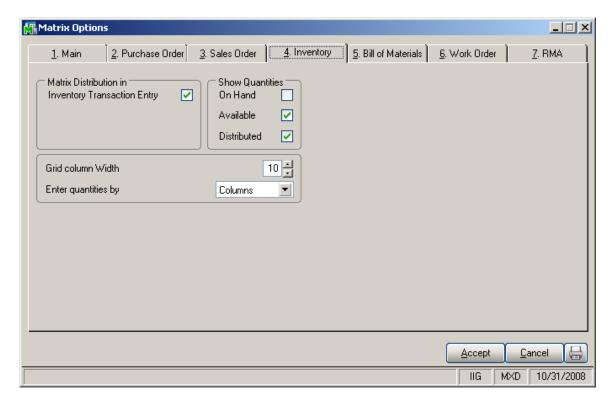
The **Show Quantities** section, **Grid column Width** field, and the **Enter quantities by** drop-down list are the same as on the **Purchase Order** tab. The settings apply to the programs of the **Sales Order** module.

Check the Matrix Distribution Auto Popup in S/O Entry box to auto display the **Matrix Distribution** screen when clicking in the **Quantity** field in the **Sales Order Entry** program. The Matrix Distribution screen is displayed when the quantity is zero regardless of this setting. If the box is checked, it will also popup for non-zero quantities. In this case, the **Ordered** quantity cannot be entered on the line, and is set equal to the Quantity Distributed displayed on the Matrix Distribution screen. For Back Orders, the Back Ordered field is used instead of the Ordered. If the Matrix Distribution Auto Popup in S/O Entry box is cleared, the screen will popup only for zero quantities. In this case, the **Quantity Distributed** field is not displayed on the Matrix Distribution screen, and the distribution should be balanced against the quantity entered in the Ordered field of the line.

Check the **Sales Order Full Distribution Required** box to require full distribution for all lines of the sales order for accepting the order. If this check box is cleared, orders can be accepted without distributing all the lines completely.

If the Use Price Discount % with Lot Pricing box is checked the standard Price Discount % along with MXP Lot Pricing will be used in the Sales Order Entry and SO Invoice Data Entry. Otherwise, only the MXP Lot Pricing for the selected item, if there is such specified in the MXP Lot Price/ Cost maintenance, will be used.

On the **Inventory** tab, select options for **Matrix Distribution** in the programs of the **Inventory Management** module.

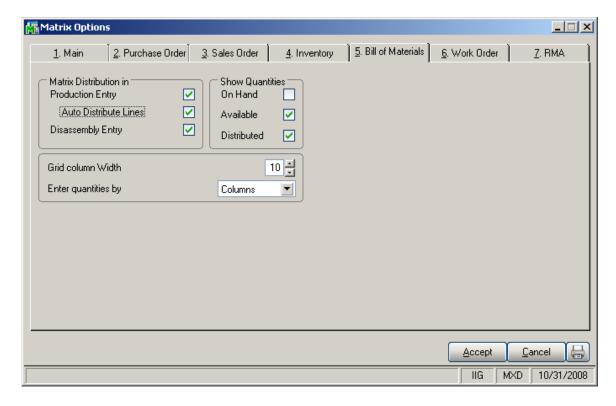


In the **Matrix Distribution in** section, check the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen should be displayed instead of the standard **Lot/Serial Distribution** screen.

The **Show Quantities** section, **Grid column Width** field, and the **Enter quantities by** drop-down list are the same as on the **Purchase Order** tab. These settings are applied to the programs of the **Inventory** module.

On the **Bill of Materials** tab, select options for **Matrix Distribution** in the programs of the **Bill of Materials** module.

If the module has not been activated and setup in the system, the options will be unavailable.



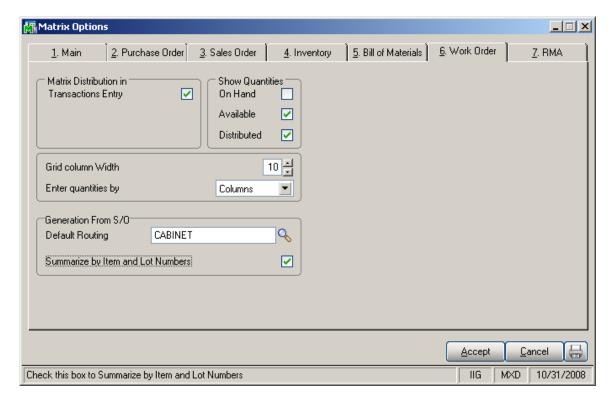
In the **Matrix Distribution in** section, check the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen should be displayed instead of the standard **Lot/Serial Distribution** screen.

If the **Production Entry** box is checked, you can select the **Auto Distribute Lines** option to use the Header Bill Matrix distribution for the distribution of the Lines Matrix items. The Auto Distribution will be done only when entering new **Production Entry**.

The **Show Quantities** section, **Grid column Width** field, and the **Enter quantities by** drop-down list are the same as on the **Purchase Order** tab. The settings apply to the programs of the **Bill of Materials** module.

On the **Work Order** tab, select options for **Matrix Distribution** in the programs of the **Work Order** module.

If the module has not been activated and setup in the system, the options are unavailable.



In the Matrix Distribution in section, select the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen should be displayed instead of the standard Lot/Serial Distribution screen.

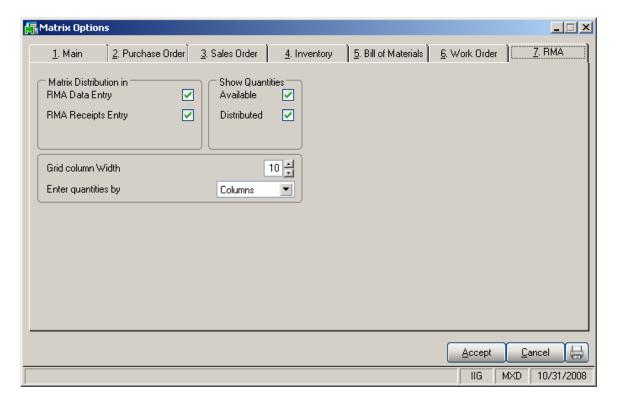
The Show Quantities section, Grid column Width field, and the Enter quantities by drop-down list are the same as on the Purchase Order tab. The settings apply to the programs of the Work Order module.

In the **Generation From S/O** group, select the **Default Routing** to be used during Work Order generation with the **Auto Generate Work Orders from Sales Orders**program. The **Routing** can be viewed, and changed for the current generation, from that screen, before generation.

Check the **Summarize by Item and Lot Numbers** box, to sum up different Lot Numbers of the same Item into the same work order instead of generating separate work orders per Item – Lot Number pair.

On the **RMA** tab, select options for **Matrix Distribution** in the programs of the **Work Order** module.

If the module has not been activated and setup in the system, the options are unavailable.

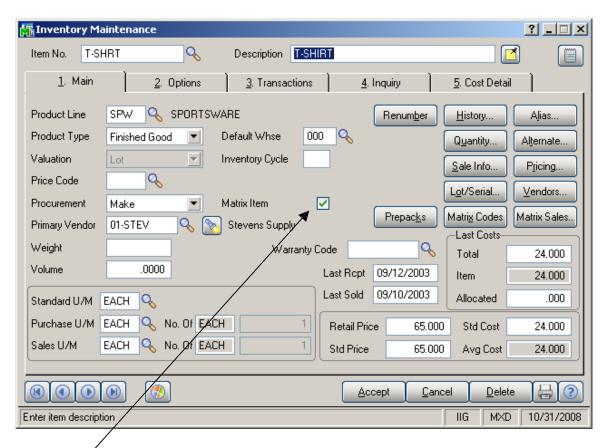


In the **Matrix Distribution in** section, check the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen should be displayed instead of the standard **Lot/Serial Distribution** screen.

The **Show Quantities** section, **Grid column Width** field, and the **Enter quantities by** drop-down list are the same as on the **Purchase Order** tab. The settings apply to the programs of the **RMA** module.

Matrix Items

Select the **Inventory Maintenance** program under the **Inventory Management Main** menu.



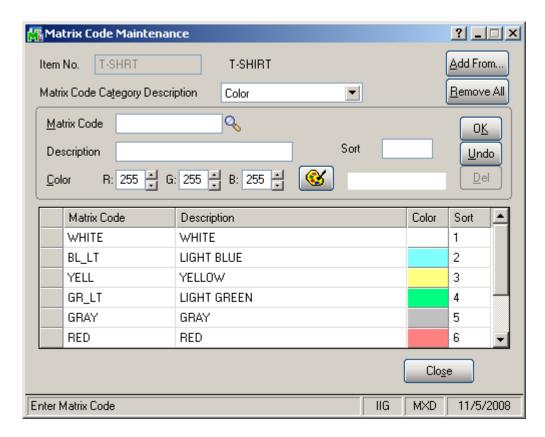
The **Matrix Item** box can be checked only for **Lot** items. The **Valuation** of an item specified as **Matrix Item** cannot be changed to any type other than **Lot**.

The new **Prepacks** button is available only for **Matrix Items**. Prepacks are discussed later in this manual.

Matrix Item cannot be specified as non-Matrix, if it has Prepacks.

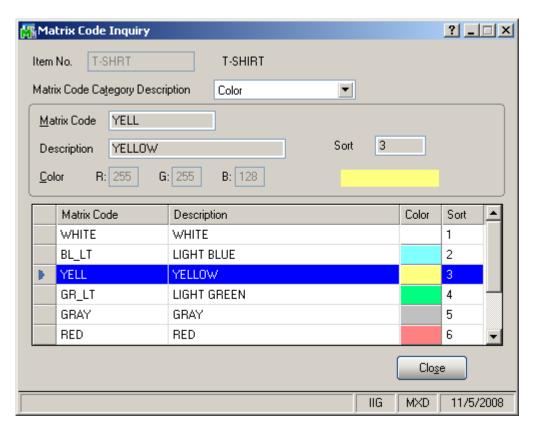
If the **Matrix Item** check box is cleared for an item that has Matrix Codes, the program displays a confirmation message. Matrix Codes of the item will be cleared, if the user chooses to remove the Matrix Item option from the item.

For Matrix Items, the **Matrix Codes** button is also available. Click the button to display the **Matrix Code Maintenance** screen for the selected item.

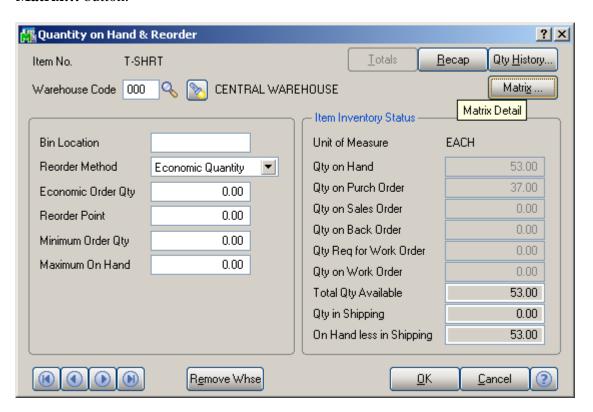


Here the user can add new matrix codes for the selected item if necessary or modify the existing ones. (See details: Matrix Codes)

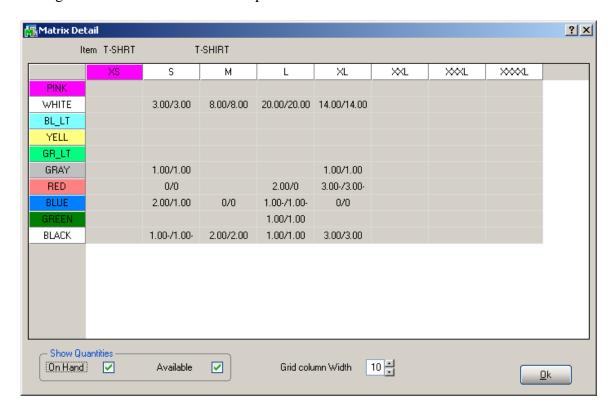
The Matrix Code button is available on the Inventory Inquiry program, too. Clicking the Matrix Code button displays the Matrix Code Inquiry screen. Matrix Codes can be only viewed but not modified or added, from the Inventory Inquiry program.



Click the **Quantity...** button on the **Inventory Maintenance** screen. Select a **Warehouse**, and click the **Matrix...** button.

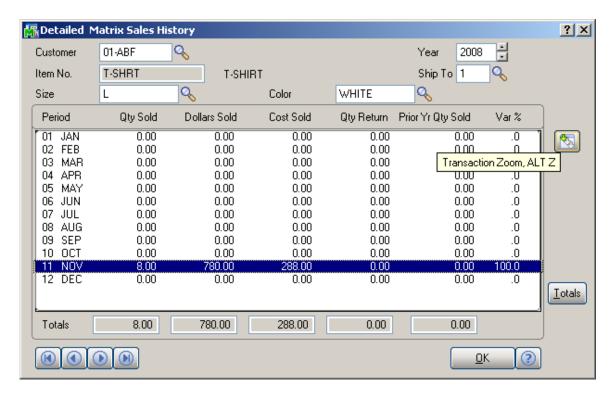


The Matrix Distribution Detail screen displays the Quantities Available and On Hand in the Grid constructed by Matrix Codes.
The On Hand and Quantities Available checkboxes' settings are defaulted from Matrix Options.



