



Matrix Processing For MAS 90 and MAS 200

457 Palm Drive Glendale, CA 91202 818-956-3744 818-956-3746 sales@iigservices.com



Information in this document is subject to change without notice. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose without the express written consent of Information Integration Group. Inc.

TRADEMARKS

MS-DOS and *Windows* are trademarks of Microsoft Corporation.

MAS 90, MAS 90CS, MAS 90W and MAS 200 are registered trademarks of Sage Software, Inc.

All other product names and brand names are service marks, and/or trademarks or registered trademarks of their respective companies.

Table of Contents

Installation Instructions and Cautions	
Wait! Before You Install - Do You Use CUSTOM OFFICE?	. 4
Registering IIG products	
ODBC Security	
Role Maintenance	. 6
Introduction	7
Setup	8
Matrix Options	. 8
Matrix Items	19
Customer Matrix Sales History	25
Matrix Codes	30
Prepacks	34
UPC Options	39
UPC Codes	41
Matrix Distribution	4 3
Purchase Order Entry	43
Receipt of Goods	49
Return of Goods Entry	54
Sales Order Entry	55
S/O Invoice Data Entry	59
Shipping Data Entry	
Inventory Transaction Entry	66
Physical Count Entry	69
RMA Data and RMA Receipts Entry	70
Production Entry	71
Disassembly Entry	
Work Order Transaction Entry	73
P/O Auto Generate Orders Selection	75
Work Order generation from Sales Orders	75
Auto Generate Work Orders from Sales Orders	
Generated Work Orders	76
Sales Order Assignment	82
Predefined Distribution in Bills	83
Bill of Materials Maintenance	
Work Order and Auto Issue	
Inquiries	
Invoice History Inquiry	
Purchase Order Inquiry	70

Printings	100
Matrix Sales History Report	
Matrix Stock Status Report	
Matrix Committed Report	104
Open Orders by Matrix Item Report	106
Open Orders by Matrix Lot Report	108
Inventory Valuation Report	111
Other Printing Forms	
Matrix Codes Sorting in Printings	116
Recreate Matrix Lot Sales History	118

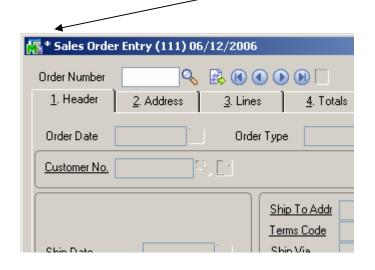
Installation Instructions and Cautions

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.

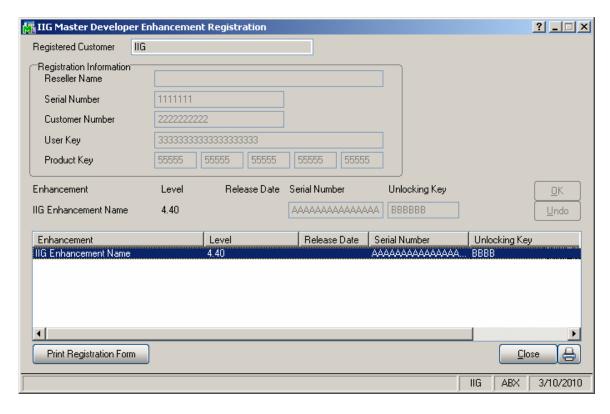
Follow all the instructions on this page before you run Customizer Update!

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**.



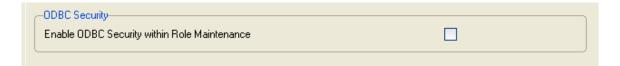
Enter **Serial Number** and **Unlocking Key** provided by IIG, and click **OK**.

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.

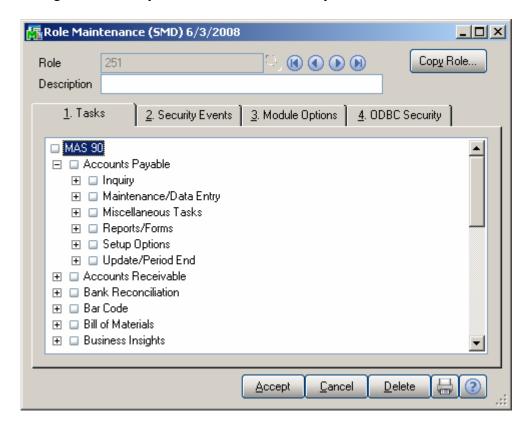
ODBC Security

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.

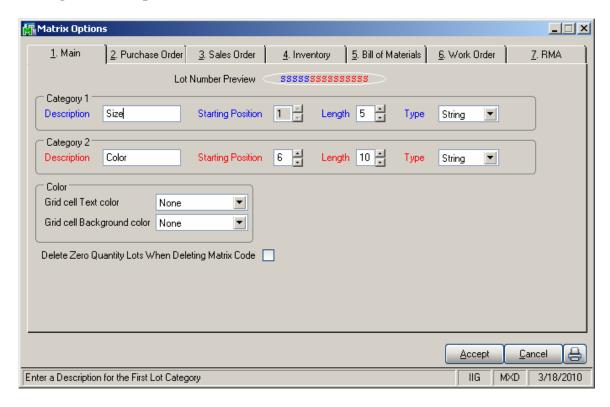
Several reports such as: Matrix Sales History Report, Matrix Stock Status Report, Matrix Committed Report, etc. have been provided for Matrix items. The Matrix Grid printing form has been added to the graphical printing Form Templates to allow printing the Matrix Distribution grid information on the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



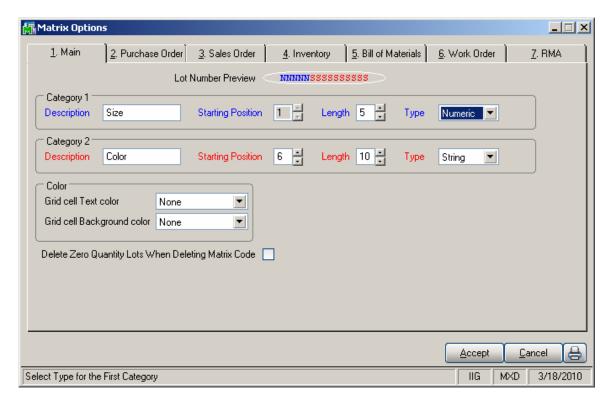
On the **Main** tab, select options for Matrix Code Categories and grid colors.

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



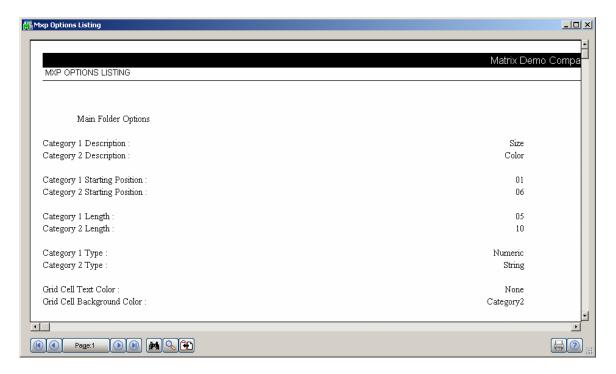
Note: It is not recommended changing the length or type of Category 1 and Category 2 fields if there are Matrix Codes already setup in the system.

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 colors assigned to the Codes of the selected Category. Colors are assigned in the **Matrix Code Maintenance** program.

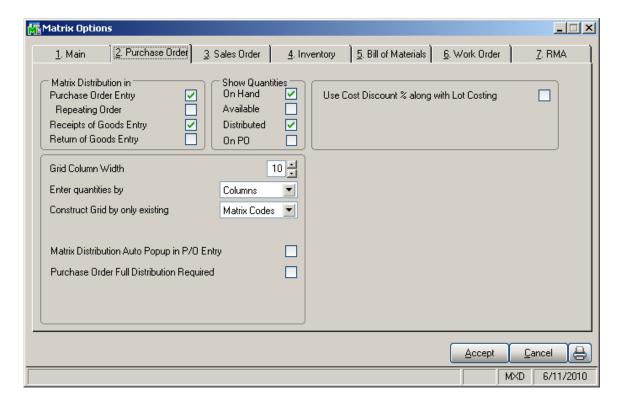
Check the **Delete Zero Quantity Lots When Deleting Matrix Code** box to have deleted the Lot Numbers, which do not have Quantity, corresponding to the Matrix Code being deleted for the item from the **Matrix Code Maintenance**. This option does not affect deletion of the System Matrix Codes.

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 the **Quantity Ordered** is zero.

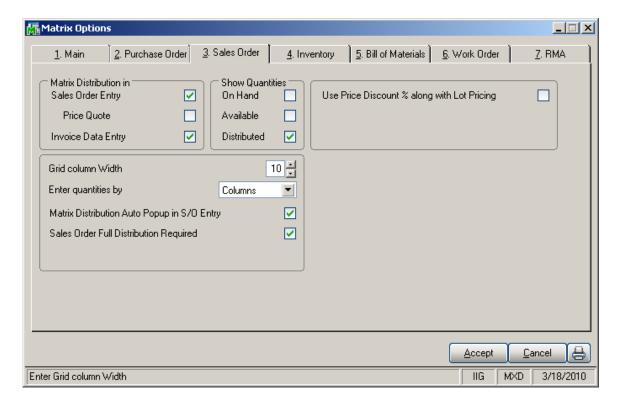
In this case, the **Ordered** quantity cannot be entered on the line, and it will be set equal to the **Quantity Distributed** on the **Matrix Distribution** screen.

If this checkbox is cleared the distribution screen appears only after entering the quantity. In this case, the **Quantity Distributed** field is not displayed on the **Matrix Distribution** screen, and the distribution is 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.

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 be popup also for non-zero quantities. In this case, the Ordered quantity cannot be entered on the line, and is set equal to the Quantity

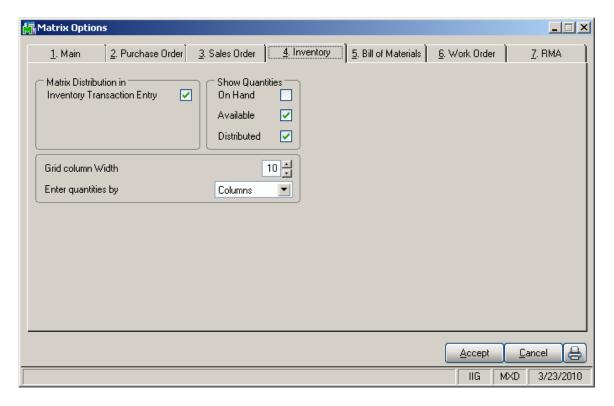
Distributed displayed on the **Matrix Distribution** screen. For Back Orders, the **Back Ordered** field is used instead of the **Ordered**.

If the Matrix Distribution Auto Popup in S/O Entry box is cleared, the distribution screen will popup only after entering the Qty Ordered and setting the focus to the next line. 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.

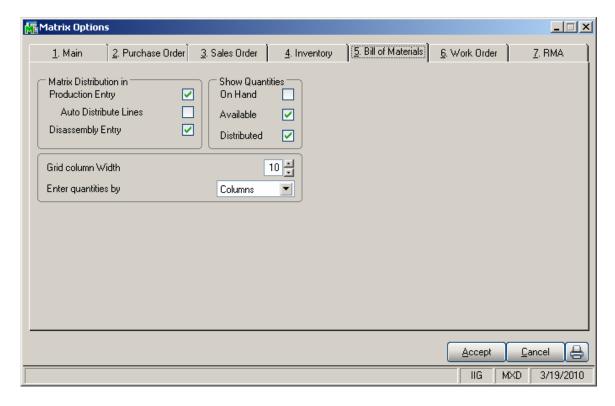


In the Matrix Distribution in section, check the Inventory Transaction Entry checkbox to open the Matrix Distribution screen instead of the standard Lot/Serial Distribution screen for Matrix Items in the Inventory Transaction entries.

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 Management** 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.



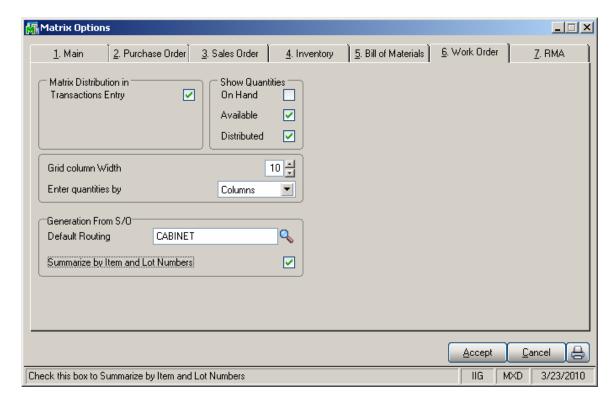
In the **Matrix Distribution in** section, check the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen should be displayed instead of the standard **Lot/Serial Distribution** screen.

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.

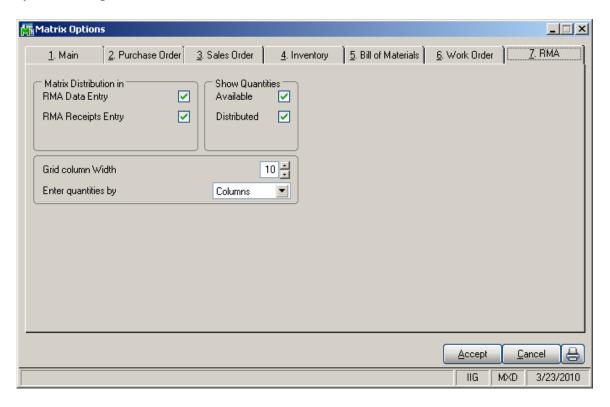
In the **Generation From S/O** group, select the **Default Routing** to be used during Work Order generation with the **Auto Generate Work Orders from Sales Orders** program. The **Routing** can be viewed, and changed for the current generation, from that screen, before generation.

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 **Return Merchandise Authorization** module.

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

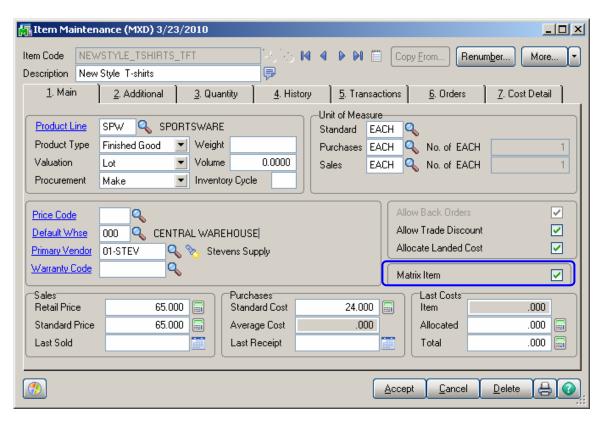


In the **Matrix Distribution in** section, check the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen should be displayed instead of the standard **Lot/Serial Distribution** screen.

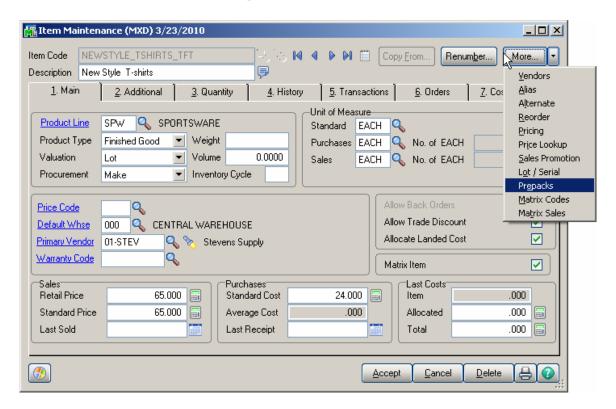
The **Show Quantities** section, **Grid column Width** field, and the **Enter quantities by** drop-down list are the same as on the **Purchase Order** tab. The settings apply to the programs of the **RMA** module.

Matrix Items

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



Select the **Matrix Item** checkbox to indicate matrix items. 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**.

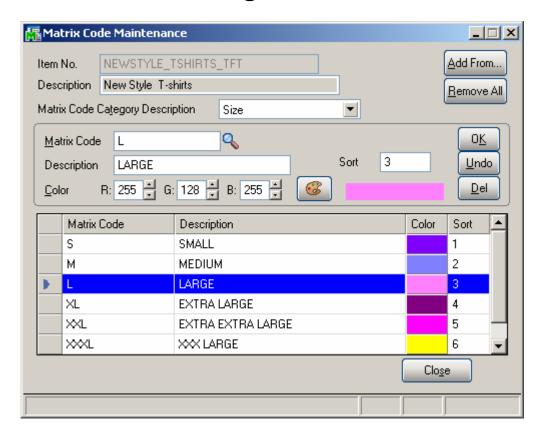


The **Prepacks, Matrix Codes** and **Matrix Sales** buttons are enabled only for Matrix Items.

<u>Prepacks</u> are discussed later in this manual. Matrix Item cannot be changed to non-Matrix if it has Prepacks.

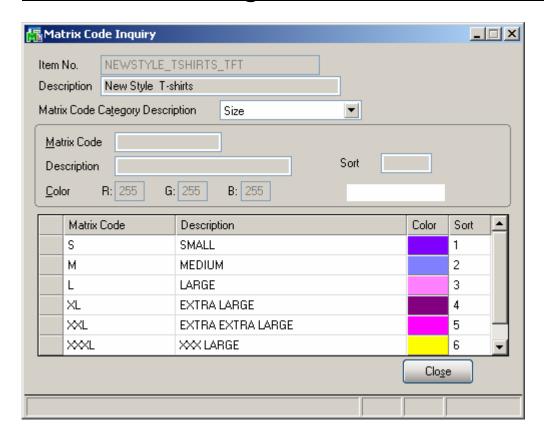
If the **Matrix Item** check box is cleared for an item that has Matrix Codes, the program displays a confirmation message. Matrix Codes of the item will be cleared, if the user chooses to remove the Matrix Item option from the item.

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

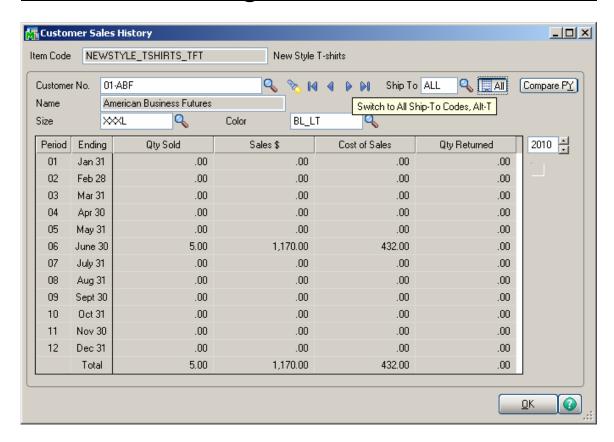


Here the user can add new matrix codes for the selected item if necessary or modify the existing ones (Refer to Matrix Codes for details).

The Matrix Code button is available on the Item 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 Item Inquiry program.

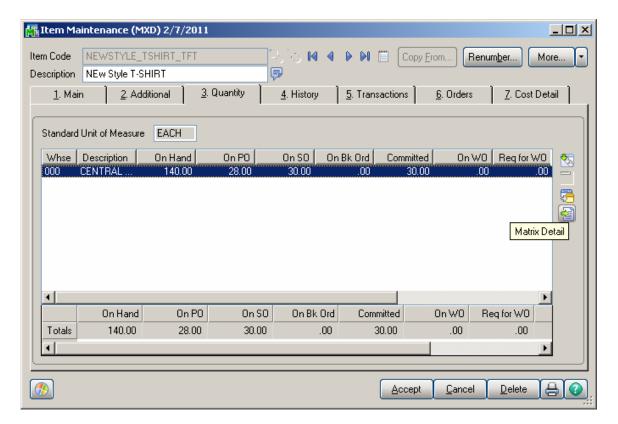


Use the **Matrix Sales** button on the **Item Maintenance** screen to view Matrix Item Sales history information by customer and by the Item Matrix codes.



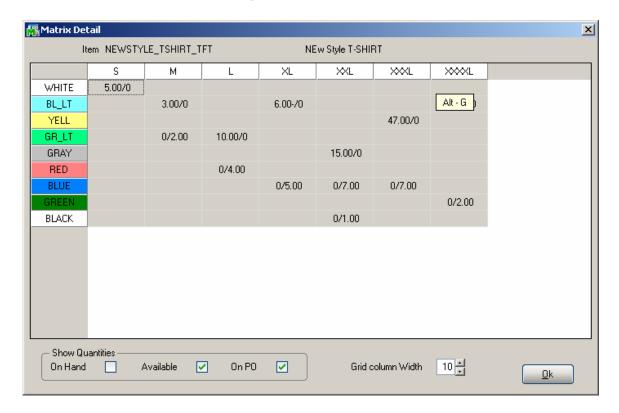
Click **ALL** to view the combined total of all ship-to locations for the customer and the selected Matrix Code combination.

The **Matrix Detail** information is available on the **Quantity** tab of the **Item Maintenance**. Select a line in the grid and click the **Matrix Detail** button on the right hand.



The value of **On PO** field is calculated run-time.

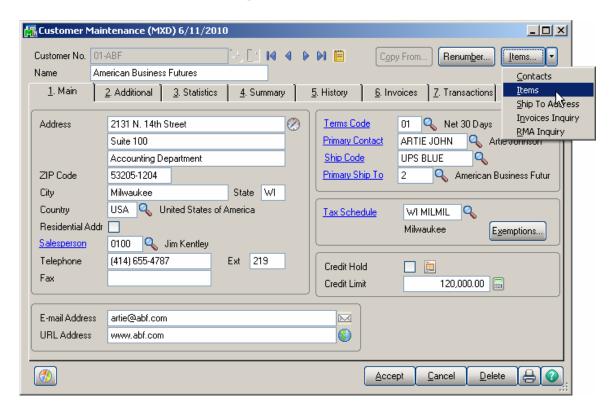
The Matrix Detail screen displays the Quantities Available and On Hand (optional) in the Grid constructed by Matrix Codes.



The same screen is available also from the **Inventory Inquiry** program.

Customer Matrix Sales History

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



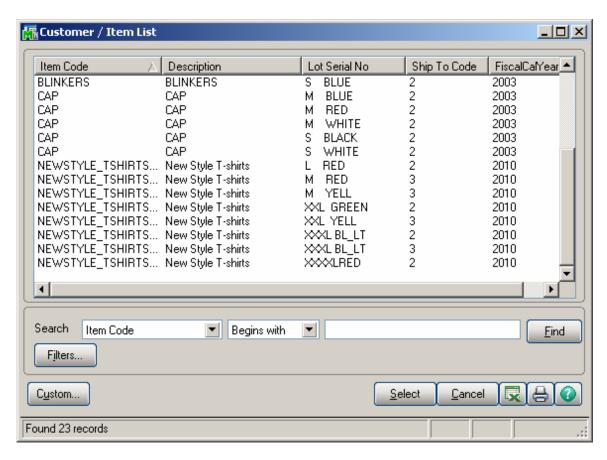
Click the **Items** menu item.



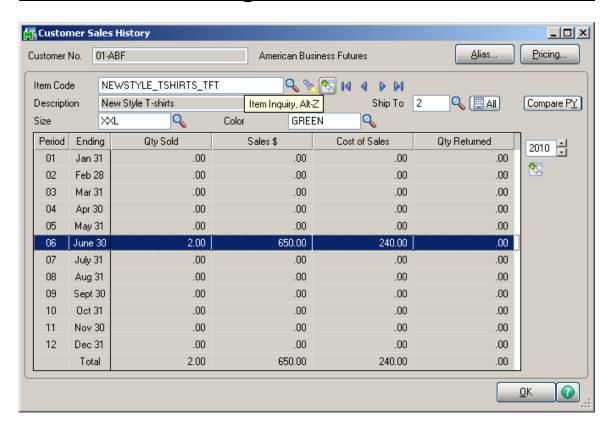
In the opened dialog box click the Matrix button to open the **Detailed Matrix Sales History** screen.

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

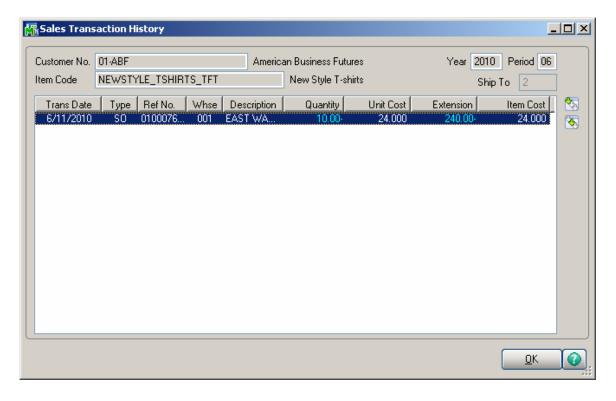
Click the **Item Customer Lookup** button to view the list of all the Lot Numbers for all matrix items sold to the selected customer.



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

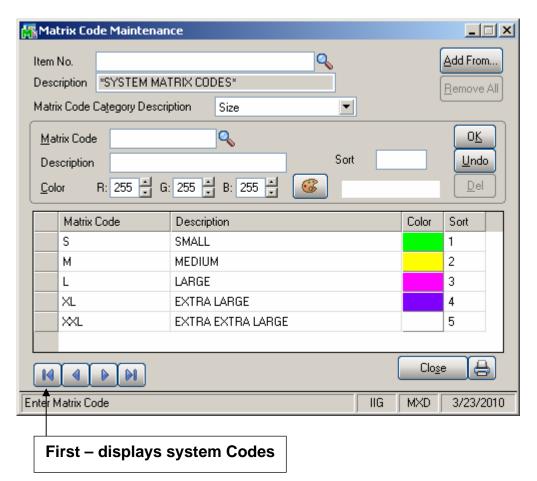


Select a period and click the **Transaction History** button to view the **Sales Transaction History** screen.