The same screen is available also from the **Inventory Inquiry** program. Select an item, then select a warehouse from the list, and click the **Zoom** button to display the **Quantity On Hand** screen. Click the **Matrix...** button on that screen to view the **Matrix Distribution Detail** screen.

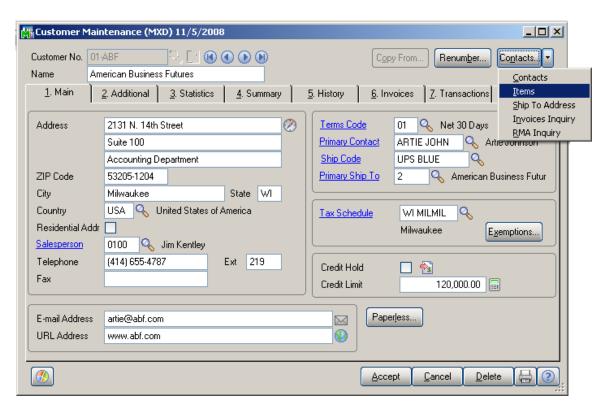
Use the **Matrix Sales** button on the **Inventory Maintenance** screen to view Matrix Item Sales history information by customer and by the Item Matrix codes.



Click **Totals** to view the combined total of all ship-to locations for the customer and the selected Matrix Code combination. The **Totals** feature is available only for customers with multiple ship-to locations.

Customer Matrix Sales History

Select the **Customer Maintenance** program under the **Accounts Receivable Main** menu.



Click the **Items** menu item.

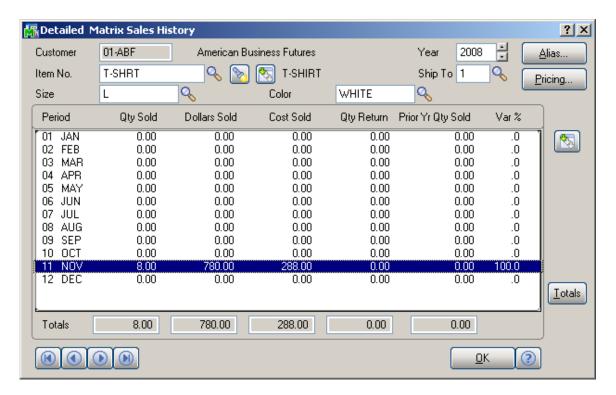


In the opened dialog box click the Matrix button to open the **Detailed Matrix Sales History** screen.

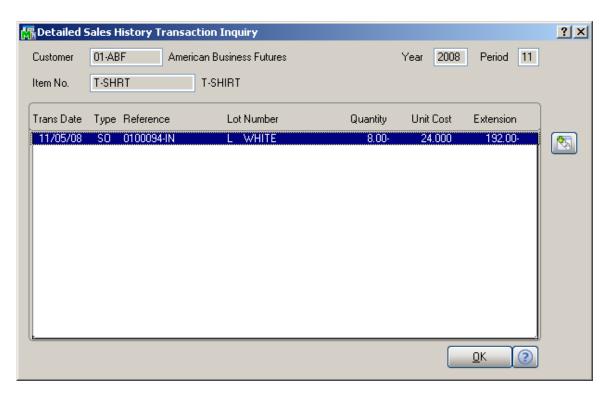
Enter the **Item No.** or select it using the **Lookup** button. The Lookup list displays only Matrix items.

Click the **Multiple Item Lookup** button to view the list of all the Lot Numbers of all the items.

The **Item Zoom** button displays the **Inventory Inquiry** screen for the selected item.

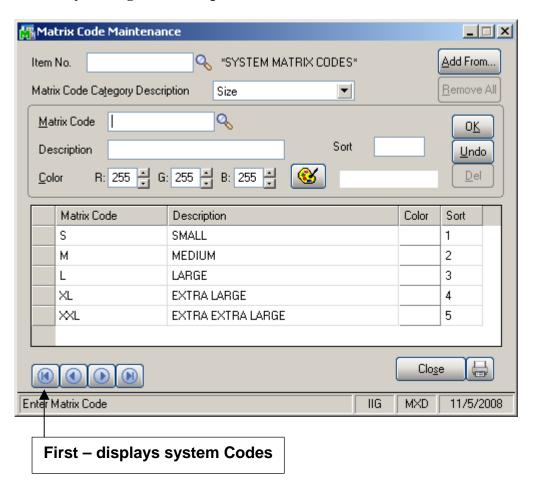


Select a period and click the **Transaction Zoom** button to view the **Detailed Sales History Transaction Inquiry** screen.



Matrix Codes

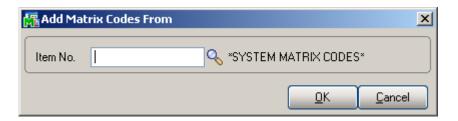
Select the **Matrix Code Maintenance** program under the **Inventory Management Setup** menu.



Each Matrix Item (item checked as Matrix in the Inventory Maintenance program) can have its own Matrix Codes. Besides, Matrix Codes can be defined for the entire system. If an item doesn't have own Matrix Codes, the program will use the system Codes for this item.

When no Item is selected in the **Item No.** field, the program displays the Codes of the system. To view system Codes, click the First button (of the Navigation buttons).

Matrix Codes can be added from an item or entire system to the selected item's Matrix Codes or to the system Codes (if no item is selected). Click the **Add From...** button.



On the **Add Matrix Codes From** screen, select the Item to copy and add Matrix Codes from. The existing Matrix Codes of the destination Item will be retained, and the copied Codes will be added. If the Code already exists, it is retained with all options, not overridden by the added Code.

If no item is selected in the **Add Matrix Codes From** screen, the program will add the system Matrix Codes.

Click the **Remove All** button to remove all the Matrix Codes of the selected Item. The Matrix Codes used in a Prepack will not be removed. The **Remove All** operation cannot be done for system Codes.

The **Add From** and **Remove All** operations are performed for all the Codes of both **Categories**.

To enter a new Code or view/modify an existing one, first select the **Matrix Code Category** by Description. All the Matrix Codes of the selected Category are listed with their descriptions and assigned colors.

Note: Special symbols like ½ can be included in the Matrix Code, if its type is set to String in the Matrix Options program. To enter such symbol, you can use the Character Map program from the System Tools sub-menu of the Accessories folder of the Start Menu in the Windows. Or, you can enter it simply by holding down the Alt key on your keyboard and typing the code of the needed symbol on the Num Pad. (Make sure the Num Lock is pressed before.) For example, to enter the symbol ½, hold down Alt and type 0189 on the Num Pad.

A **Matrix Code** can be selected either by clicking the **Lookup** button or by clicking the corresponding line in the list.

To assign **Color** to the selected Code, enter RGB values or click the **Lookup Colors** button to select a color in the standard Windows **Color** screen.

Optional **Sort** information can be entered to have the Codes sorted in the Matrix Distribution Grids. The Codes are listed according to that information, so that you can preview the order in which they will be displayed in Grids.

To enter new Code, type in the **Matrix Code** and **Description**, and select a color.

Click **OK** to accept the changes for the selected Code.

Click **Undo** to cancel changes.

Click **Del** to delete the selected Code.

If the **Delete Zero Quantity Lots When Deleting Matrix Code** box is checked in the **Matrix Options**, the Lot Numbers, which have Zero Quantities (do not have current activity), constructed with the Matrix Code being deleted for the item will be deleted, too. This option does not affect deletion of the System Matrix Codes.

When trying to delete a Code used in a Prepack, a message is displayed informing that the Matrix Code cannot be deleted since it is used in the Prepack Code, indicating the Prepack Code and the Item Number (if working with the system Matrix Codes):



If there is a Prepack for the selected Item, based on the system Matrix Codes, after creating at least one pair of Matrix Codes of different Categories (that is, one of Category 1 and one of Category 2), the Prepack's Matrix Codes with non-zero quantities will be added to the Item Matrix Codes.

The initial grid is constructed from the Matrix Codes of the selected Item, if it has at least one Code of each Category. Otherwise system Matrix Codes are used.

The following keyboard shortcuts can be used in the **Matrix Code Maintenance** screen:

Alt+G to go to the grid.

Alt+T to set focus to the Category field.

Alt+M to set focus to the Matrix Code field.

Alt+C to set focus to the Color field.

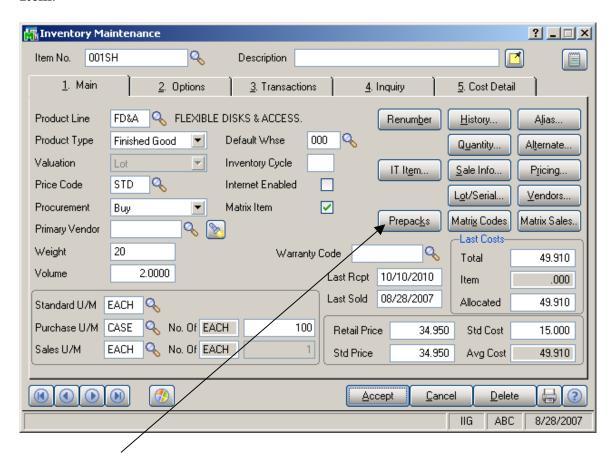
You can navigate from Code to Code in the grid using the Arrow keys. PageUp selects the first, and PageDown the last Code in the grid.

Matrix Codes not corresponding to the Type of Category are displayed in red. This can happen when changing the Category Type from String to Numeric in the Matrix Options. The existing Matrix Codes, containing other symbols besides digits, will be displayed in red on the Matrix Code Maintenance screen.

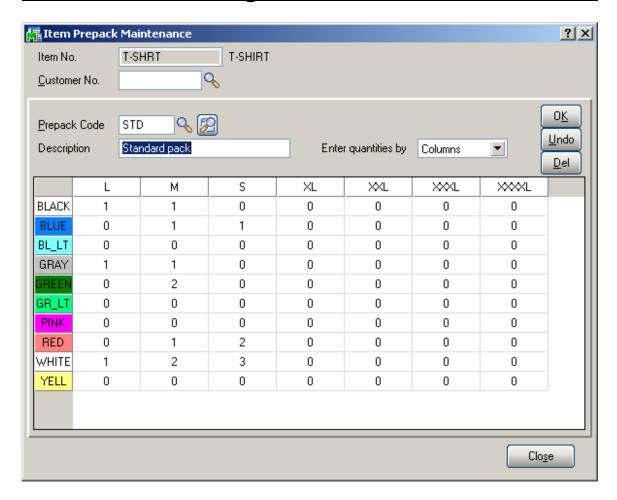
The **Matrix Code Maintenance** screen doesn't allow navigating through other items' codes, if launched from the **Inventory Maintenance** program. The Item **No.** field is disabled with the selected Item displayed.

Prepacks

In the **Inventory Maintenance** program, select a **Matrix Item**.



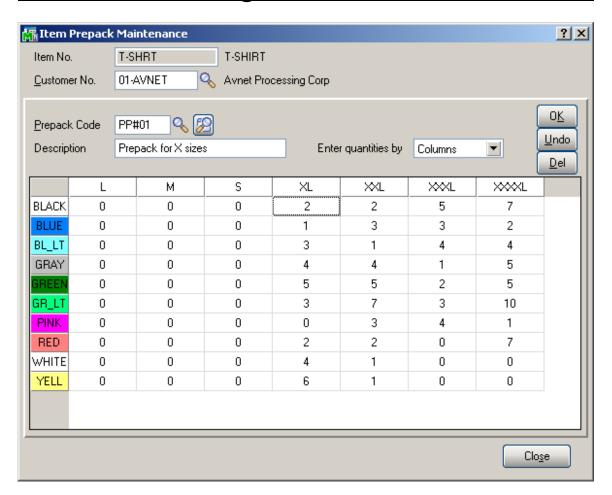
Click the **Prepacks** button.



Select a **Customer No.** to view the Prepacks of the selected customer. If no Customer is selected, the Prepacks of the Item can be viewed.

To create a new Prepack, enter the **Prepack Code** and **Description**.

Select a cell, and enter the quantity:



After pressing Enter, the focus moves to the next cell, which is activated by pressing Enter, double-clicking, or by directly entering the new quantity. The direction of moving the selection in the Grid when entering quantities is defined by the **Enter quantities by** drop-down list. It is defaulted to the setting on the **Inventory** tab of the **Matrix Options** program, but you can change it and select **Rows** or **Columns** for current use. You can choose to enter all the quantities in the first row, then move to the second, and so on (by **Rows**). The selection moves to the left, when accepting the quantity. If you want to enter all the quantities in the first column, then in the second, and so on, select the **Columns** option. In this case, the selection moves down, when accepting the quantity.

After filling all the needed quantities, click **OK** to accept the **Prepack Code**. Click **Undo** to clear all the changes for the selected/entered **Prepack Code**. Click **Delete** to delete the selected **Prepack Code**.

When accepting a Prepack Code, based on the system Matrix Codes, for the Item having at least one Matrix Code, all the Matrix Codes with non-zero quantities from the Prepack will be added to the Item's Matrix Codes.

The **Lookup** button displays the list of existing Prepacks for the selected Item – Customer pair. If no Customer is selected, the list displays the Prepacks of the Item.

The **Alternate Lookup** button displays the list of all the Prepacks of the Item (for all the Customers, and Item's own).

The initial grid is constructed from the Matrix Codes of the selected Item, if it has at least one Code of each Category. Otherwise system's Matrix Codes are used.

The following keyboard shortcuts can be used in the **Item Prepack Maintenance** screen:

Alt+G to go to the grid.

Alt+C to set focus to the Customer No. field.

Alt+P to set focus to the Prepack Code field.

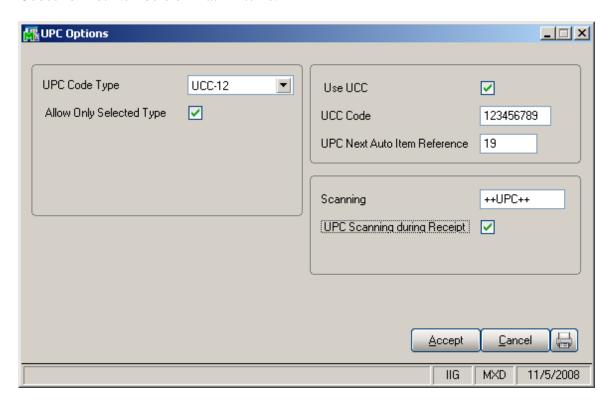
You can navigate between cells in the grid using the Arrow keys. PageUp selects the first, and PageDown the last cell in the current column; Home selects the first, and End the last cell in the current row.

The **Prepacks** of the Item can be viewed from the **Inventory Inquiry** program, too. Clicking the **Prepacks** button displays the same **Item Prepack Maintenance** screen. From the **Inventory Inquiry** program Prepacks can be only viewed but not modified or added

UPC Options

Select the **UPC Options** program under the **Inventory Management Setup** menu.

The **UPC Options** are set up for using Universal Product Codes for Lot Numbers of Matrix items.

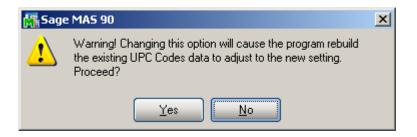


The **UPC Code Type** determines the default length to be used for the code – 12, 13 or 14 digits. The available options are UCC-12, EAN/UCC-13, EAN/UCC-14.

Check the **Allow Only Selected Type** box to force the programs to reject UPC Codes of the lengths different from the selected.

Generally, if the **Allow Only Selected Type** box is cleared, the enhancement uses 14 digits for UPC Codes. If the entered UPC Code is 13 or 12 digits long, the program adds one or two zeroes correspondingly to the beginning of the Code. The default length determines possible **UCC Code** and **Item Reference** combinations.

Changing the **Allow Only Selected Type** option after using the UPC Codes in the system, can lead to problems after rebuilding the data connected to the already entered and used UPC Codes.



Check the **Use UCC** box, if your company manufactures rather than purchasing and selling finished goods

The **UCC Code** is the company code, which will be used as the default for the part of the UPC codes. The **UCC Code** cannot be shorter than 6 digits.

The UPC Next Auto Item Reference is for adding to the UCC Code for assigning UPC Codes automatically in the UPC Code Maintenance program. The Item Reference cannot be shorter than 2 digits.

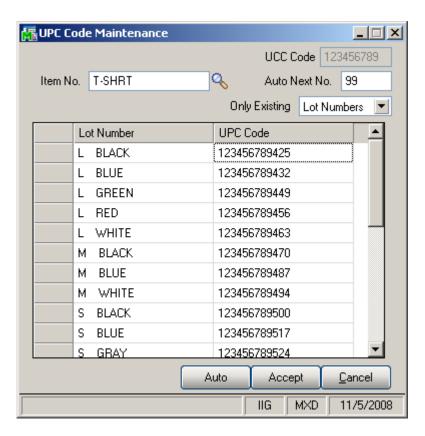
The sum of the **UCC Code** and **Item Reference** lengths is equal to the length of the **UPC Code Type** selected (12, 13, or 14).

In the **Scanning** field, enter the code, which will denote the start of scanning UPC codes, when scanned once.

Check the **UPC Scanning during Receipt** box to enable display of the UPC field for scanning UPC codes of the lots not having one, in the Receipt of Goods Matrix Grid.

UPC Codes

The **UPC Code Maintenance** program under the **Inventory Management Setup** menu allows assigning UPC Codes to the Lot Numbers of the selected item.



Enter the **Item Number**, or select it using the **Lookup** button. Only Matrix Items are listed in the Item List.

UCC Code and Auto Next Number are defaulted to the UPC Options settings.

From the **Only existing** drop-down list, select **Lot Numbers** to display only the existing Lot Numbers. Select **Matrix Codes** to display all the possible Lot Numbers with the Matrix Codes from the **Matrix Code Maintenance**. If the selected item does not have own Matrix Codes, System Matrix Codes will be used.

Click the **Auto** button to assign codes automatically to all the listed Lot Numbers not having UPC Codes yet.

Any valid UPC Code may be entered. If the **Allow Only Selected type** box is not checked in the UPC Options, the length can be 12, 13 or 14 digits. If the entered UPC Code is 13 or 12 digits long, the program adds one or two zeroes correspondingly to the beginning of the Code. The Checking Digit is checked to be valid. If the **Allow Only Selected type** box is checked, the length must match the selected type. If the Use UCC option is set in the UPC Options, you can enter only Item Reference (the length must correspond to the Options). In this case the program will use the UCC Code and calculate the Checking Digit.

All the codes entered will be saved when clicking the **Accept** button.

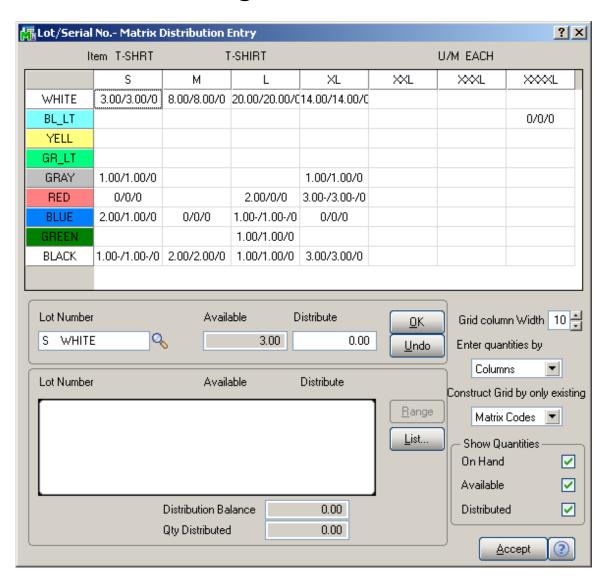
Matrix Distribution

Purchase Order Entry

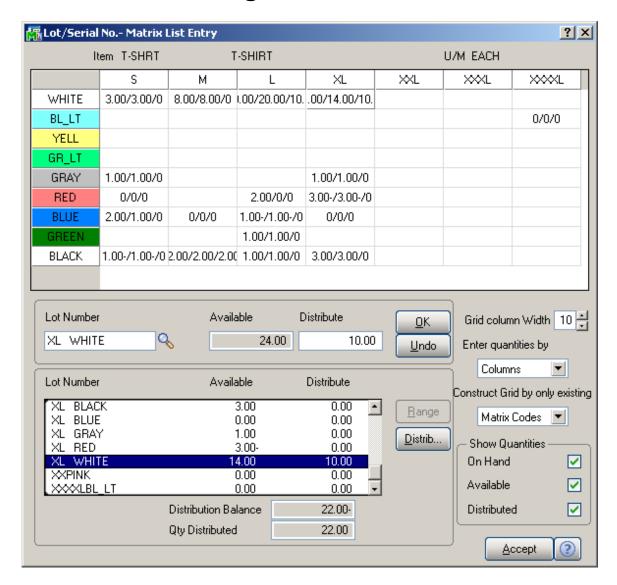
Select the **Purchase Order Entry** program under the **Purchase Order Main** menu.

The Matrix Distribution is allowed for Standard Order Type and Repeating Orders (if corresponding checkbox is selected on the Purchase Order tab of the Matrix Options). For Repeating Orders the distributed quantities are not committed to the corresponding warehouse.

In the **Lines** tab, select a Matrix Item. If the **Purchase Order Entry** box is checked in the **Matrix Distribution in**section of the **Purchase Order** tab on the **Matrix Options**screen, the following **Matrix Distribution Entry** screen is
displayed. For other Lot/Serial items, as well as for Matrix
Items (if the Purchase Order checkbox is selected in the
Matrix options) the standard **Lot/Serial No. Distribution**screen is available.



The grid in the upper part of the screen displays the quantities of the item per Matrix Codes pair, with the **Category 1 Matrix Codes** placed horizontally across the top of the grid and the **Category 2 Matrix Codes** placed vertically. The Codes are highlighted with the corresponding colors. Note that text and background colors of the cells can be set to either of corresponding Category's code colors, in the **Matrix Options** program.



Clicking in a cell in the grid selects the Lot Number corresponding to the selected Matrix Codes pair, both in the **Lot Number** field and the Lot Numbers list.

The following keyboard shortcuts can be used in the **Matrix Distribution** screen:

Alt+G to go to the cell in the grid corresponding to the selected Lot Number. If no Lot Number is selected, focus is set to the first cell of the grid.

Alt+C to set focus to the Lot Number field.

You can navigate between cells in the grid using the Arrow keys. PageUp selects the first, and PageDown the last cell in the current column; Home selects the first, and End the last cell in the current row.

In addition to the fields of the standard screen (in the lower part), there are options for the grid. The values are defaulted to the settings on the **Purchase Order** tab of the **Matrix Options** program, but can be changed for the current receipt.

Enter **Grid column Width**. Each column in the matrix distribution grid will have the entered width.

From the **Enter quantities by** drop-down list, select **Rows** or **Columns**. This option specifies the direction of moving the selection in the Grid when entering quantities. You can choose to enter all the quantities in the first row, then move to the second, and so on (by **Rows**). The selection moves to the left, when accepting the quantity. If you want to enter all the quantities in the first column, then in the second, and so on, select the **Columns** option. In this case, the selection moves down, when accepting the quantity.

From the **Construct Grid by only existing** drop-down list, select **Lot Numbers** to display only the selected item's Matrix Codes for which there already exist Lot Numbers (they are listed on the Lot Numbers List). Select **Matrix Codes** to display all the selected item's Matrix Codes from the **Matrix Code Maintenance**.

If there is no previously entered Lot Number for the item, a message will be displayed instead of the Grid, when the **Lot Numbers** option is selected:

Similar message is displayed, if the **Matrix Codes** option is selected, and no Matrix Codes have been entered for the item.

In the **Show Quantities** section, check the boxes corresponding to the quantities to be displayed in the matrix distribution grid. Quantities **On Hand, Available**, and **Distributed** can be selected. Each cell of the grid will display the selected quantities, separated by slashes.

Note that if the **Distributed Qty** is not selected to be displayed, and only one of the **On Hand** and **Available** quantities are selected, the values of the selected meaning will be considered as entered if you move around the Grid with the Enter key or double-clicking.

If the **Allow only existing Matrix Codes** box is checked in the **Matrix Options** program, then only Lot Numbers containing existing Matrix Codes are allowed to be entered. If the check box is cleared, you can enter Lot Numbers with new Matrix Codes (not entered in the Matrix Code Maintenance). If the Grid is constructed by Matrix Codes, the new Codes will not be displayed.

Note: Click OK to accept the current Quantity in the Distribute field. Clicking directly the Accept button disregards the current state of the selected Lot Number.

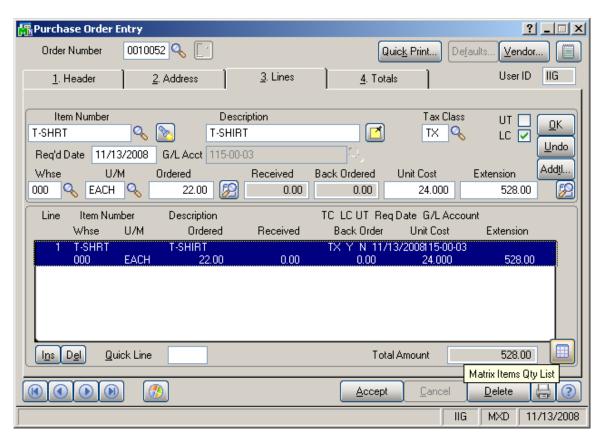
The **Distribution Balance** field displays the difference of **Quantity Ordered** of the Order and **Quantity Distributed** in the Matrix Distribution.

If the Matrix Distribution Auto Popup in P/O Entry box is checked on the Purchase Order tab of the Matrix Options screen, the Quantity Distributed field displays the sum of the quantities of all the distributed Lots. In this case, the Quantity Ordered of the Order is set equal to the Quantity Distributed when closing the Matrix Distribution screen.

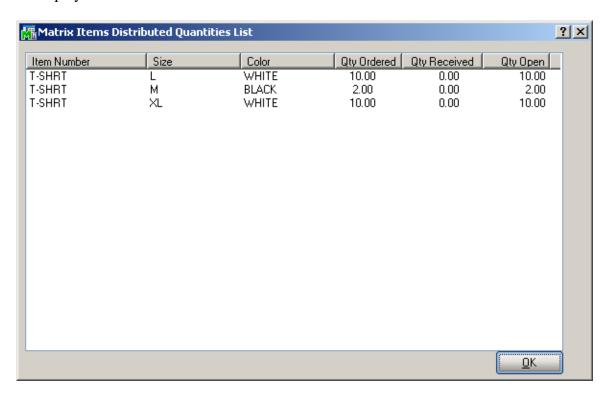
If the Matrix Distribution Auto Popup in P/O Entry box is cleared, the Quantity Distributed field is displayed only when Quantity Ordered is zero.