Matrix Codes

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



Each Matrix Item (item checked as Matrix in the Item 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.

If there is not Item number 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 the Codes of both **Size** and **Color 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's 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.

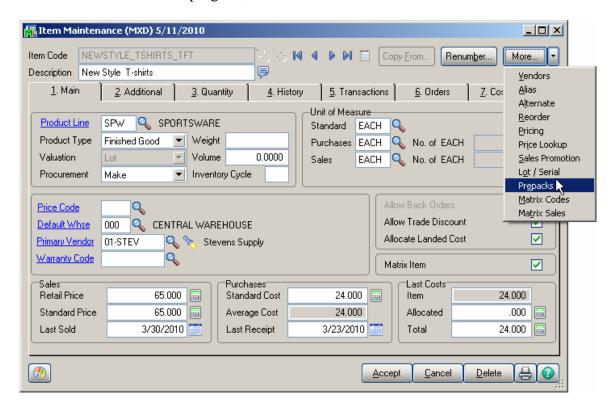
You can navigate from Code to Code in the grid using the Arrow keys. PageUp selects the first, and PageDown the last Code in the grid.

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.

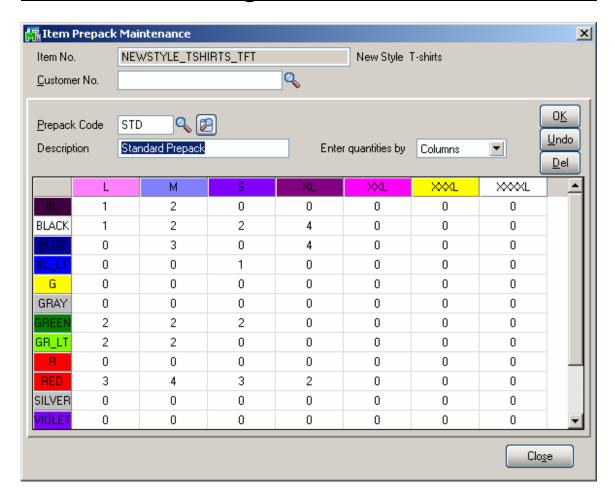
The **Matrix Code Maintenance** screen doesn't allow navigating through other items' codes, if launched from the **Item Maintenance** program. The Item **No.** field is disabled with the selected Item displayed.

Prepacks

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



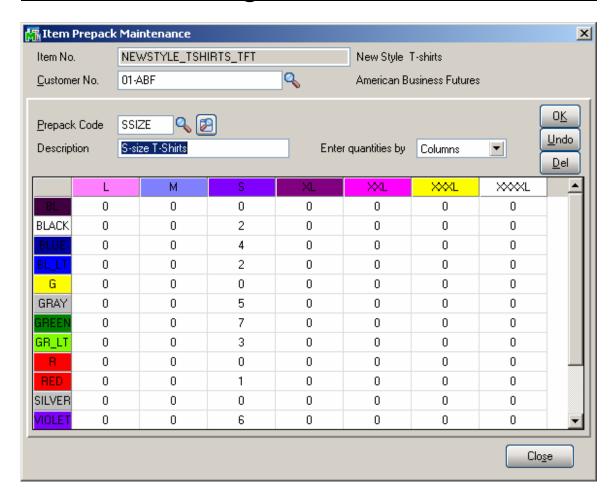
Click the **Prepacks** button from the **More...** menu button.



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:



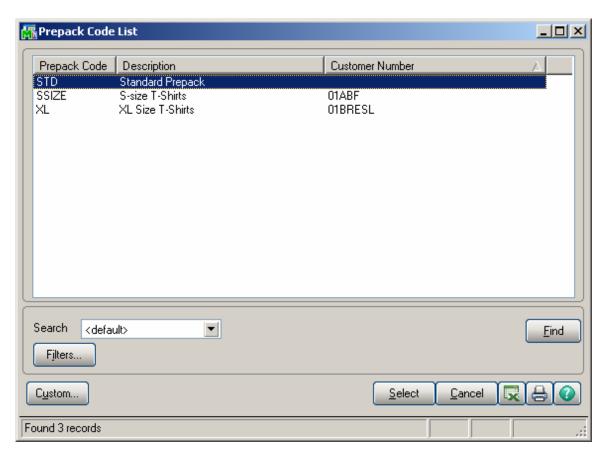
After pressing Enter, the focus moves to the next cell, which is activated by pressing Enter, double-clicking, or by directly entering the new quantity. The direction of moving the selection in the Grid when entering quantities is defined by the **Enter quantities by** drop-down list. It is defaulted 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.

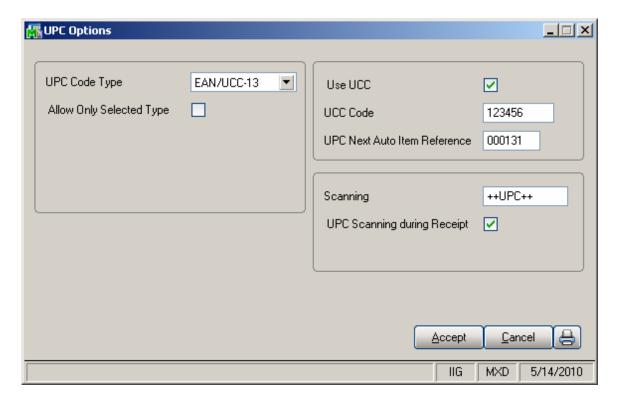
You can navigate between cells in the grid using the Arrow keys. PageUp selects the first, and PageDown the last cell in the current column; Home selects the first, and End the last cell in the current row.

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.



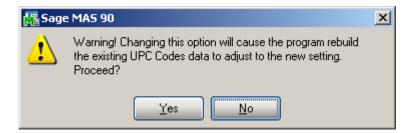
The **UPC Code Type** determines the default length to be used for the code – 12, 13 or 14 digits. The available options are UCC-12, EAN/UCC-13, EAN/UCC-14.

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.

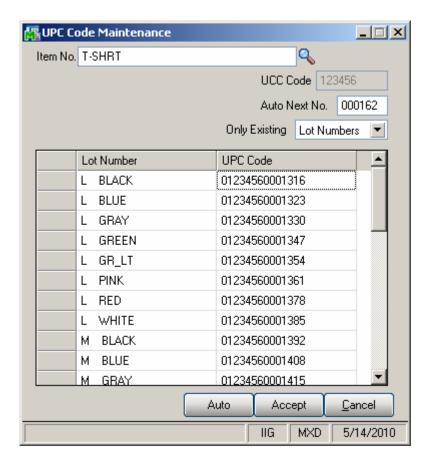
The sum of the **UCC Code** and **Item Reference** lengths is equal to the length of the **UPC Code Type** selected (12, 13, or 14).

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.

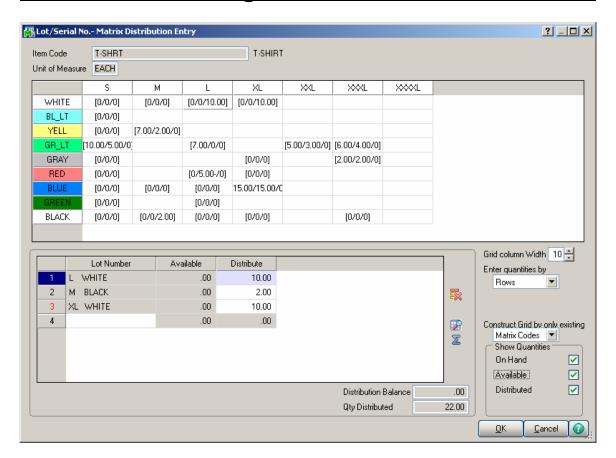
Matrix Distribution

Purchase Order Entry

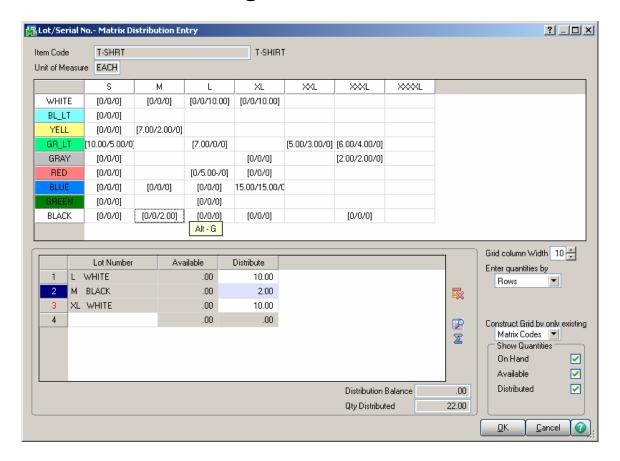
Select the **Purchase Order Entry** program under the **Purchase Order Main** menu.

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 not 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.

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 cursor in the Grid when entering quantities. You can choose to enter all the quantities in the first row, and then move to the second, and so on (by **Rows**). The cursor moves to the next cell when accepting the quantity entered in the cell of current row. 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 cursor 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.

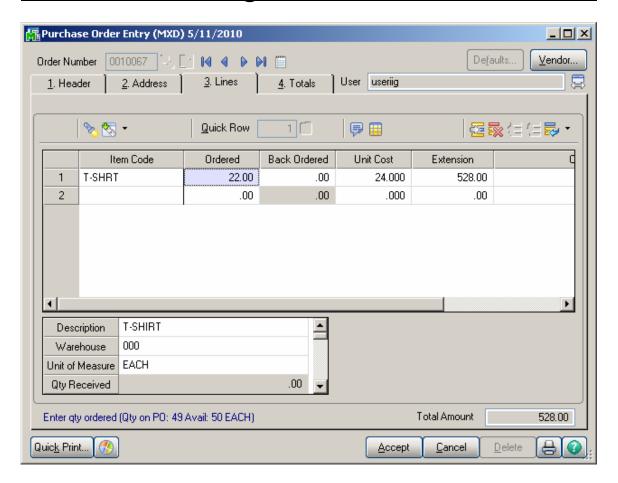
Note: Click OK to accept the current Quantity in the Distribute field. Clicking directly the Accept button disregards the current state of the selected Lot Number.

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.

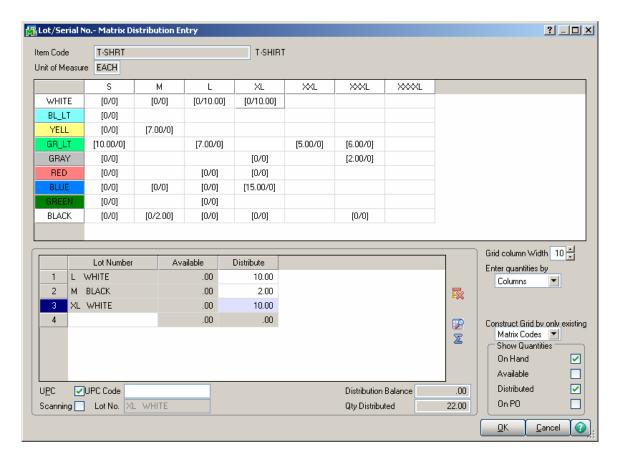
The **Matrix Distribution** screen is displayed when clicking in the Ordered field, if the quantity is zero. If the **Matrix Distribution Auto Popup in P/O Entry** box is checked in the Options, the screen is also popup for non-zero quantities.



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.

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.

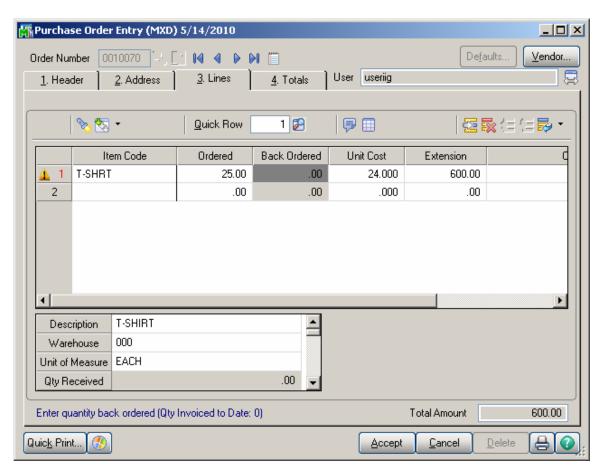
The **Scanning** sequence (++UPC++ by default) specified in the **UPC Options** program can be typed in the **Lot Number** field, or scanned with bar code scanner to switch the UPC Code Scanning mode.