The **Matrix Distribution** screen is displayed when clicking in the Ordered field, if the quantity is zero. If the **Matrix Distribution Auto Popup in P/O Entry** box is checked in the Options, the screen is also popup for non-zero quantities.

Click the **Matrix Items Qty List** button on the **Lines** tab of the **Purchase Order Entry** screen, to see the list of the distributed Lot Numbers of all Matrix Items of the order.



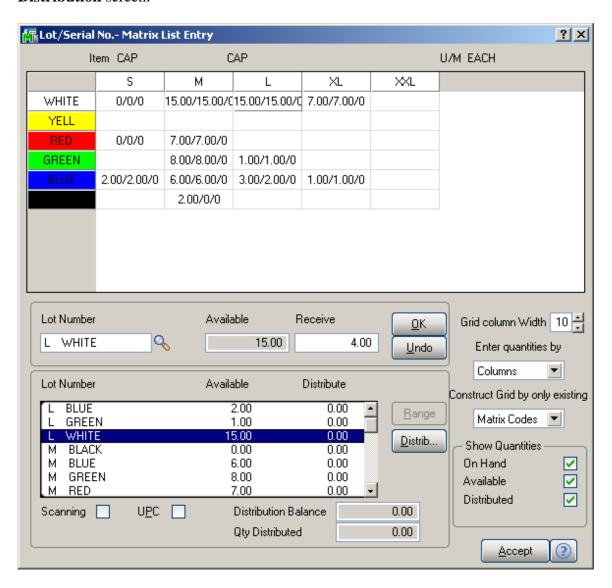
The Matrix Items Distributed Quantities List screen will be displayed.



Receipt of Goods

Select the **Receipt of Goods** program under the **Purchase Order Main** menu.

In the **Lines** tab, select a Matrix Item. If the **Receipt of Goods** box is checked in the **Matrix Distribution in** section of the **Purchase Order** tab on the **Matrix Options** screen, the following **Matrix Distribution Entry** screen is displayed instead of the standard **Lot/Serial No. Distribution** screen.



The **Matrix Distribution** screen is similar to the screen in the **Purchase Order Entry** program.

The grid in the upper part of the screen displays the quantities of the item per Matrix Codes pair, with the

Category 1 Matrix Codes placed horizontally across the top of the grid and the Category 2 Matrix Codes placed vertically. The Codes are highlighted with the corresponding colors. Note that text and background colors of the cells can be set to correspond to either of Category's code colors, in the Matrix Options program.

Clicking in a cell in the grid selects the Lot Number corresponding to the selected Matrix Codes pair, both in the **Lot Number** field and the Lot Numbers list.

Note: Click OK to accept the current Quantity in the Distribute field. Clicking directly the Accept button disregards the current state of the selected Lot Number.

Note that if the **Distributed Qty** is not selected to be displayed, and only one of the **On Hand** or **Available** quantities are selected, the values of the selected meaning will be considered as entered if you move around the Grid with the Enter key or double-clicking.

If the Receipt of Goods is one-step (not based on a Purchase Order), or the line is newly added, the **Quantities Ordered** and **Received** are set equal to the **Quantity Distributed** in the **Matrix Distribution** screen.

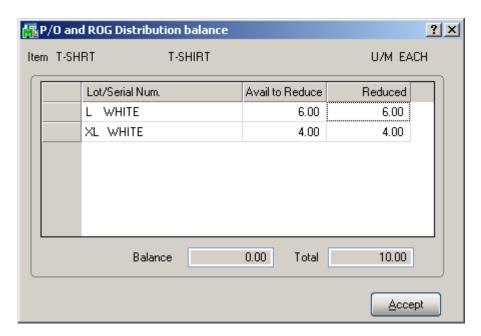
The **Quantity Distributed** field is displayed only when **Quantity Received** is zero.

The **Quantity On PO** field displays the distributed quantities on Purchase Order.

If the Receipt of Goods is based on a Purchase Order, the Quantity Received cannot exceed the Ordered Quantity, if the Allow Qty Received/Invoiced to Exceed Quantity Ordered box is not checked on the Additional tab of the Purchase Order Options program under the Purchase Order Setup menu.

If the distribution of the Order is changed in the Receipt, (the **Distribution Balance** can be zero even if the distribution is changed), when accepting the distribution, the **P/O and ROG Distribution Balance** screen is displayed with the list of **Lot Numbers**, and the Quantities **Available to Reduce** from them. Enter the Quantities **Reduced** and click **Accept**. The **Total** field displays the

total of reduced quantities, and the **Balance** field displays the balance between reduced and changed quantities.



The **Scanning** check box determines that the Lot Number field is being used for scanning UPC Codes. The corresponding Lot Number will be selected in the list and in the Grid. If the check box is cleared, the entered number will be regarded as regular Lot Number.

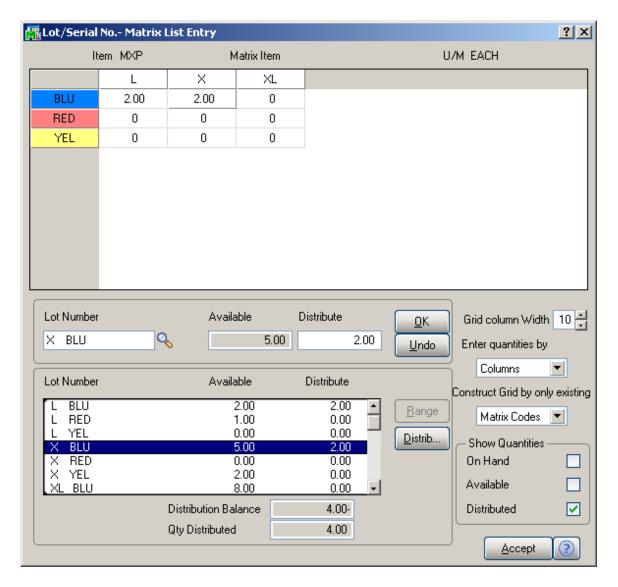
The **Scanning** sequence (++UPC++ by default) specified in the **UPC Options** program can be typed in the **Lot Number** field, or scanned with bar code scanner to switch the UPC Code Scanning mode.

The **UPC** box enables displaying the **UPC Code** field when a **Lot Number** not having **UPC Code** is entered, to enable entering the UPC Code for the entered Lot Number.

Return of Goods Entry

Select the **Return of Goods** program under the **Mat. Req/Return** menu.

In the **Lines** tab, select a Matrix Item. If the **Return of Goods** box is checked in the **Matrix Distribution in**section of the **Purchase Order** tab on the **Matrix Options**screen, the following **Matrix Distribution Entry** screen is
displayed instead of the standard **Lot/Serial No. Distribution** screen.



The **Matrix Distribution** screen is similar to the screen in the **Purchase Order Entry** program.

If the **Return Of Goods** is generated through the **RMA Generate Transactions** program the distribution is transferred from the RMA Receipt Entry with the **Quantity Returned** set equal to the **Quantity Distributed**.

Note: If the Summarize Multiple Items checkbox is selected on the Generate Transactions screen the Matrix Item distribution will not be transferred to the generated Return of Goods from the RMA Receipts Entry.

When running the **Return Order Register/Update** program checking is performed by **Qty On Hand** and error log is printed to prevent the user from updating the journal if the total **Qty Returned** for some lot number by Warehouse exceeds the **Qty On Hand** for it.

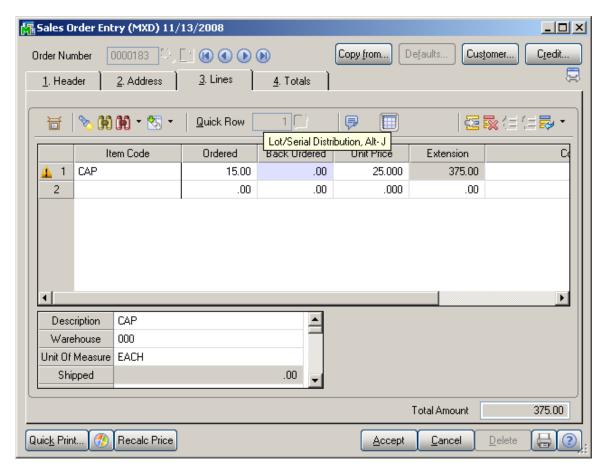
Sales Order Entry

Select the **Sales Order Entry** program under the **Sales Order Main** menu.

The **Matrix Distribution** is allowed only for **Standard**, **Back Orders** and **Quotes** if the **Price Quote** checkbox is selected in the **Matrix Options**.

Note: The **Matrix Processing** enhancement doesn't support selling a specific size and color on a **Drop Ship** lines of a sales order.

On the **Lines** tab enter a matrix item.

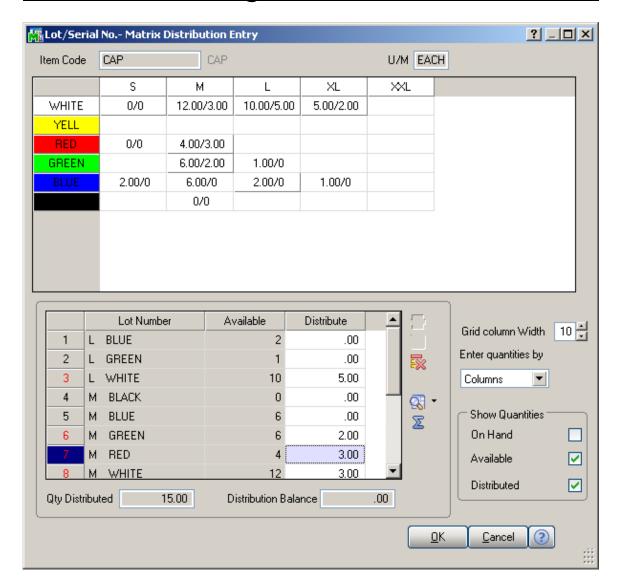


The quantity should be distributed in the **Matrix Distribution** screen, which is similar to the screen in the **Receipt of Goods** program.

Click the **Lot/Serial Distribution** button for the line with matrix item to open the **Matrix Distribution** screen.

The **Matrix Distribution** screen is displayed when clicking in the **Ordered** field, if the quantity is zero. If the **Matrix Distribution Auto Popup in S/O Entry** box is checked in the Options, the screen is also popup for non-zero quantities.

If a UPC Code is scanned, when the focus is in the **Lot Number** field, the program checks if the code is assigned to any Lot Number of the selected item, and substitutes this corresponding Lot Number.



The **Distribution Balance** field displays the difference of **Quantity Ordered** of the Order and **Quantity Distributed** in the Matrix Distribution.

If the **Distribution Balance** is positive, it is displayed in the **Distribute** field when a **Lot Number** is selected either in the Grid or from the Lookup list. Distribution of the Quantity exceeding the Available is also allowed.

Note: Click OK to accept the current Quantity in the Distribute field. Clicking directly the Accept button disregards the current state of the selected Lot Number.

Note that if the **Distributed Qty** is not selected to display, and only one of the **On Hand** and **Available** quantities are selected, the quantity values of the selected lots will be considered as entered if you move around the Grid with the Enter key or double-clicking.

If the Matrix Distribution Auto Popup in S/O Entry box is checked on the Sales Order tab of the Matrix Options screen, the Quantity Distributed field displays the sum of the quantities of all the distributed Lots. In this case, the Quantity Ordered of the Order is set equal to the Quantity Distributed when closing the Matrix Distribution screen.

If the Matrix Distribution Auto Popup in S/O Entry box is cleared, the Quantity Distributed field is not displayed.

If the Matrix Distribution in Price Quote box is checked in the Matrix Options, the distribution for Matrix items is also available for Price Quote Sales Orders.

Matrix distribution entered for the **Price Quote** is preserved when converting to **Standard Order**.

S/O Invoice Data Entry

Select the **Invoice Data Entry** program under the **Sales Order Main** menu.

In the **Lines** tab, select a Matrix Item. Enter the **Quantities**, and click **OK**. If the **Invoice Data Entry** box is checked in the **Matrix Distribution in** section of the **Sales Order** tab on the **Matrix Options** screen, the following **Matrix Distribution Entry** screen is displayed instead of the standard **Lot/Serial No. Distribution** screen.

The **Matrix Distribution** screen is similar to the screen in the **Sales Order Entry** program.

The grid in the upper part of the screen displays the quantities of the item per Matrix Codes pair, with the **Category 1 Matrix Codes** placed horizontally across the top of the grid and the **Category 2 Matrix Codes** placed vertically. The Codes are highlighted with the corresponding colors. Note that text and background colors of the cells can be set to correspond to either of Category's code colors, in the **Matrix Options** program.

Clicking in a cell in the grid selects the Lot Number corresponding to the selected Matrix Codes pair, both in the **Lot Number** field and the Lot Numbers list.

The following keyboard shortcuts can be used in the **Matrix Distribution** screen:

Alt+G to go to the cell in the grid, corresponding to the selected Lot Number. If no Lot Number is selected, focus is set to the first cell of the grid.

Alt+C to set focus to the Lot Number field.

You can navigate between cells in the grid using the Arrow keys. PageUp selects the first, and PageDown the last cell in the current column; Home selects the first, and End the last cell in the current row.

In addition to the fields of the standard screen (in the lower part), there are options for the grid. The values are defaulted to the settings on the **Sales Order** tab of the **Matrix Options** program, but can be changed for the current invoice.

From the **Enter quantities by** drop-down list, select **Rows** or **Columns**. This option specifies the direction of moving the selection in the Grid when entering quantities. You can choose to enter all the quantities in the first row, then move to the second, and so on (by **Rows**). The selection moves to the left, when accepting the quantity. If you want to enter all the quantities in the first column, then in the second, and so on, select the **Columns** option. In this case, the selection moves down, when accepting the quantity.

Enter **Grid column Width**. Each column in the matrix distribution grid will have the entered width.

In the **Show Quantities** section, check the boxes corresponding to the quantities to be displayed in the matrix distribution grid. Quantities **On Hand, Available**, and **Distributed** can be selected. Each cell of the grid will display the selected quantities, separated by slashes.

If a UPC Code is scanned (entered), when the focus is in the **Lot Number** field, the program checks if the code is assigned to any Lot Number of the selected item, and substitutes this corresponding Lot Number.

If the **Distribution Balance** is positive, it is displayed in the **Distribute** field when a **Lot Number** is selected either in the Grid or from the Lookup list. Distributed Quantity can exceed the Available.

Note: Click OK to accept the current Quantity in the Distribute field. Clicking directly the Accept button disregards the current state of the selected Lot Number.

Note that if the **Distributed Qty** is not selected to display, and only one of the **On Hand** and **Available** quantities are selected, the values of the selected meaning will be considered as entered if you move around the Grid with the Enter key or double-clicking.

If the Invoice is created based on a Sales Order, a message appears on the Lines tab asking whether all the items ordered on the sales order or only the distributed quantities will be shipped.



Shipping the distributed order means that Matrix items will be shipped in quantity equal to the quantity distributed in the sales order.

The distribution cannot be accepted with negative Balance. The Invoice cannot be accepted with not fully distributed lines.

If Invoice is created for a Sales Order, with either **Invoice Data Entry** or **Auto Generate Invoice Selection** program, the distribution of the order is transferred to the invoice.

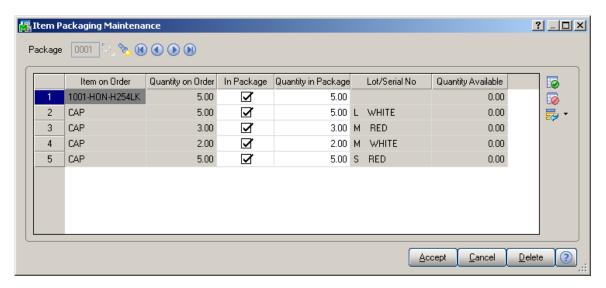
If the entire quantity distributed in the Sales Order is not shipped, and the distribution of the Order is changed in the Invoice so that to back order the quantities from the same Matrix/Lots; the Sales Order distribution is preserved in the back order generated after Sales Journal update.

Shipping Data Entry

The Matrix Distribution screen for the **Shipping Data Entry** program under the **Sales Order Shipping** menu is the same as in the **Invoice Data Entry** program.

If a UPC Code is scanned (entered), when the focus is in the **Lot Number** field, the program checks if the code is assigned to any Lot Number of the selected item, and substitutes this corresponding Lot Number.

In the **Item Packaging Maintenance** the Matrix Items can be added to the package(s) by the distributed Lot/Serial No quantities.



Inventory Transaction Entry

Select the **Transaction Entry** program under the **Inventory Management Main** menu.

The Matrix Distribution screen is the same for **Sales**, **Transfers**, and **Receipts** transaction Types.

In the **Lines** tab, select a Matrix Item. If the **Inventory Transaction Entry** box is checked in the **Matrix Distribution in** section of the **Inventory** tab on the **Matrix Options** screen, the following **Matrix Distribution Entry**screen is displayed instead of the standard **Lot/Serial No. Distribution** screen.

The **Matrix Distribution** screen is similar to the screen in the **Sales Order Entry** program.

The grid in the upper part of the screen displays the quantities of the item per Matrix Codes pair, with the **Category 1 Matrix Codes** placed horizontally across the top of the grid and the **Category 2 Matrix Codes** placed vertically. The Codes are highlighted with the corresponding colors. Note that text and background colors of the cells can be set to correspond to either of Category's code colors, in the **Matrix Options** program.

Clicking in a cell in the grid selects the Lot Number corresponding to the selected Matrix Codes pair, both in the **Lot Number** field and the Lot Numbers list.

The following keyboard shortcuts can be used in the **Matrix Distribution** screen:

Alt+G to go to the cell in the grid, corresponding to the selected Lot Number. If no Lot Number is selected, focus is set to the first cell of the grid.

Alt+C to set focus to the Lot Number field.

You can navigate between cells in the grid using the Arrow keys. PageUp selects the first, and PageDown the last cell in the current column; Home selects the first, and End the last cell in the current row.

In addition to the fields of the standard screen (in the lower part), there are options for the grid. The values are defaulted to the settings on the **Sales Order** tab of the **Matrix Options** program, but can be changed for the current invoice.

From the **Enter quantities by** drop-down list, select **Rows** or **Columns**. This option specifies the direction of moving the selection in the Grid when entering quantities. You can choose to enter all the quantities in the first row, then move to the second, and so on (by **Rows**). The selection moves to the left, when accepting the quantity. If you want to enter all the quantities in the first column, then in the second, and so on, select the **Columns** option. In this case, the selection moves down, when accepting the quantity.

Enter **Grid column Width**. Each column in the matrix distribution grid will have the entered width.

In the **Show Quantities** section, check the boxes corresponding to the quantities to be displayed in the matrix distribution grid. Quantities **On Hand**, **Available**, and **Distributed** can be selected. Each cell of the grid will display the selected quantities, separated by slashes.

Note: Click OK to accept the current Quantity in the Distribute field. Clicking directly the Accept button disregards the current state of the selected Lot Number.

Note that if the **Distributed Qty** is not selected to be displayed, and only one of the **On Hand** and **Available** quantities are selected, the values of the selected meaning will be considered as entered if you move around the Grid with the Enter key or double-clicking.

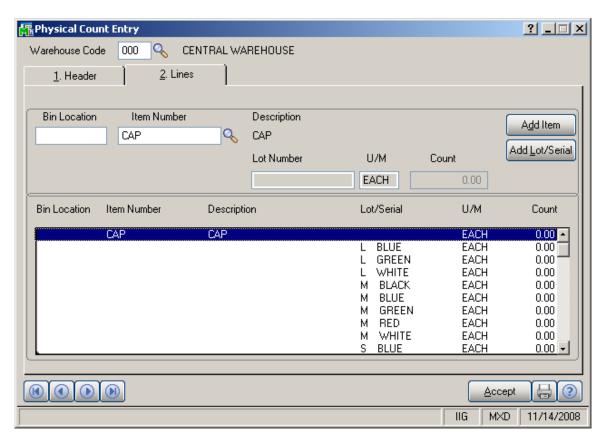
The **Matrix Distribution** screen is displayed when clicking in the Ordered field, if the quantity is zero.

The **Distribution Balance** field displays the difference of **Quantity Ordered** of the Transaction and **Quantity Distributed** in the Matrix Distribution.

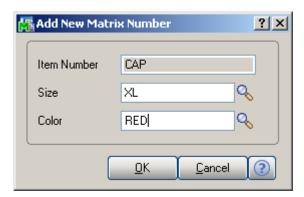
If the **Distribution Balance** is positive, it is displayed in the **Distribute** field when a **Lot Number** is selected either in the Grid or from the Lookup list. Distribution of the Quantity exceeding the Available is also allowed.

Physical Count Entry

Select the **Physical Count Entry** program under the **Inventory Management Physical** menu.



In the **Lines** tab, when adding a Matrix Item, clicking the **Add Lot/Serial** button displays the following screen instead of the standard:



Enter Codes of the first and second Categories, which descriptions are displayed. You can enter new Matrix Codes, or enter or select from the lookup the existing Matrix Codes.

RMA Data and RMA Receipts Entry

In the RMA Data Entry and RMA Receipts Entry programs under the Return Merchandise Authorization Main menu, if the selected item in the Lines tab is a Matrix Item, the Matrix Distribution screen will be displayed for the line, instead of the standard Lot/Serial Distribution screen.

The Matrix Distribution screen for the **RMA Entry** programs is the same as in the **Invoice Data Entry** program.

The **Available** Quantities are the quantities available for Return for the selected Customer.

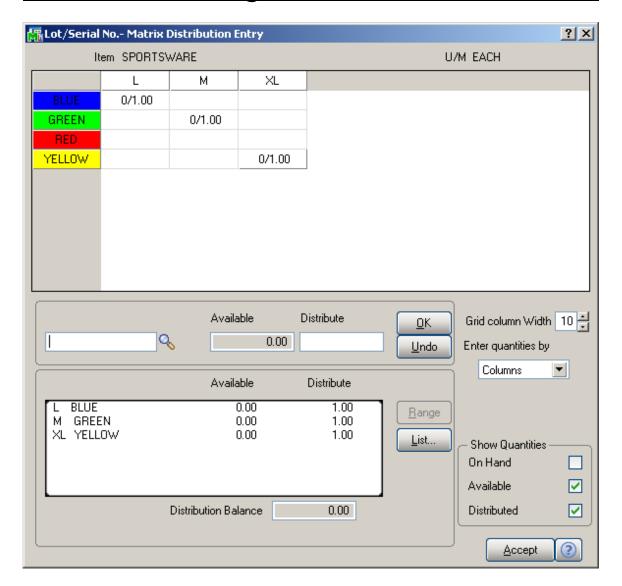
Production Entry

Select the **Production Entry** program under the **Bill of Materials Main** menu.



To distribute to **Lot Numbers** for Matrix Bill, click the **Matrix** button to open the **Matrix Distribution** screen. This button is not available for non-matrix items.

Check the **Auto Distribute Lines** box to use the Header Bill Matrix distribution for the distribution of the Lines Matrix items. The **Auto Distribute Lines** check box is available only if the **Auto Distribute Lines** is selected in the **Matrix Options**. The Auto Distribution will be done only when entering new **Production Entry**, to the maximum quantity available for distribution in the Lines Matrix items.



If a component in the **Lines** tab is a Matrix Item, the **Matrix Distribution** screen will be displayed for the line, instead of the standard Lot/Serial Distribution screen.

The Matrix Distribution screen for the **Production Entry** program is the same as in the **Invoice Data Entry** program.

Disassembly Entry

Select the **Disassembly Entry** program under the **Bill of Materials Main** menu.

If the Bill to be disassembled or a component is a Matrix Item, the **Matrix Distribution** screen will be displayed for the item, instead of the standard Lot/Serial Distribution screen.

The Matrix Distribution screen for the **Disassembly Entry** program is the same as in the **Invoice Data Entry** program.

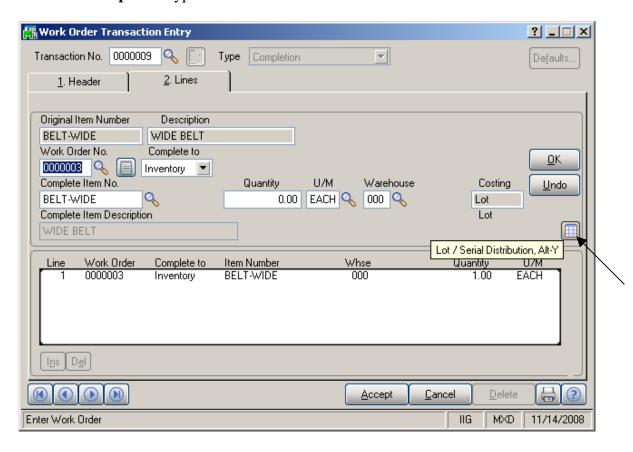
Work Order Transaction Entry

Select the **Work Order Transaction Entry** program under the **Work Order Main** menu.

Select the **Material Issue** type of the transaction.

If the selected item in the **Lines** tab is a Matrix Item, the **Matrix Distribution** screen will be displayed for the line, instead of the standard Lot/Serial Distribution screen. The **Matrix Distribution** screen for the **Work Order Transaction Entry** program is the same as in the **Invoice Data Entry** program.

Select the **Completion** type of the transaction.

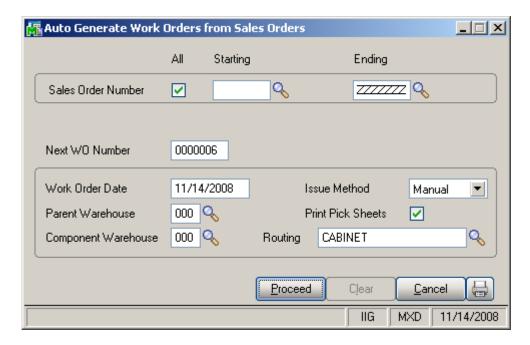


Click the newly added **Lot/Serial Distribution** button to open the **Lot/Serial Distribution** or **Matrix Distribution** screen (same as for the **Production Entry** program), for Lot and Matrix items, correspondingly. This button is not available for Serial, only for Lot and Matrix Items.