The **UPC** box is checked by default with the **UPC Code** field enabled to allow for entry of a UPC Code for the selected/entered Lot Number, which don't have UPC Code specified in the UPC Code Maintenance. .

If the **Receipt of Goods** is based on a Purchase Order a message is popup on the Lines tab of the Receipt of Goods

Entry allowing the user to receive the quantities distributed in the PO, all the quantities regardless distribution or don't receive any:

Here is an example of Purchase Order-> Receipt processing:



The following message is appeared in the Receipt of Goods Lines tab when the Order is received.



If **Yes** is selected all the quantities ordered will be received entirely, with the quantity received equal to the quantity **Ordered.**

In this case the matrix item distribution is carried over from the Purchase Order to the Receipt. If the entire quantity distributed in the Purchase Order is not received, and the distribution of the Order is changed in the Receipt entry so that to back order the quantities from the same Matrix/Lots; the Purchase Order distribution is retained in the back order generated during the Daily Receipt/Registers update.

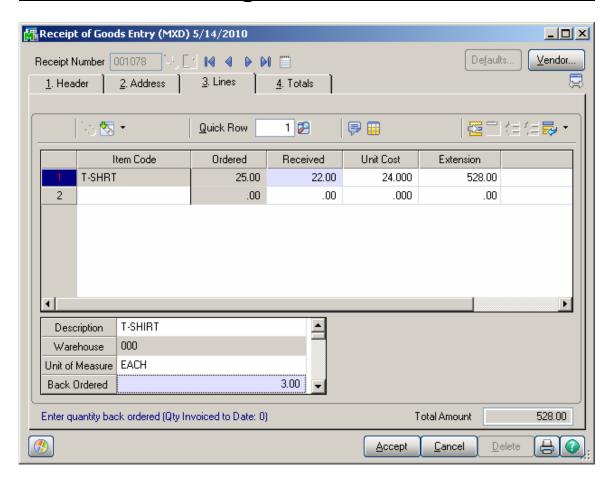
Note: The Purchase Order distribution is not retained in the Back Order, generated during Daily Receipt/Registers update, in the following cases:

If the quantity to be placed on back order is not equal to the "Qty Ordered - Qty Received".

If there is even a quantity back ordered from a Matrix/Lot other than the ones distributed in the Purchase Order.

When **No** is selected the Purchase Order lines are loaded in the grid with 0 quantity received.

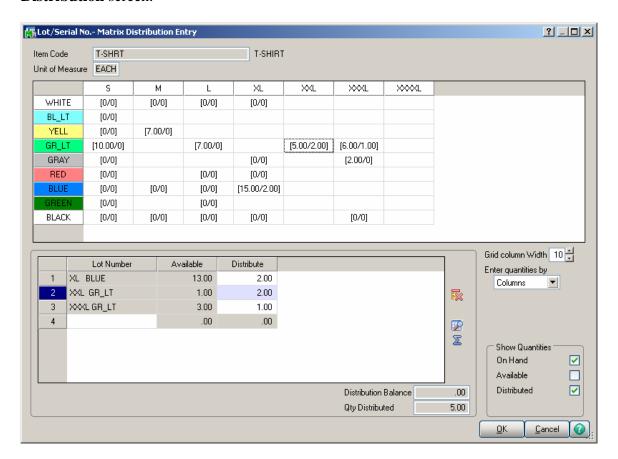
Selecting **Distributed** will load the lines of PO with the **Quantity Received** set equal to the quantities distributed in the Purchase Order and the quantities not distributed in the PO will be set as Backordered Quantity.



Return of Goods Entry

Select the **Return of Goods Entry** 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.

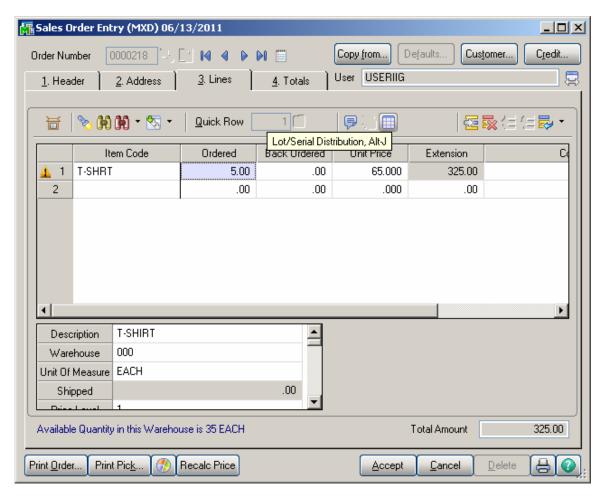
Sales Order Entry

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.

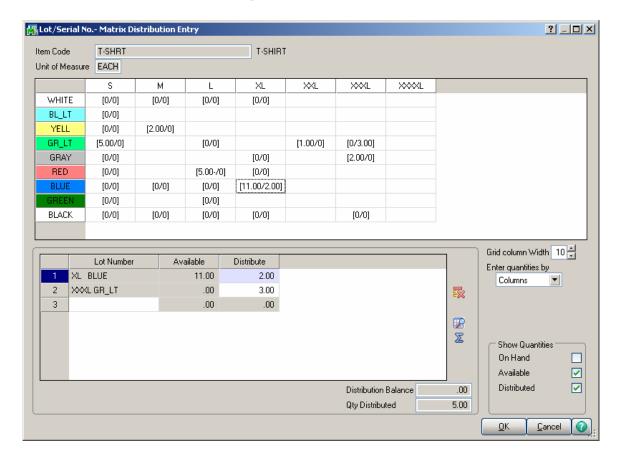


The quantity should be distributed in the **Matrix Distribution** screen, which is similar to the screen in the **Receipt of Goods** program.

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 it for 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.

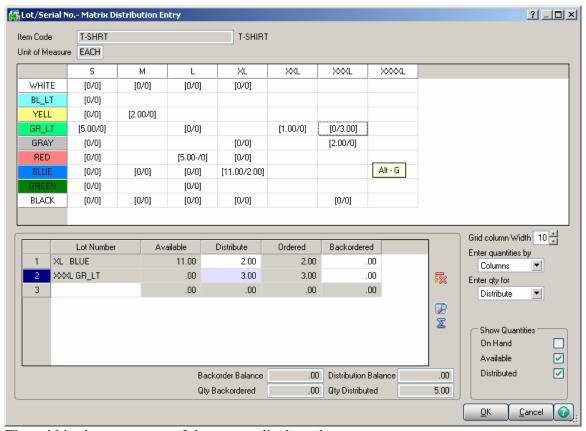
Matrix distribution entered for the **Price Quote** is preserved when converting to **Standard Order**.

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 a little different from the distribution screen opened 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:

Use 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.

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.

From the **Enter Qty for** drop-down list select **Distribute** or **Backordered**. This option indicates the entry parameter for the distribution grid. If **Distribute** is selected the number entered in the grid is treated as the Qty Distributed. If Backordered is selected it will be treated as the Qty Backordered.

There is also an option provided in the grid for easily entering the Distribute and Backorder quantities for a matrix lot at once. It is necessary to enter corresponding numbers separated by slash (e.g 2/3) in the distribution grid and the Lot Number line

with respective Distributed/Backordered quantities will be added in the below list.

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

The Matrix Grid is automatically resized upon changing the size of Matrix Distribution screen.

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) while 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 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.

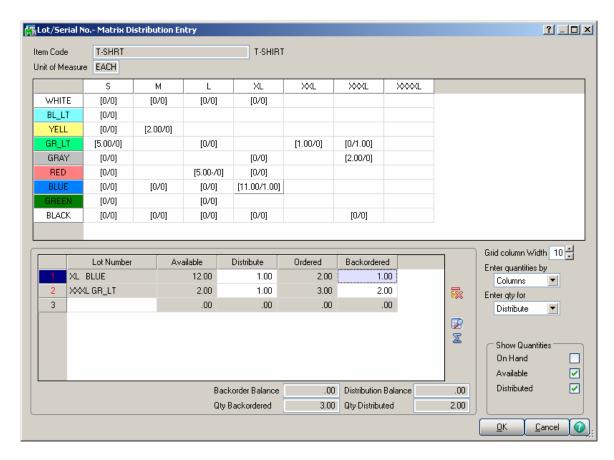


Shipping the distributed order means that Matrix items will be shipped in quantity equal to the quantity distributed in the sales order. The distribution cannot be accepted with negative Balance. The Invoice cannot be accepted with not fully distributed lines.

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

Backorder Processing for Matrix Lots

The Backorder functionality for Matrix Lots has been provided in the **Invoice Data Entry**. In case the Sales Order is partially shipped the backorder quantities for the Matrix Lots being backordered should be entered in the corresponding **Backordered** field on the Matrix distribution screen.



Distribute- quantities distributed for current Lot Number.

Ordered- displays the quantity ordered for current Lot Number and can only be viewed.

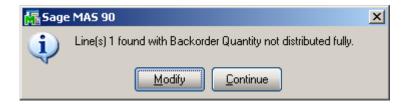
Backordered – allows for entry of the Lot Number quantities to be backordered.

Backorder Balance- this field displays a running total of the remaining backorder quantity to distribute, and can only be viewed.

The user will not be able to **Accept** the Invoice and a message will popup in case the Backordered quantity entered in the Distribution grid is greater than the Backorder Qty on the Invoice line resulting in Negative Backorder Distribution Balance.



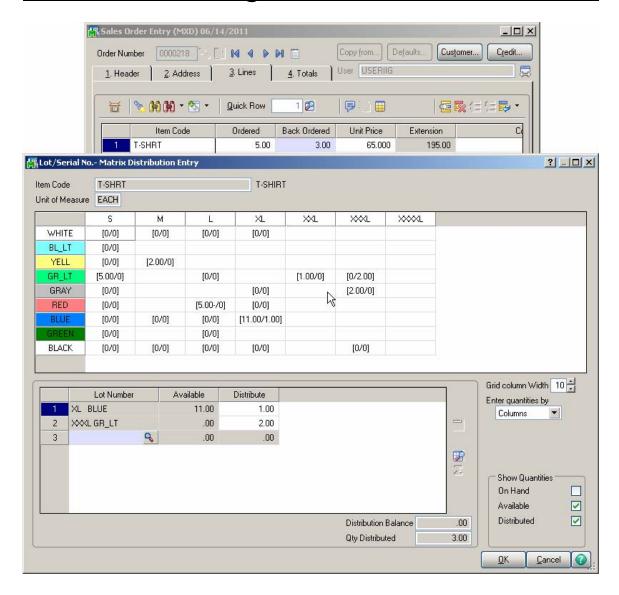
The user is allowed accepting the Invoice in case the Back Order Balance is not 0, that is there are Back Order quantities remaining to distribute.



Selecting **Continue** allows the user to accept the Invoice entry. In this case no distribution is carried over to the backorder generated in a result of Sales journal update. The Distribution should be done in the Sales Order entry.

Qty Backordered- this field displays the total of backordered quantity distributed by Lot Numbers.

Here is an example of Backorder created in a result of Sales Journal Update when the Order is partially shipped with the Sales Order Matrix Lot distribution preserved:



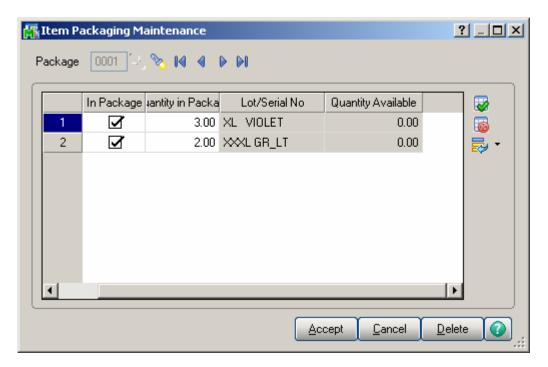
The distribution in the created backorder is done based on the backordered quantities entered in the Invoice Matrix Distribution screen.

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) while 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 **Inventory** 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.

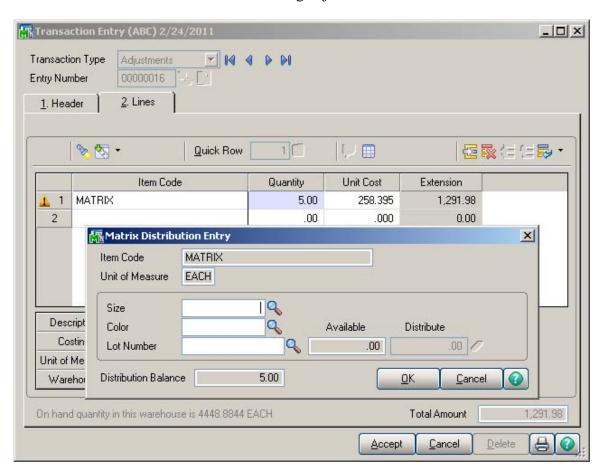
Note that if the **Distributed Qty** is not selected to be displayed, and only one of the **On Hand** and **Available** quantities are selected, the values of the selected meaning will be considered as entered if you move around the Grid with the Enter key or double-clicking.

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

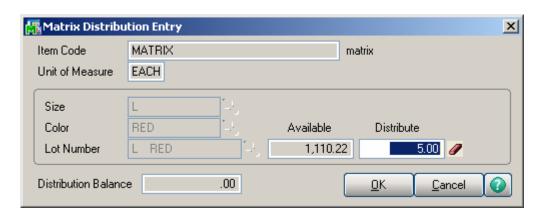
The **Distribution Balance** field displays the difference of **Quantity Ordered** of the Transaction and **Quantity Distributed** in the Matrix Distribution.

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.

For **Adjustment Transaction** the Matrix Distribution Entry is opened allowing the user to specify the Lot Number/Matrix Codes for the line item being adjusted.



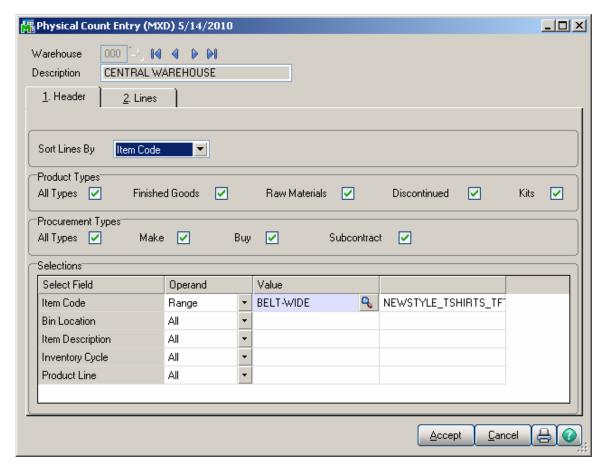
The user may select the Size and Color code to create the Lot Number automatically or specify an existing Lot Number.



During the **Transaction Register** update checking is performed by the Matrix item Lot Committed Qty by warehouse and error log is printed to prevent the user from updating transaction journal if the **Qty Committed** in the I/M Transactions for some lot number by Warehouse exceeds the **Qty On Hand** for it.

Physical Count Entry

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



On 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.

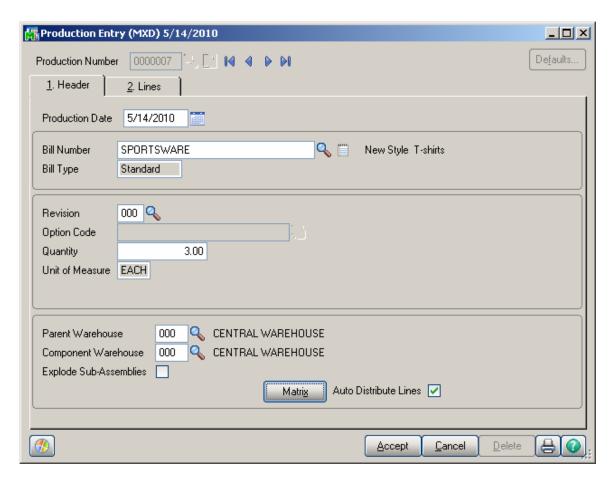
The Matrix Distribution screen for the **RMA Entry** programs is the same as in the **Invoice Data Entry** program.

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

Note: After Sales Orders are generated from RMA Receipts, matrix distribution needs to be done manually for generated Orders in Sales Order Entry.

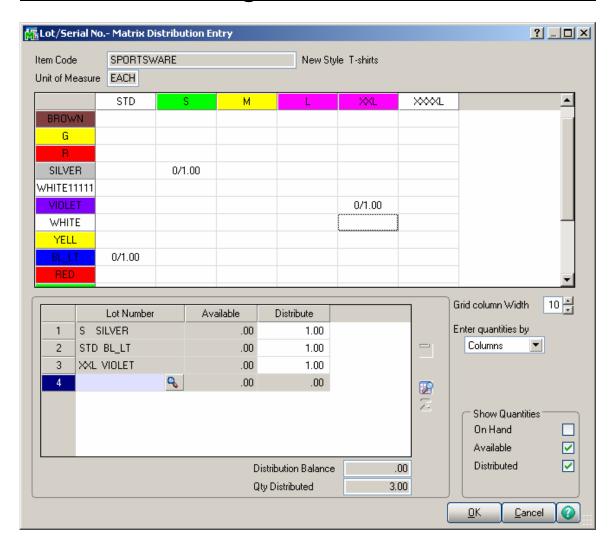
Production Entry

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.

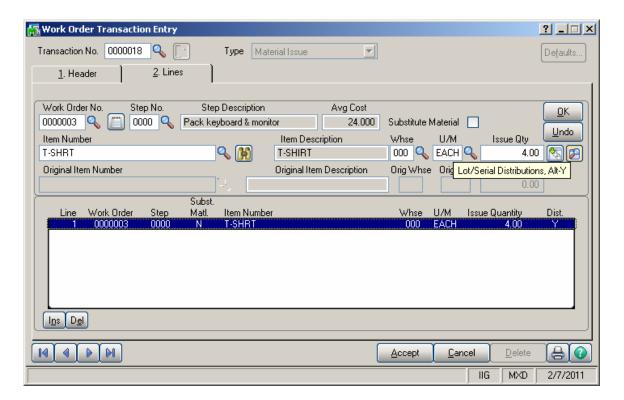
Work Order Transaction Entry

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 Items; it is available only for Lot and Matrix Items.

P/O Auto Generate Orders Selection

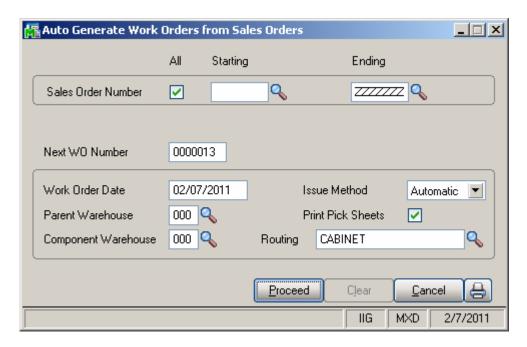
The MXP enhancement provides the Matrix Items' distribution done in the Sales Order entry to be carried over to the Purchase Orders generated by the **Auto Generate Orders Selection** program.

The **Summarize Multiple Items** by line logic is applied also to the Matrix Item Distribution.

Work Order generation from Sales Orders

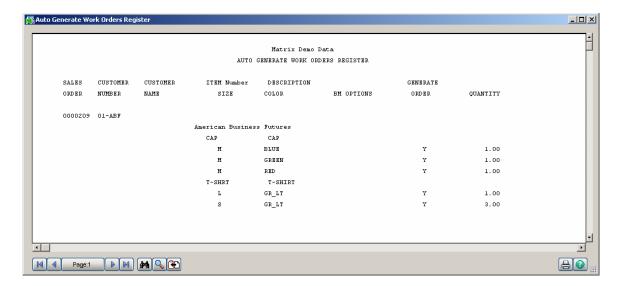
Auto Generate Work Orders from Sales Orders

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.

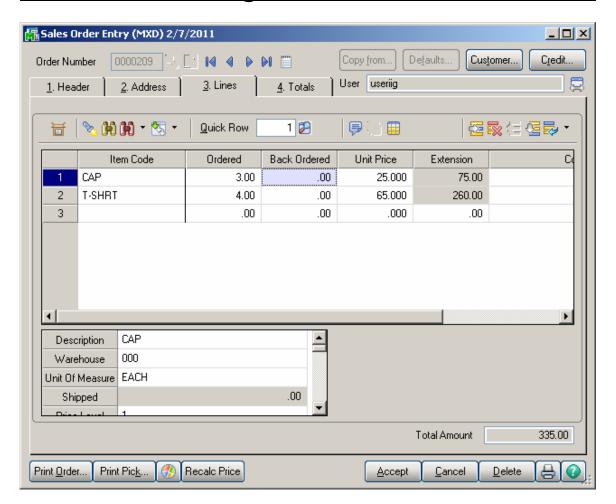
The **Routing** comes from the **Matrix Options**, and can be changed here.

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

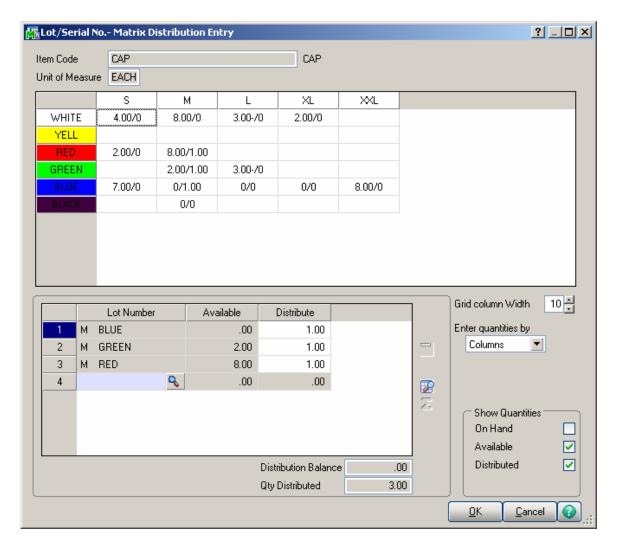
Based on the **Summarize by Item and Lot Numbers** option set in the **Matrix Options**, the program will generate separate work orders per Item – Lot Number pair, or summarize different Lot Numbers of the same Item into the same work order. Sales orders are always summarized, that is one work order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

Generated Work Orders

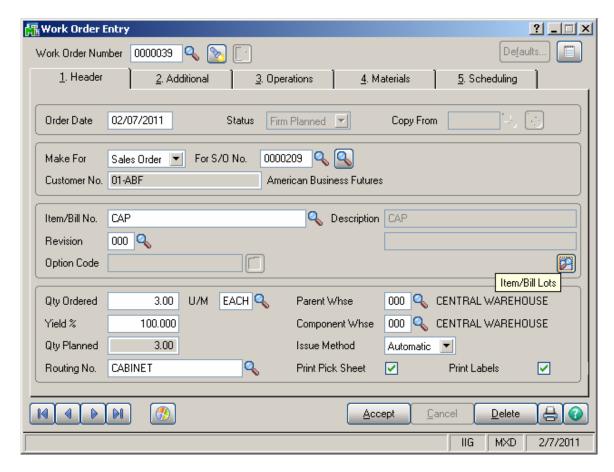
Here is an example of sales order and generated work order, with the **Summarize by Item and Lot Numbers** option selected in **Matrix Options**.



Here is the Matrix Distribution of the selected line item:

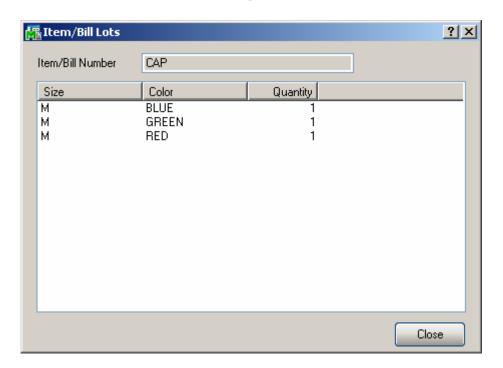


The generated Work Order is set to the **Make For Sales Order** and the originating **S/O Number** is stored.

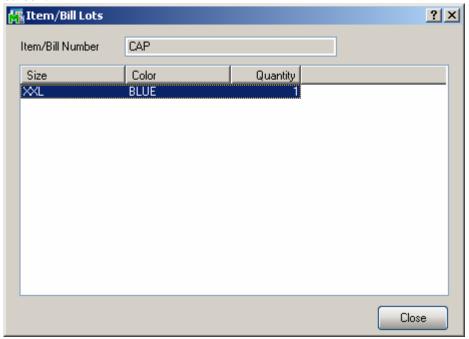


If the **Summarize by Item and Lot Numbers** option has been checked in the **Matrix Options**, the list of the Lot Numbers with the distributed quantities of the generated Sales Order is stored on the generated Work Order, and can be viewed by clicking the **Item/Bill Lots** button.

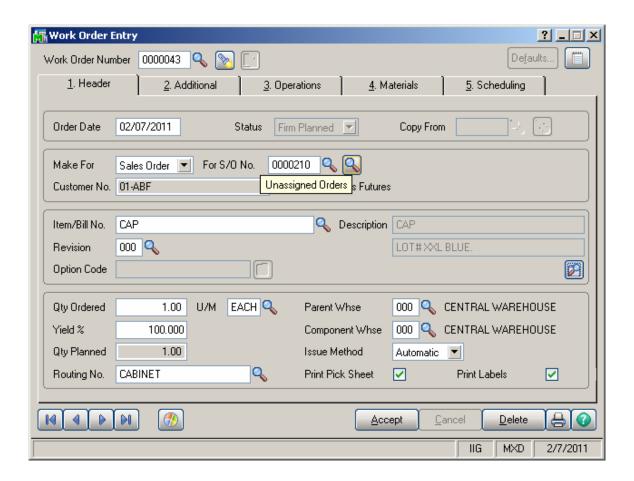
The Item/Bill Lots list is informational only, and is not taken into account in the further processing of Work Orders.