Work Order generation from Sales Orders

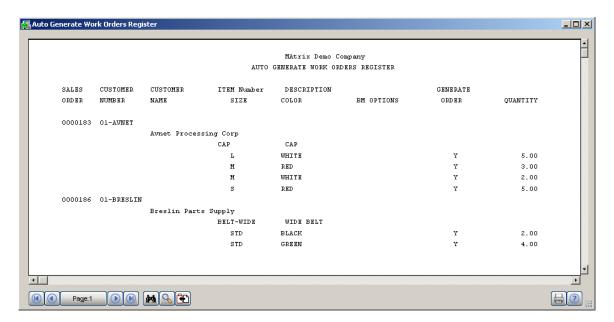
Auto Generate Work Orders from Sales Orders

The **Auto Generate Work Orders from S/O** program has been added under the **Work Order Main** menu.



Select range of the **Sales Order Numbers**, for which you want to generate Work Orders.

Work Orders are generated only for not Assigned Orders.



You can change the settings for the Work Orders to be generated.

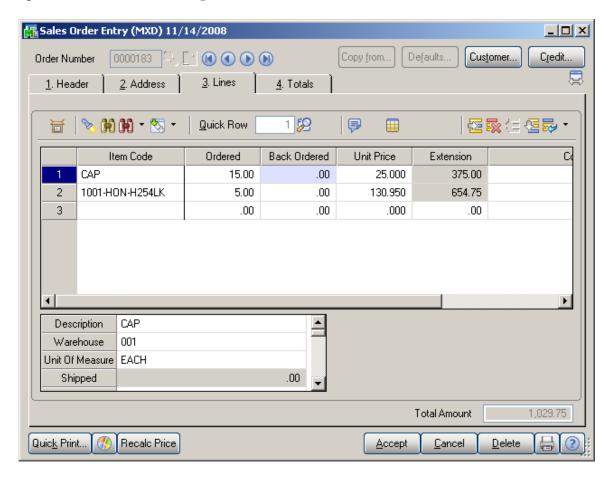
The **Routing** comes from the **Matrix Options**, and can be changed here.

The other settings come from the **Default Values for Work Order Entry**.

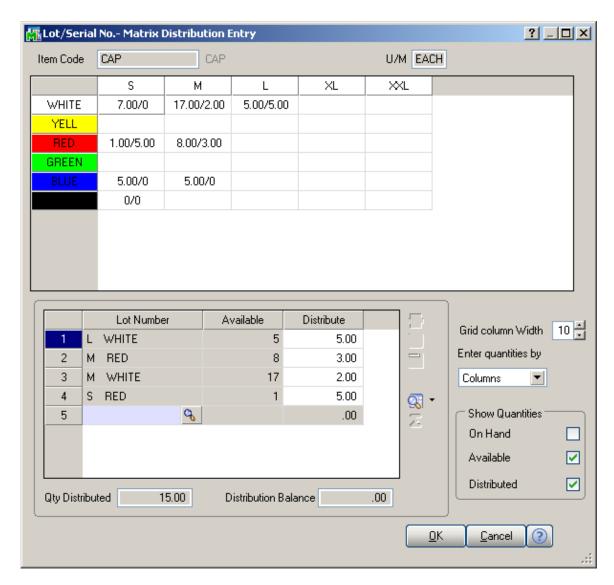
Based on the **Summarize by Item and Lot Numbers** option set in the **Matrix Options**, the program will generate separate work orders per Item – Lot Number pair, or summarize different Lot Numbers of the same Item into the same work order. Sales orders are always summarized, that is one work order is generated for the same Item or Item – Lot Number pair, from multiple sales order.

Generated Work Orders

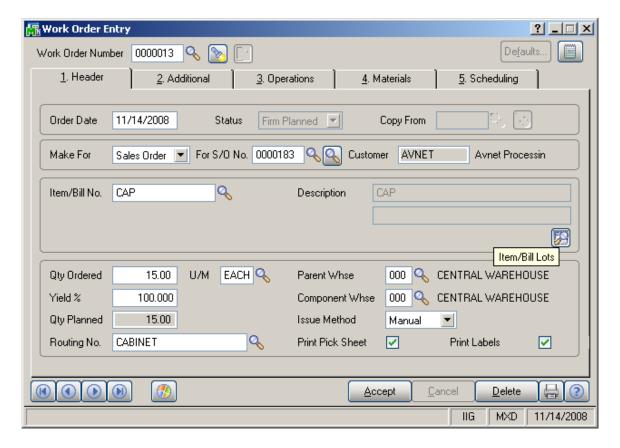
Here is an example of sales order and generated work order, with the **Summarize by Item and Lot Numbers** option selected in **Matrix Options**.



Here is the Matrix Distribution of the selected line item:

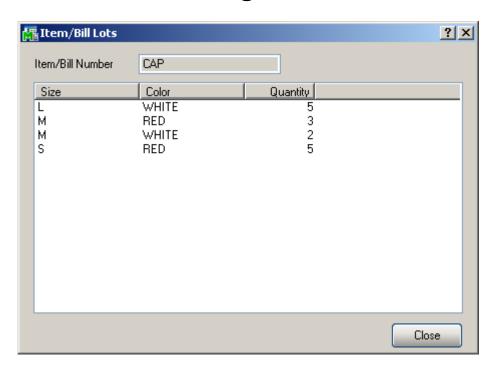


The generated Work Order is set to the **Make For Sales Order** and the originating **S/O Number** is stored.

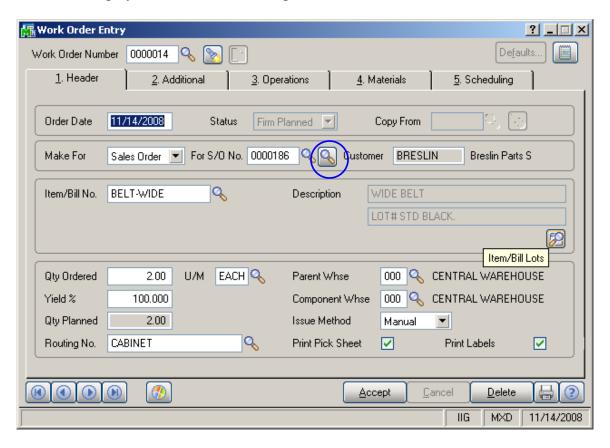


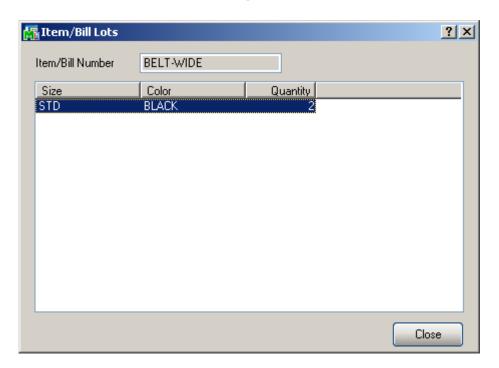
If the **Summarize by Item and Lot Numbers** option has been checked in the **Matrix Options**, the list of the Lot Numbers with the distributed quantities of the generated Sales Order is stored on the generated Work Order, and can be viewed by clicking the **Item/Bill Lots** button.

The Item/Bill Lots list is informational only, and does not taken into account in the further processing of Work Orders.



For Work Orders generated with the **Summarize by Item** and Lot **Numbers** option not selected, the only Lot Number is displayed in the second Description line.

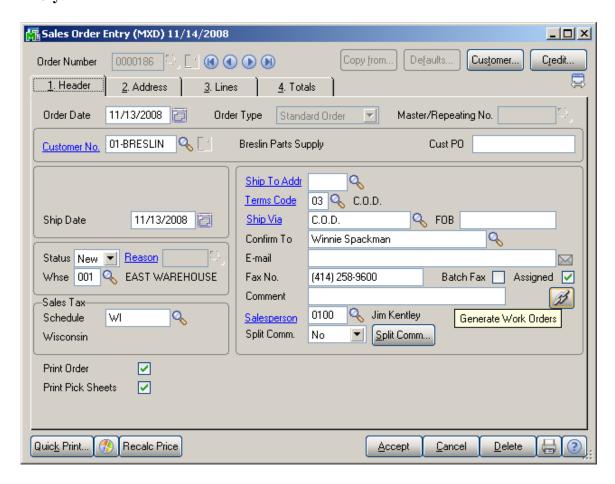




The second lookup has been added for the **S/O Number** on the **Work Order Entry** screen, to list only Unassigned Orders.

Sales Order Assignment

The **Assigned** check box and **Generate Work Orders** button have been added to the **Header** tab of **Sales Order Entry**.



You can generate Work Orders for the currently selected order directly from this screen, clicking the **Generate Work Orders** button.

Once Work Orders are generated for a Sales Order, the **Assigned** box is automatically checked on that Sales Order. You can clear the box to generate new work orders for the same sales order (if the generated ones got deleted by mistake, for example).

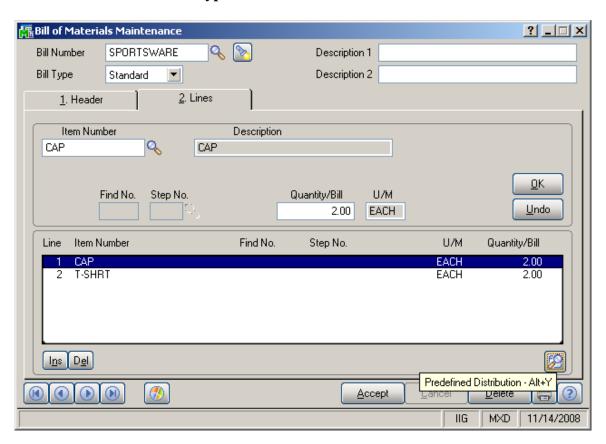
You can check the **Assigned** box for a Sales Order, to exclude it from automatic Work Order generation.

Work Orders are generated with the generation program only for not Assigned Orders.

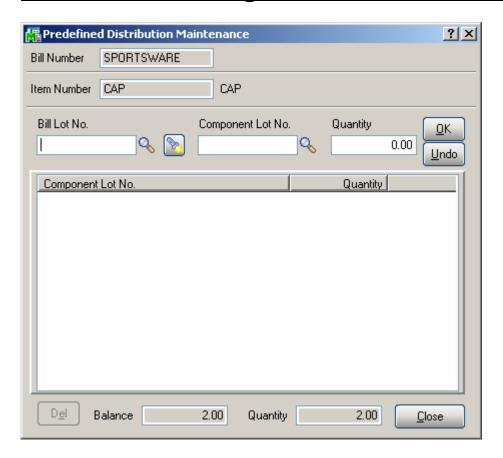
Predefined Distribution in Bills

Bill of Materials Maintenance

The **Predefined Distribution** button has been added to the **Lines** tab of the **Bill of Materials Maintenance**. It is only available for Matrix Component lines of Matrix Bill items of **Standard Bill Type**.



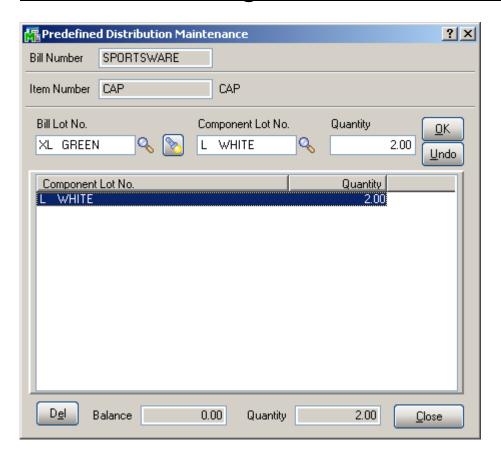
Clicking the **Predefined Distribution** button opens the **Predefined Distribution Maintenance** screen for the selected component.



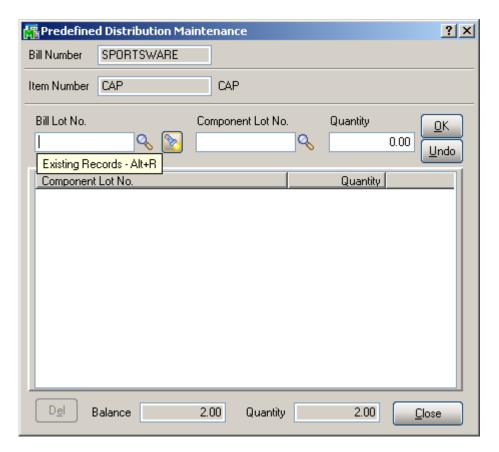
Select a **Bill Lot No.**, and distribute the **Quantity** displayed at the bottom of the screen to the **Component Lot Numbers**.

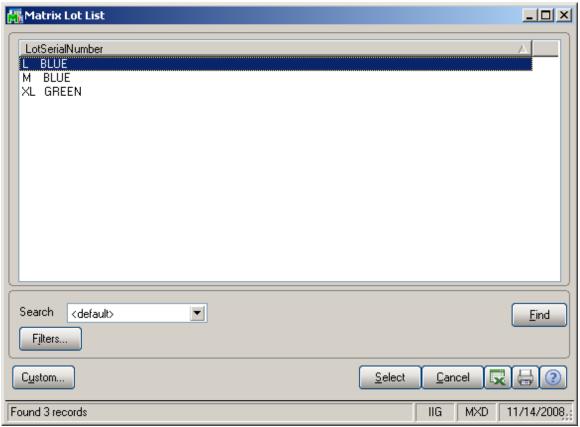
Distribution for the currently selected **Bill Lot Number** is displayed in the list.

It is recommended to make complete distribution for each selected **Bill Lot Number** (that is, so that **Balance** at the bottom of the screen is zero), to use the **Predefined Distribution** feature effectively.