For Work Orders generated with the **Summarize by Item** and **Lot Numbers** option turned off in the Matrix Options, separate Work Orders are generated for each distributed lot and the only Lot Number is displayed in the Item/Bill Lots screen.

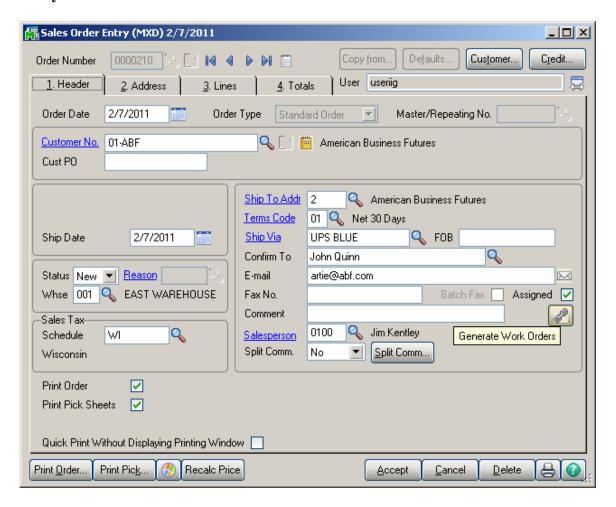


The second lookup added next to the Sales Order lookup is intended for listing only Unassigned Orders.



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).

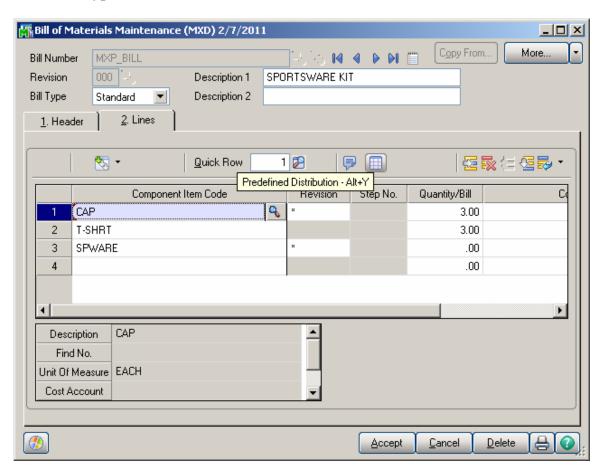
You can check the **Assigned** box for a Sales Order, to exclude it from automatic Work Order generation.

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

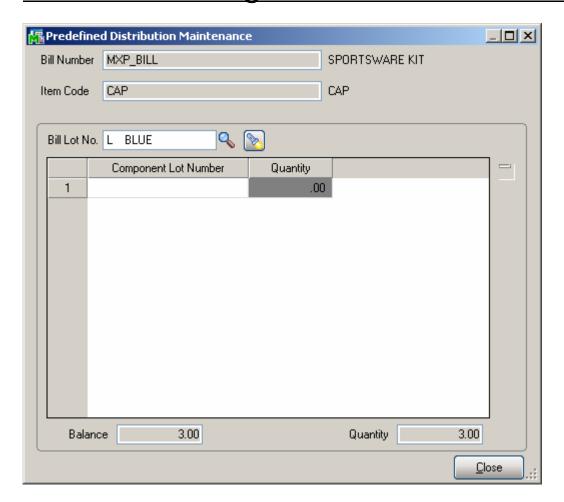
Predefined Distribution in Bills

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 **Standard Type** Matrix Bill items.



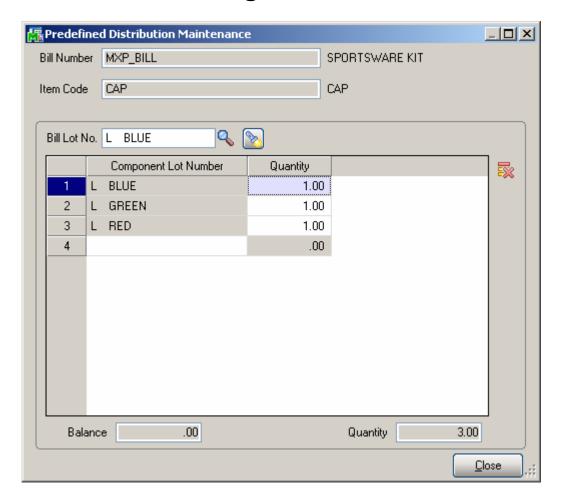
Clicking the **Predefined Distribution** button opens the **Predefined Distribution Maintenance** screen for the selected component.



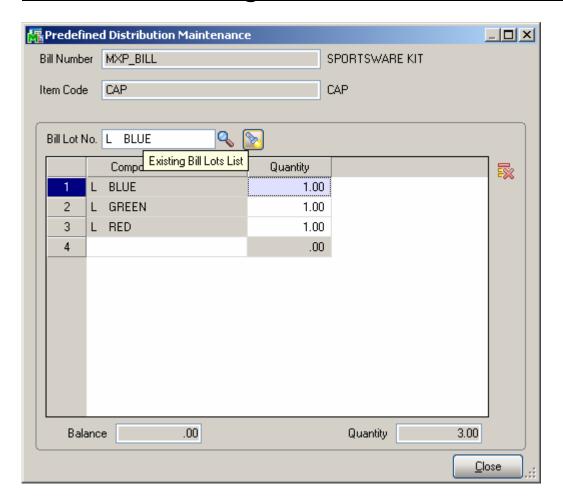
Select a **Bill Lot No.**, and distribute the **Quantity** displayed at the bottom of the screen to the **Component Lot Numbers**.

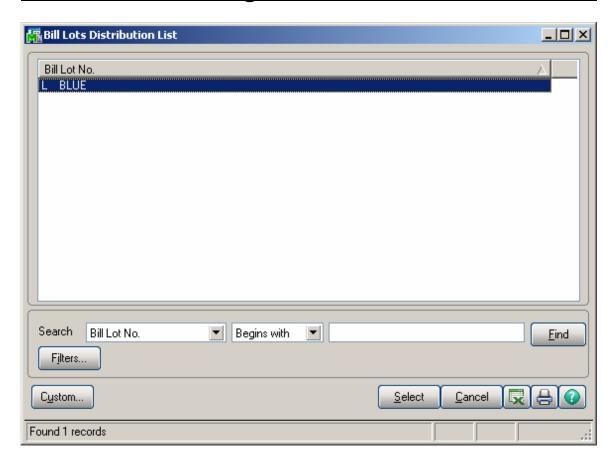
Distribution for the currently selected **Bill Lot Number** is displayed in the list.

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.



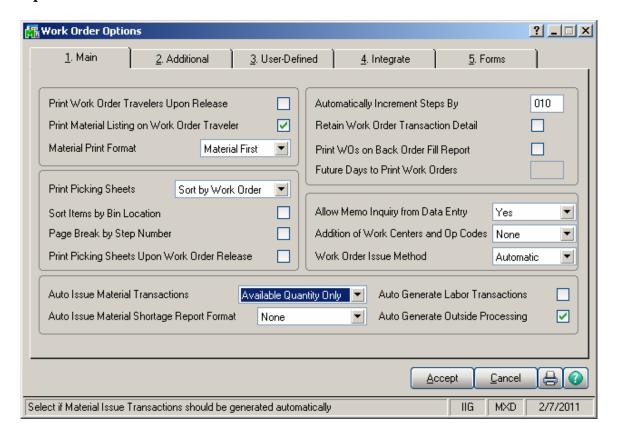
While the first lookup of the **Bill Lot No.** lists all the Lot Numbers of the Bill Item, the second displays only already entered (distributed) Lots.



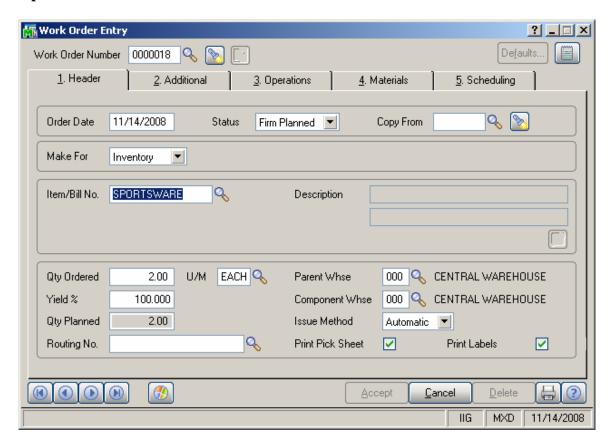


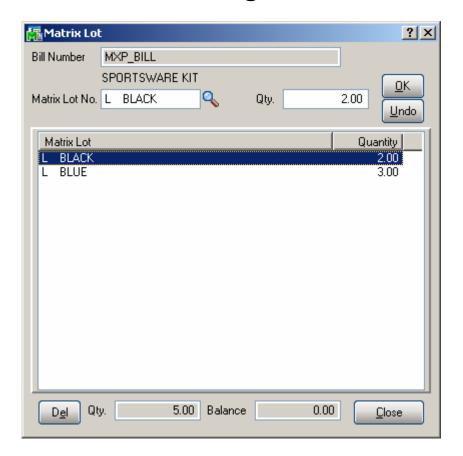
Work Order and Auto Issue

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.





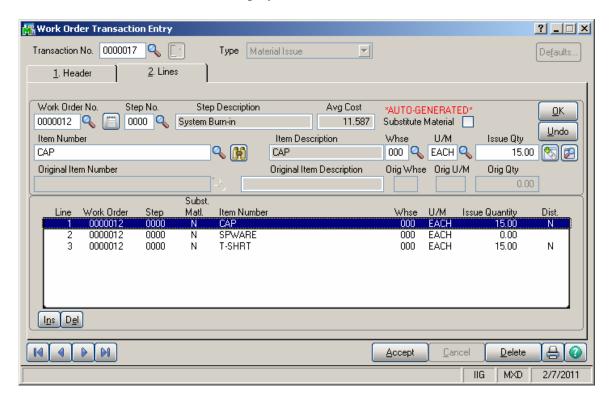
Distribute the **Quantity Ordered** by selecting **Matrix Lot Numbers** and entering appropriate **Quantities**.

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**).

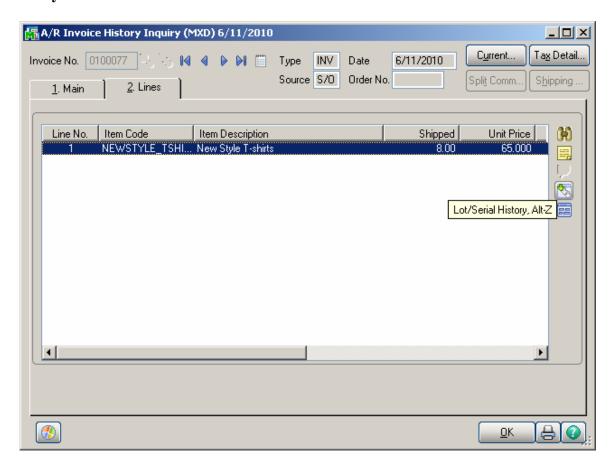
No Predefined Distribution specified for one of the Bill's Lots.

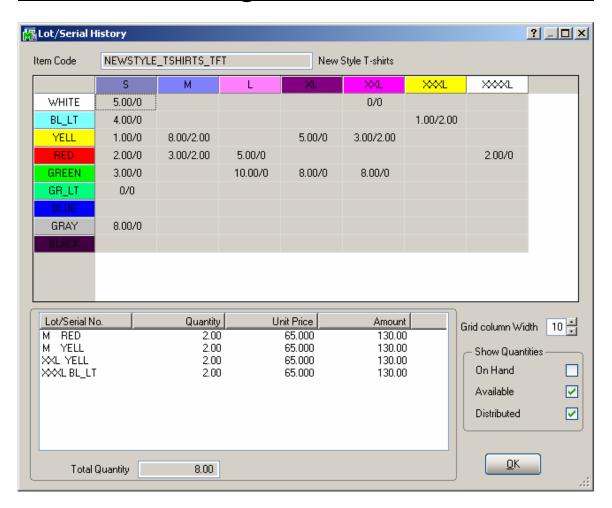
Incomplete distribution of Bill Item on Work Order (non-zero **Balance** in the **Matrix Lot** screen).

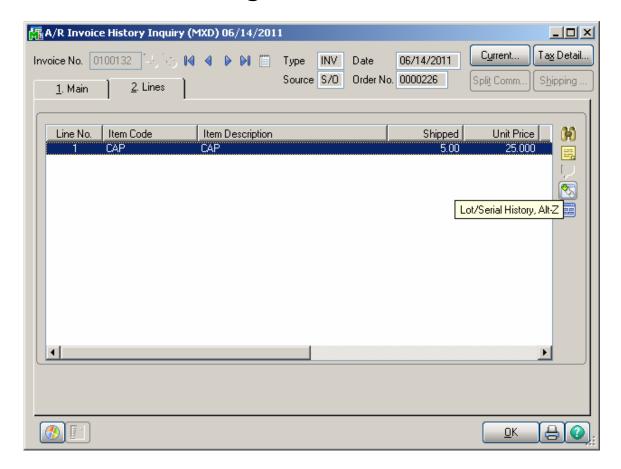
Inquiries

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**.

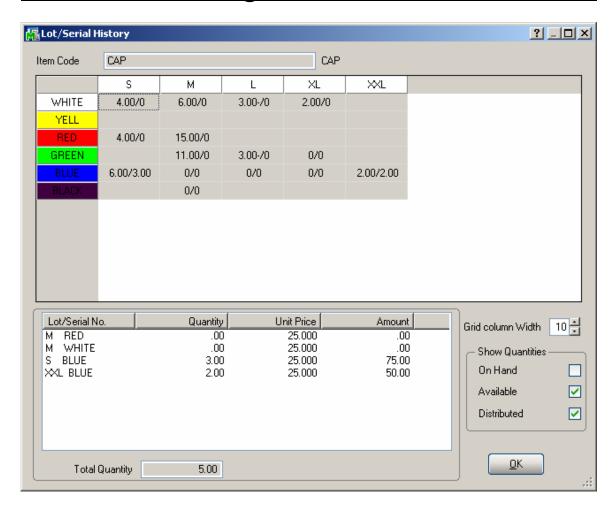




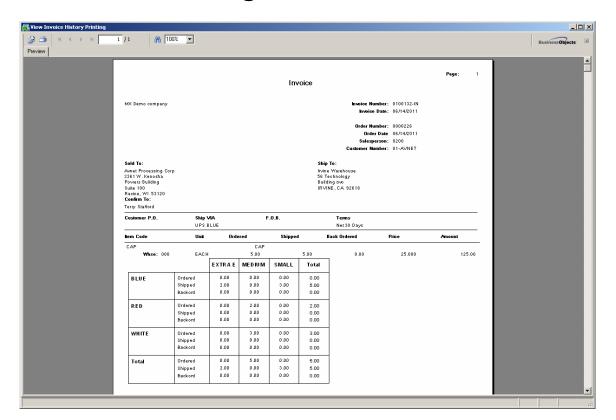


In case the Sales Order distribution have been changed during Invoice Data Entry so that to ship the matrix Lot numbers different from the ones already distributed in the Sales Order the Lot/Serial History reflects also the Sales Order's Lot Distribution.

The Quantity and Amount are 0 for the Lot numbers initially distributed in the Sales Order:

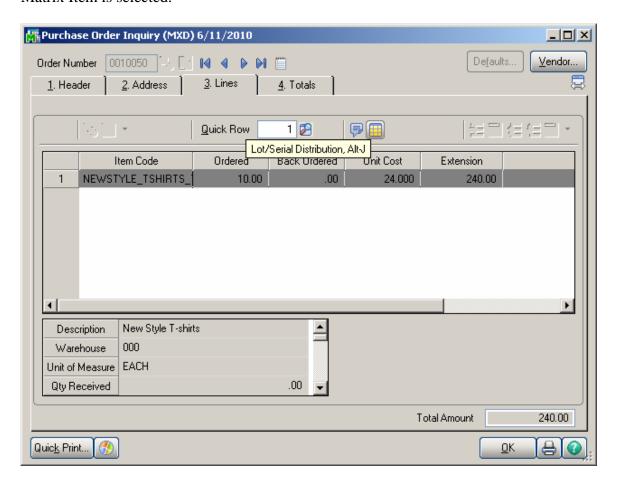


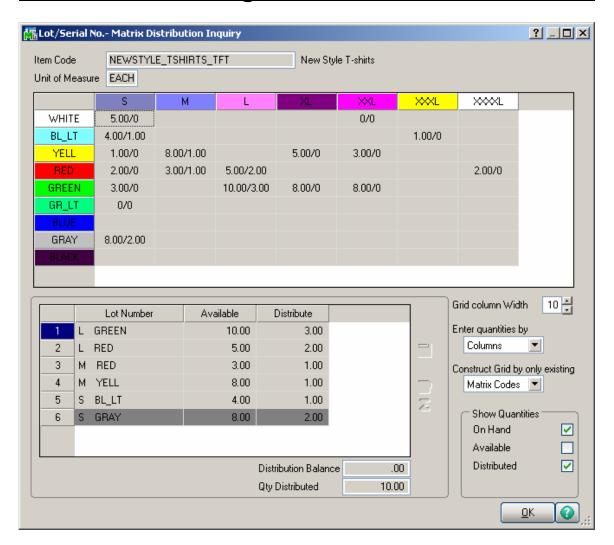
The **Invoice History Inquiry** printing displays the Sales Order Lot distribution information respectively:



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.



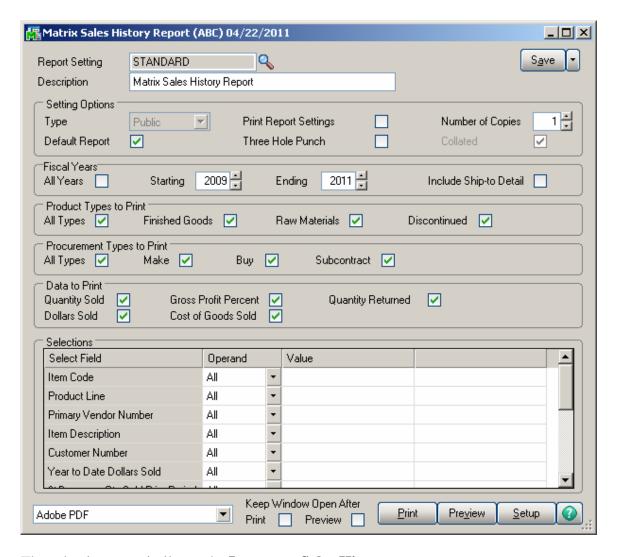


Printings

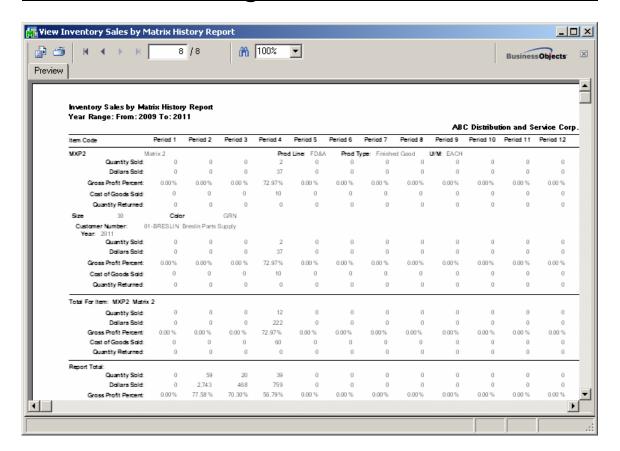
Matrix Sales History Report

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.



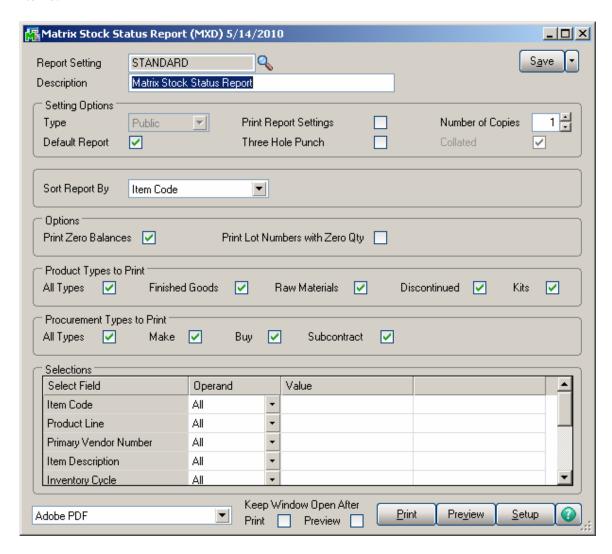
The selections are similar to the **Inventory Sales History Report**. In addition, Matrix Items can be filtered by two **Categories** specified in the **Matrix Options** program (**Size** and **Color**).



Matrix Stock Status Report

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

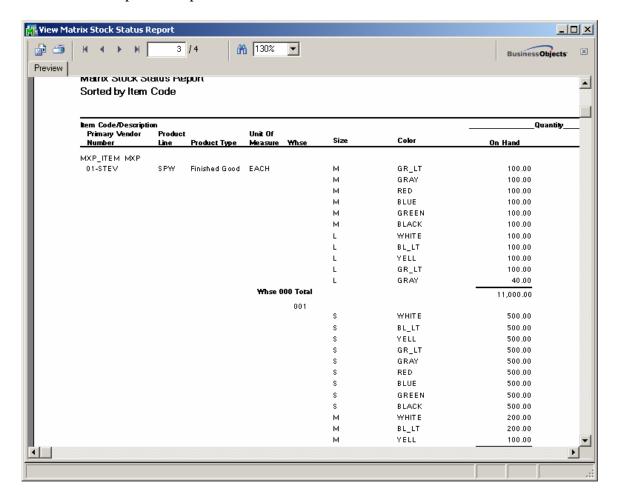
The report has been added to print Stock Status for Matrix Items.



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**).

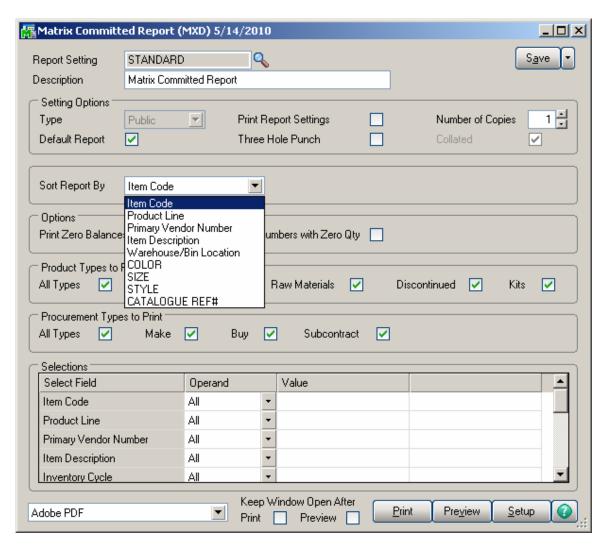
Only existing Lot Numbers will be printed in the report. Checking the **Print Lot Numbers with Zero Qty** box allows printing Lot Numbers with no quantity available.

Here is an example of the printout:



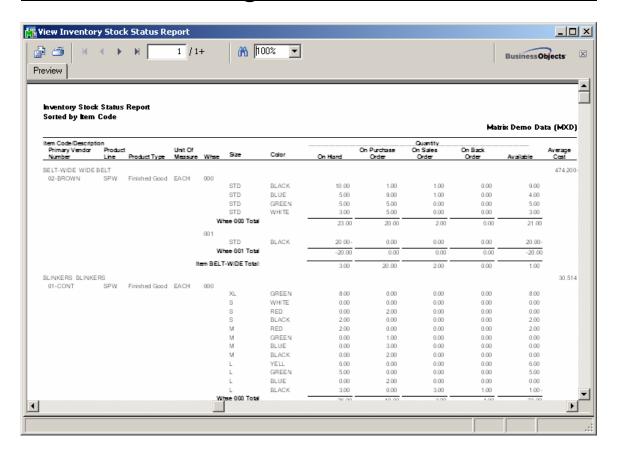
Matrix Committed Report

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



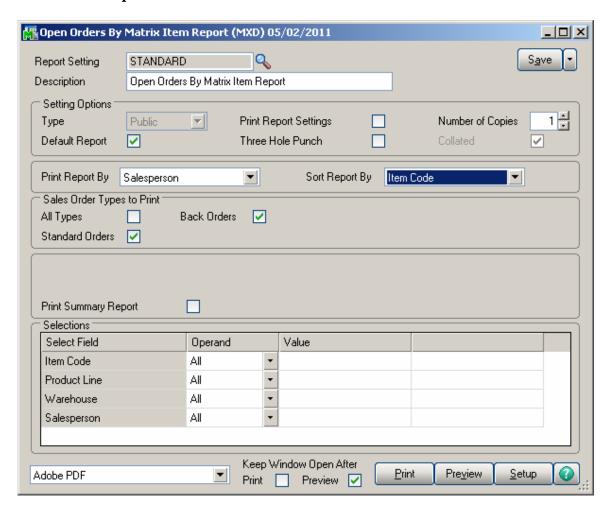
The report has been added to print Quantities on Sales Orders and Quantities on Purchase Orders for Matrix Items.

Here is an example of the printout:



Open Orders by Matrix Item Report

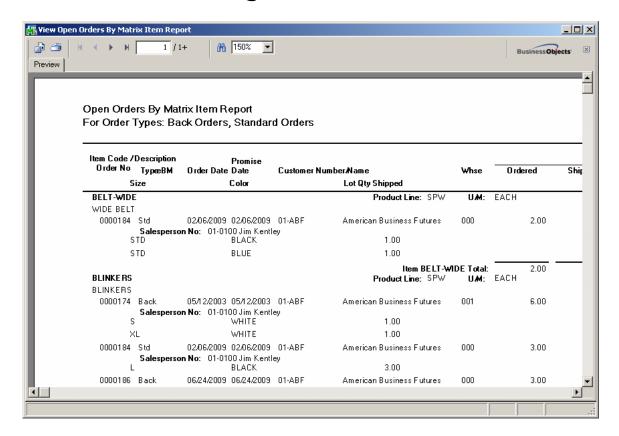
The **Open Orders by Matrix Item Report** provides open sales orders information for Matrix Items' Lots. Select the **Open Orders by Matrix Item Report** program under the **Sales Order Reports** menu.



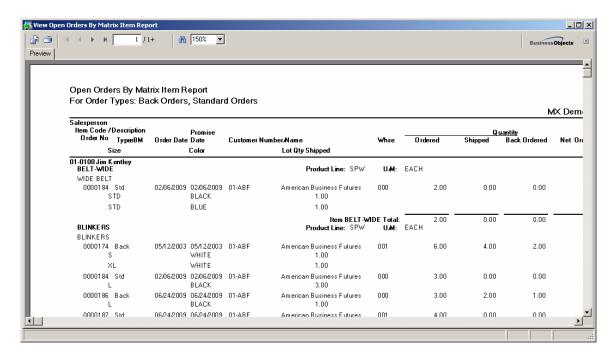
Print Report By and **Sort Report by** options allow for printing of open orders for each Salesperson by Items or for each Item by Salespersons.

Selections by Item Code, Product Line, Warehouse and salesperson are available.

Here is an example of a report printed by Item code sorted by salesperson:



Here is an example of the printout:

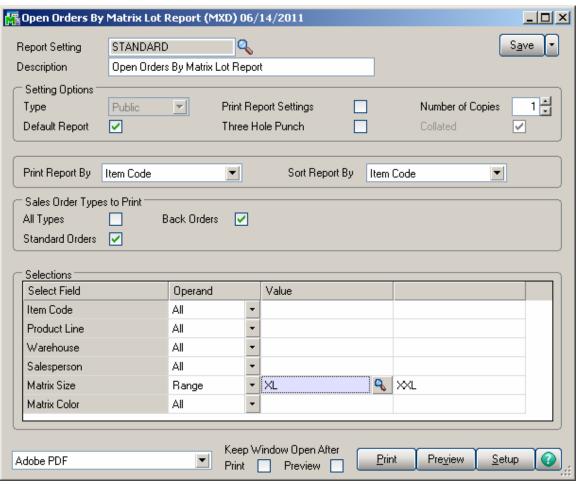


Open Orders by Matrix Lot Report

The **Open Orders by Matrix Lot Report** program has been added to the **Sales Order Reports** menu to allow printing open sales orders by Matrix Size and Matrix Color to make easy tracking of outstanding orders for each Matrix Lot.

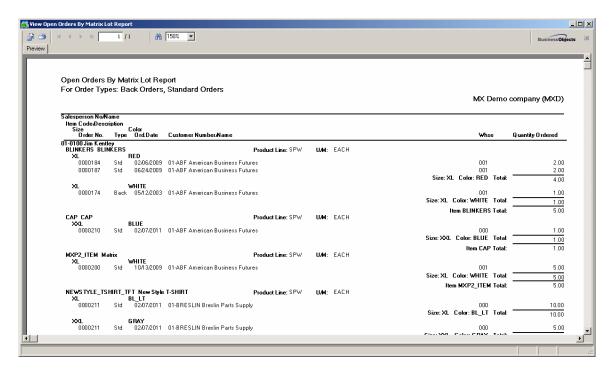
By default the report is sorted by item code. It can be sorted also by the Salesperson.

There is an option to include Standard Orders, Back Orders or both types (All).

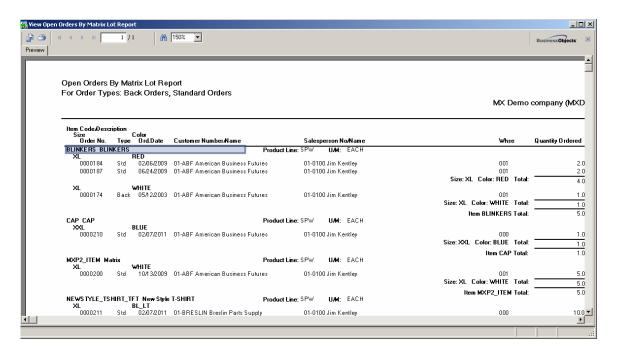


Selection of Item Code, Product Line, Warehouse, Salesperson, Matrix Size and Matrix Color may be applied to the report. **Print Report By** and **Sort Report by** options allow for printing of open orders for each Salesperson sorted by Items or for each Item sorted by Salespersons.

Here is an example of a report printed by Salesperson sorted by Item Code



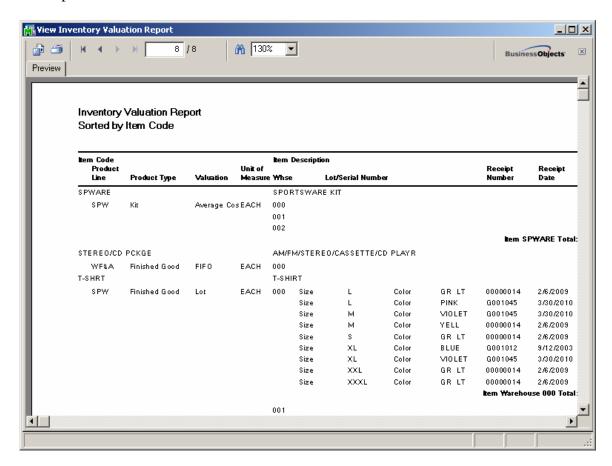
Here is an example of the report printed by Item Code and Sorted by Salesperson.



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.

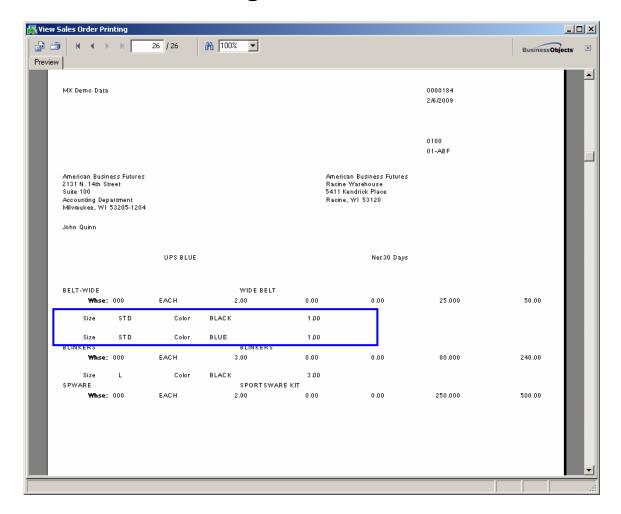


Other Printing Forms

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.

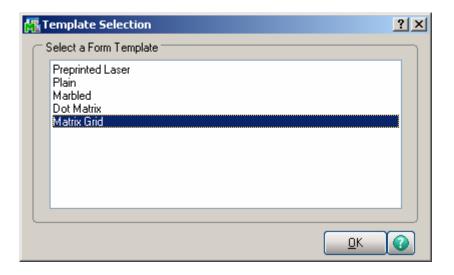
Here is an example of printout:



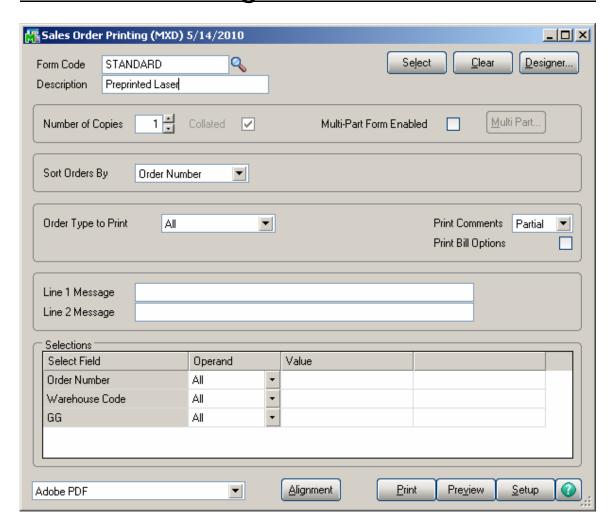
The numbers of Matrix Codes in the Line Temporary Work files are 50 for the Matrix form in the graphical printings of the Sales Order, Picking Sheet, Sales Order Invoice and Purchase Order.

Matrix Grid

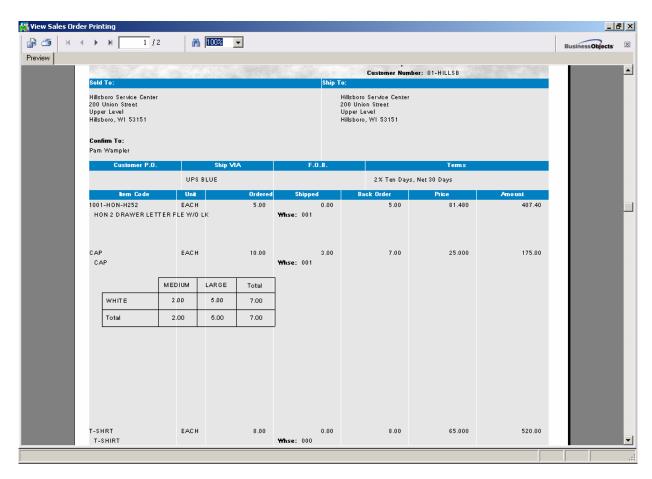
The **Matrix Grid** printing form has been added to the graphical printing Form Templates to allow printing the Matrix Distribution grid information on the report.



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.

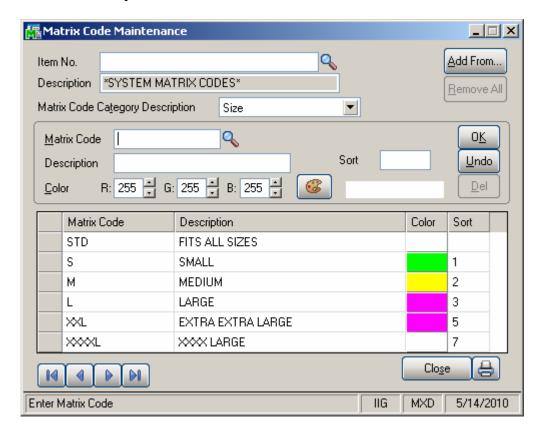


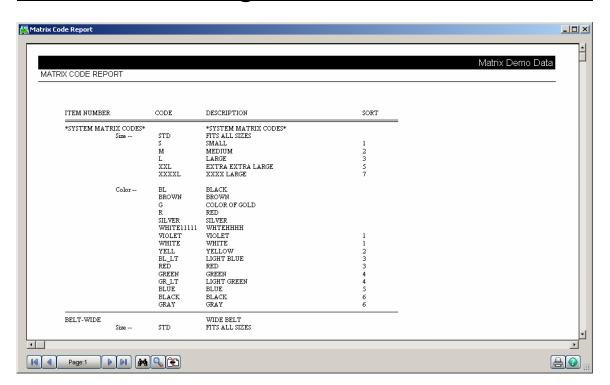
Matrix Codes Sorting in Printings

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:





Recreate Matrix Lot Sales History

The **Recreate Matrix Lot Sales History** utility added to the **Inventory Management** Utilities menu allows for purging the Sales History for Matrix Lot Items and creates it anew starting from the Year specified on the utility.

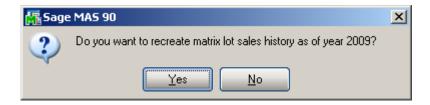


Recreate Matrix Lot Sales History as of Year- Enter the year to be used for recreating Matrix Lot Sales History.

The default Year value is calculated based on the Fiscal/Calendar Periods selected at the Base Inventory Periods On field in the Inventory Management Options and the Years to retain Item History value set in the CI Options.

Note: All Matrix Lot Sales history will be permanently removed from the system regardless the Year specified.

The following message is popup upon pressing the Proceed button.



Selecting Yes will remove the Matrix Lot Sales History for all previous years and rebuild new History based on the IM Lot Serial Transaction History data file.