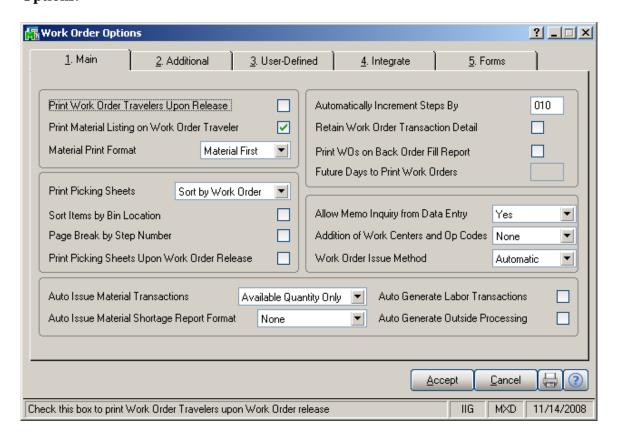
While the first lookup of the **Bill Lot No.** lists all the Lot Numbers of the Bill Item, the second displays only already entered (distributed) Lots.



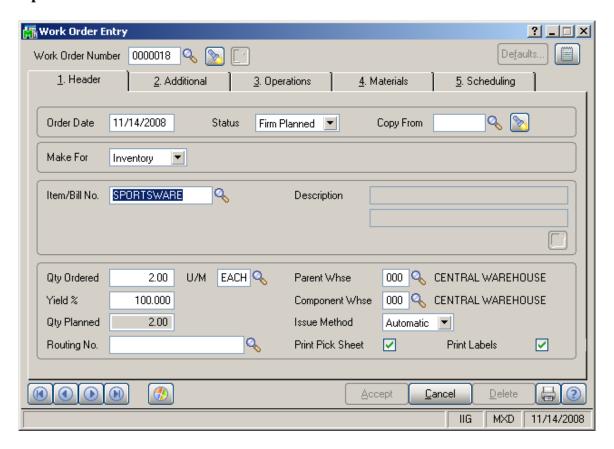


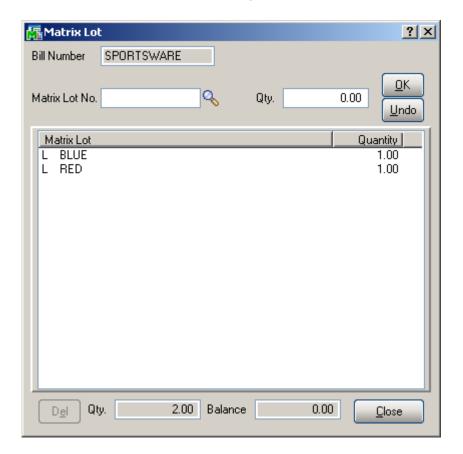
Work Order and Auto Issue

Make sure the Work Order Issue Method is set to Automatic and the Auto Issue Method Transactions to Yes or to Available Quantity Only, in the Work Order Options.



If a Matrix Bill Item is entered in a new Work Order, the **Matrix Lot** screen is displayed when going to the **Operations** tab.





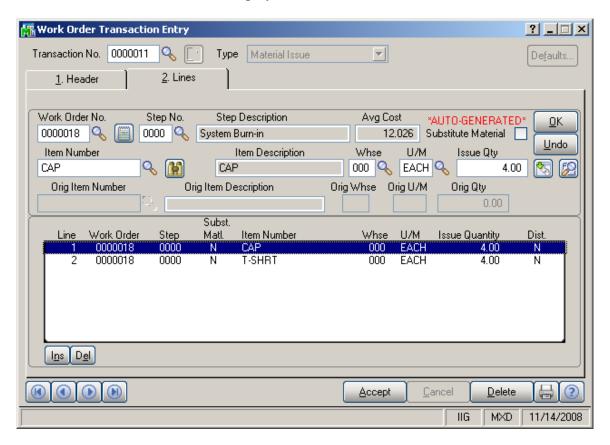
Distribute the **Quantity Ordered** by selecting **Matrix Lot Numbers** and entering appropriate **Quantities**.

If the **Lot Number** of the Bill Item has **Predefined Distribution**, the program will try to use it when generating **Material Issue Transaction** during **Work Order Transaction Journal** update of the corresponding Release Transaction.



Here is the generated **Material Issue Transaction**.

The *AUTO-GENERATED* text is displayed on the **Lines** tab.



The Matrix Components are distributed automatically using the **Predefined Distribution** for the **Lot Numbers**, to which the Bill Item has been distributed in the Work Order.

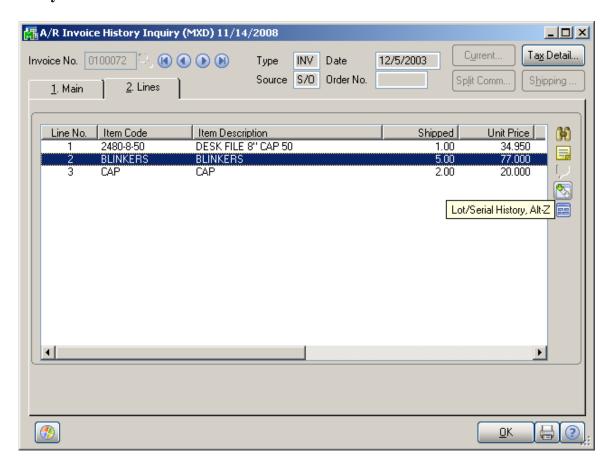
The components distribution cannot be done or will be done partially because of one of the following reasons:

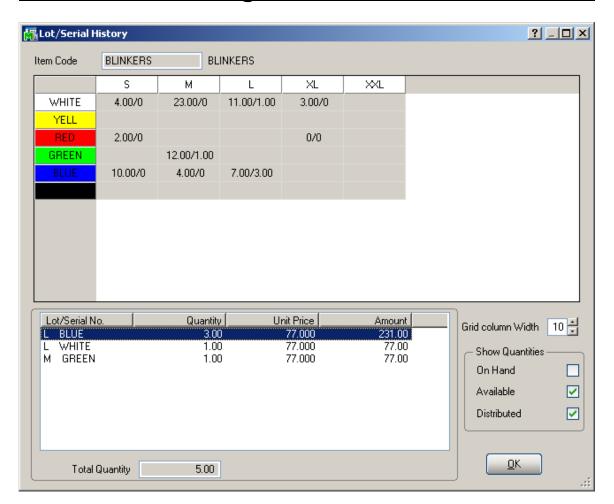
- Insufficient Available Quantity for one of the component's Lots.
- Incomplete distribution for one of the Bill's Lots specified in the **Predefined Distribution** Maintenance (non-zero Balance).
- No Predefined Distribution specified for one of the Bill's Lots.
- Incomplete distribution of Bill Item on Work Order (non-zero **Balance** in the **Matrix Lot** screen).

Inquiries

Invoice History Inquiry

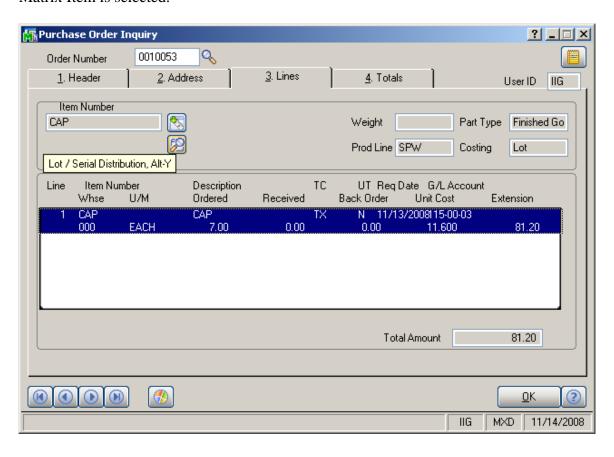
The **Lot/Serial History** button has been added to the **Lines** tab of **Invoice History Inquiry**, to display the list of the Matrix Lot Numbers as displayed in the **Sales Order Entry**.

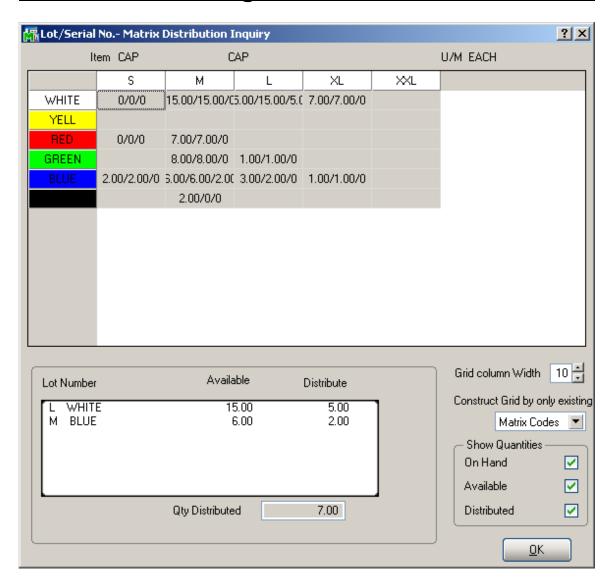




Purchase Order Inquiry

The **Lot/Serial Distribution** button on the **Lines** tab of the **Purchase Order Inquiry** screen displays the **Matrix Distribution Grid** for reviewing (display-only), when Matrix Item is selected.



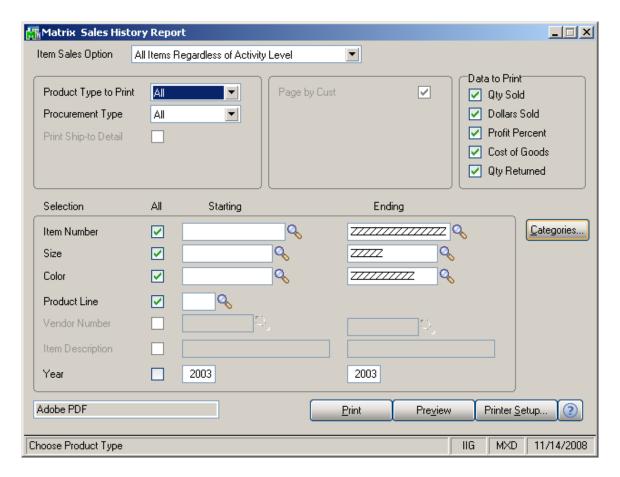


Printings

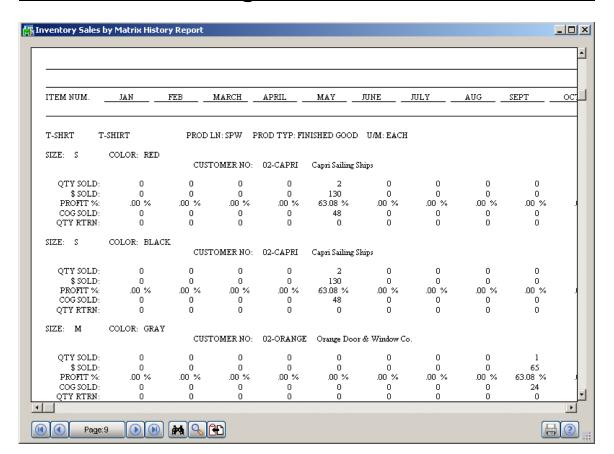
Matrix Sales History Report

Select the Matrix Sales History Report program under the Inventory Management Reports menu.

The report has been added to print Sales History for Matrix Items.



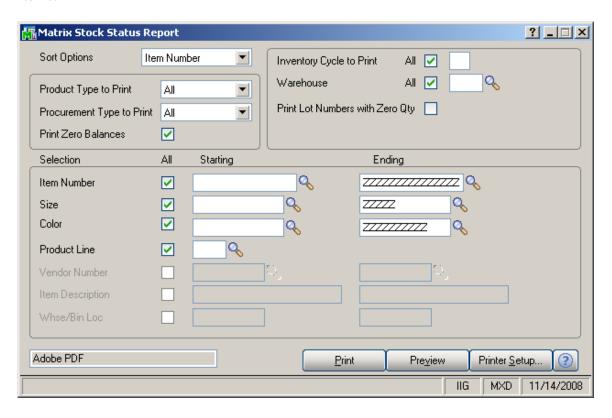
The selections are similar to the **Inventory Sales History Report**. In addition, Matrix Items can be filtered by two **Categories** specified in the **Matrix Options** program (**Size** and **Color**).



Matrix Stock Status Report

Select the Matrix Stock Status Report program under the Inventory Management Reports menu.

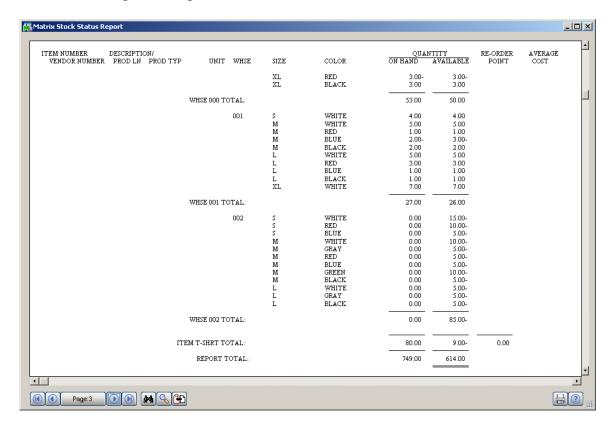
The report has been added to print Stock Status for Matrix Items.



The selections are similar to the **Inventory Stock Status Report**. In addition, Matrix Items can be filtered by two **Categories** specified in the **Matrix Options** program (**Size** and **Color**).

Only existing Lot Numbers will be printed in the report. Checking the **Print Lot Numbers with Zero Qty** box allows printing Lot Numbers with no quantity available.

Here is an example of the printout:

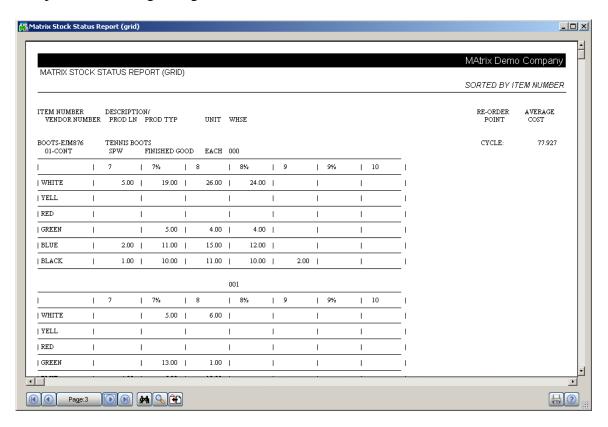


Matrix Stock Status Report (with grid)

Select the Matrix Stock Status Report (grid) program under the Inventory Management Reports menu.

The settings and selections are the same as in the **Matrix Stock Status Report** program.

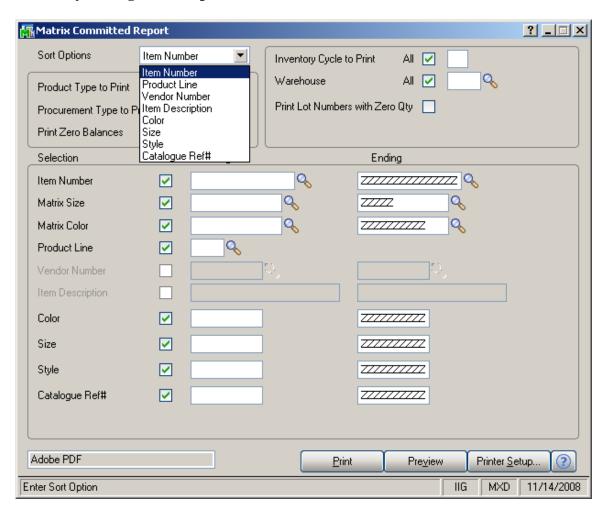
The printout is arranged in grid form:



The grid will be printed even if there is no quantity in the warehouse (empty grid).

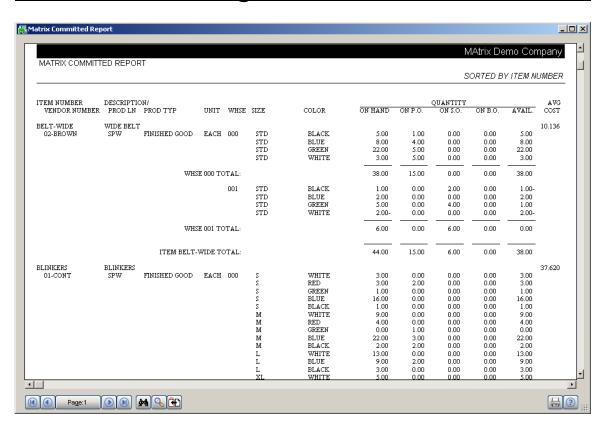
Matrix Committed Report

Select the **Matrix Committed Report** program under the **Inventory Management Reports** menu.



The report has been added to print Quantities on Sales Orders and Quantities on Purchase Orders for Matrix Items.

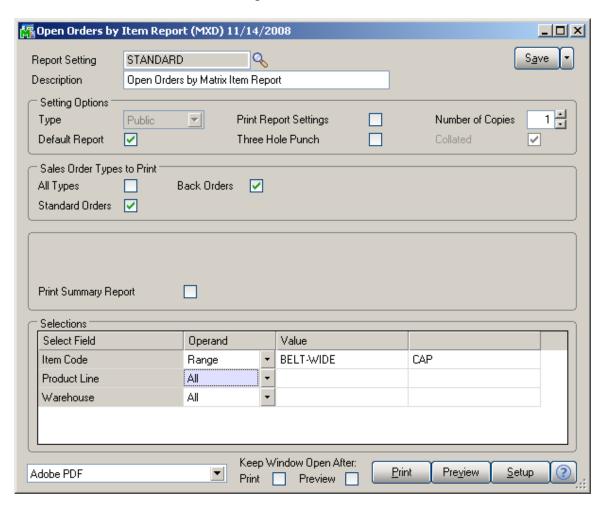
Here is an example of the printout:



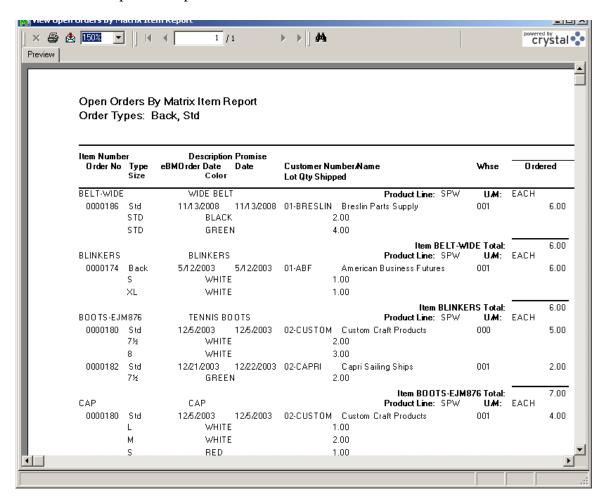
Open Orders by Matrix Item Report

Select the **Open Orders by Matrix Item Report** program under the **Sales Order Reports** menu.

The report has been added to print information of open Sales Orders with Matrix Items' Lot quantities.



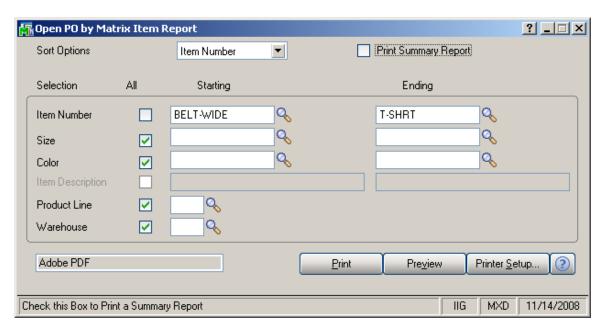
Here is an example of the printout:



Open PO by Matrix Item Report

Select the **Open PO by Matrix Item Report** program under the **Purchase Order Reports** menu.

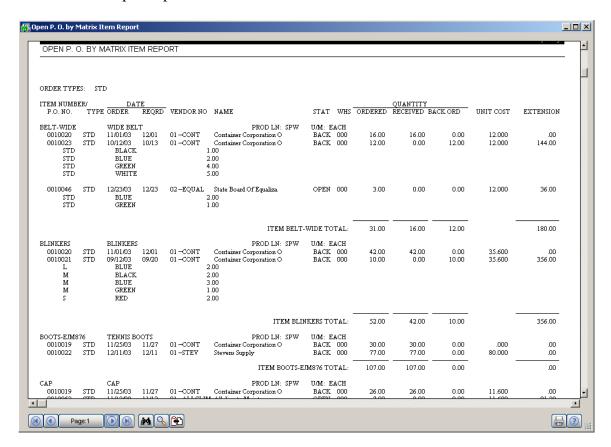
The report has been added to print information of open Purchase Orders with Matrix Items' Lot quantities.



The information to be printed can be also selected by Matrix Categories (usually Size and Color).

You can set to **Print Summary Report**, to not print separate orders but only summarized information.

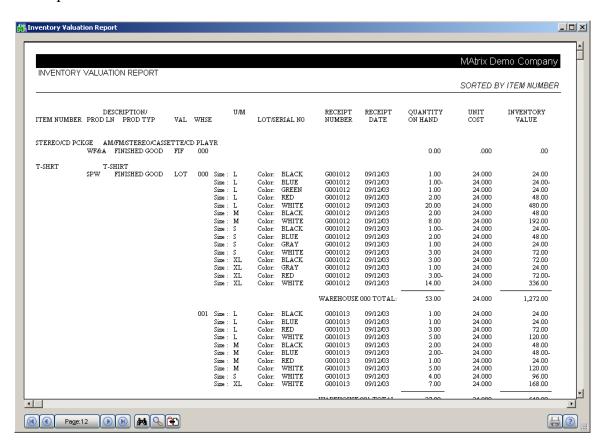
Here is an example of printout:



Inventory Valuation Report

Select the **Inventory Valuation Report** program under the **Inventory Management Reports** menu.

The report has been modified to display Lot Numbers for Matrix Items as a pair of Matrix Codes with their Category Descriptions.

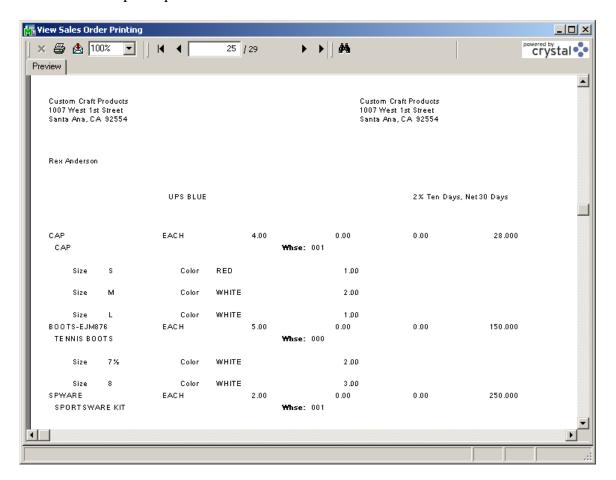


Other Printing Forms

Preprinted Lazer

The **Preprinted** form of graphical printing in **Sales Order**, **S/O Invoice**, **Picking Sheet**, and **Purchase Order** have been modified to display Lot Numbers for Matrix Items as a pair of Matrix Codes with their Category Descriptions.

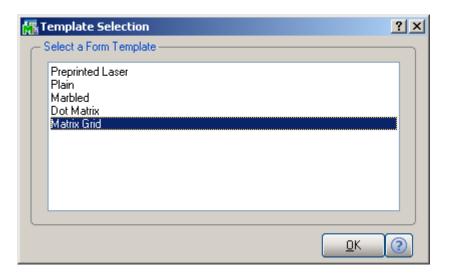
Here is an example of printout:



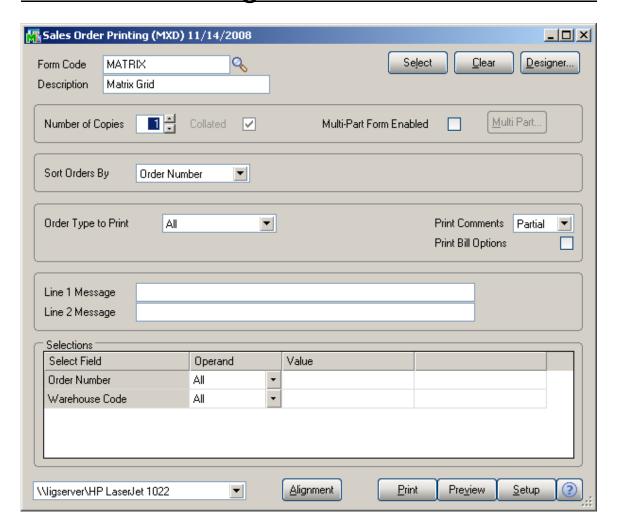
The numbers of Matrix Codes in the Line Temporary Work files are 50 for the Matrix form in the graphical printings of the Sales Order, Picking Sheet, Sales Order Invoice and Purchase Order.

Matrix Grid

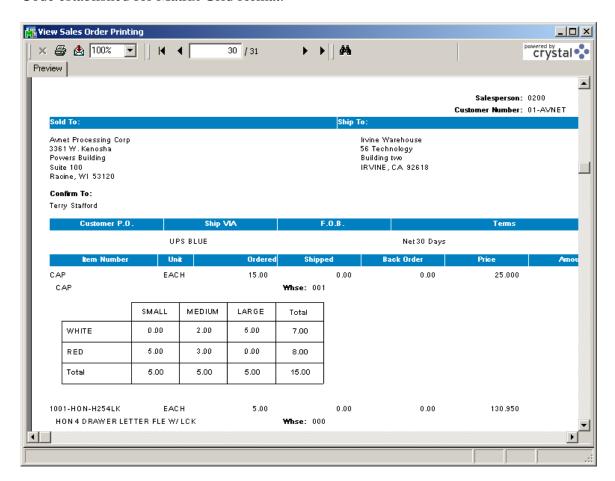
The **Matrix Grid** printing form has been added to the graphical printing Form Templates to allow printing the Matrix Distribution grid information on the report.



This form is available for the Sales Order, S/O Invoice, Picking Sheet, Packing List and Purchase Order Printings.



Here is an example of **Sales Order Printing** by the Form Code established for Matrix Grid format.



Matrix Codes Sorting in Printings

The following printings display information in the order according to the **Sort** field of **Matrix Codes**.

- Purchase Order Printing
- Picking Sheet Printing
- Sales Order Printing
- S/O Invoice Printing
- Matrix Sales History Report
- Matrix Stock Status Report
- Matrix Stock Status Report (Grid)
- Matrix Committed Report
- Open Orders by Matrix Items Report

Here is an example:

