



# Matrix Processing For Sage 100 2014

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

[www.iigservices.com](http://www.iigservices.com)



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## Table of Contents

<i>Pre-Installation Checklist</i> .....	4
<i>Installation Instructions and Cautions</i> .....	5
<b>Wait! Before You Install – Do You Use CUSTOM OFFICE?</b> .....	5
<b>Registering IIG products</b> .....	6
<b>ODBC Security</b> .....	7
<b>Role Maintenance</b> .....	7
<i>Introduction</i> .....	8
<i>Setup</i> .....	9
<b>Matrix Options</b> .....	9
<b>Matrix Items</b> .....	21
<i>Customer Matrix Sales History</i> .....	29
<i>Matrix Codes Setup</i> .....	33
<b>Role Maintenance</b> .....	33
<b>Matrix Code Maintenance</b> .....	34
<b>Prepacks</b> .....	40
<b>Matrix Item UPC Maintenance</b> .....	43
<i>Matrix Distribution</i> .....	46
<b>Purchase Order Entry</b> .....	46
<b>Receipt of Goods</b> .....	50
<b>Return of Goods Entry</b> .....	54
<b>Sales Order Entry</b> .....	56
<b>S/O Invoice Data Entry</b> .....	58
<b>Shipping Data Entry</b> .....	63
<b>Inventory Transaction Entry</b> .....	64
<b>Physical Count Entry</b> .....	66
<b>RMA Data and RMA Receipts Entry</b> .....	67
<b>Production Entry</b> .....	68
<b>Disassembly Entry</b> .....	70
<i>Predefined Distribution in Bills</i> .....	73
<b>Bill of Materials Maintenance</b> .....	73
<i>Inquiries</i> .....	77
<b>Purchase Order Inquiry</b> .....	77
<i>Printings</i> .....	79
<b>Matrix Sales History Report</b> .....	79
<b>Matrix Stock Status Report</b> .....	80
<b>Matrix Stock Status Report (Grid)</b> .....	82
<b>Matrix Committed Report</b> .....	83
<b>Inventory Valuation Report</b> .....	85
<b>Open Orders by Matrix Item Report</b> .....	87

# Matrix Processing 3

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<b>Open Orders by Matrix Lot Report .....</b>	<b>89</b>
<b>Matrix Codes Invoice History Report .....</b>	<b>92</b>
<b>Other Printing Forms .....</b>	<b>94</b>
<b>Matrix Codes Sorting in Printings.....</b>	<b>100</b>
<i>Recreate Matrix Lot Sales History.....</i>	<i>101</i>
<i>Rebuild Sort Files.....</i>	<i>101</i>

## Pre-Installation Checklist

Before beginning the installation of this enhancement:

1. Verify you have the following standard modules activated in your MAS system:
  - CI
  - IM
  - AR
  - SO
  - PO
2. Necessarily follow the steps described in the “**MXP510\_CD\Doc\Installation Instructions for MXP.txt**” file

## Installation Instructions and Cautions

**PLEASE NOTE: SAGE 100 ERP** must already be installed on your system before installing any IIG enhancement. If not already done, perform your SAGE 100 installation and setup now; then allow any updating to be accomplished automatically. Once SAGE 100 installation and file updating is complete, you may install your IIG enhancement product by following the procedure below.

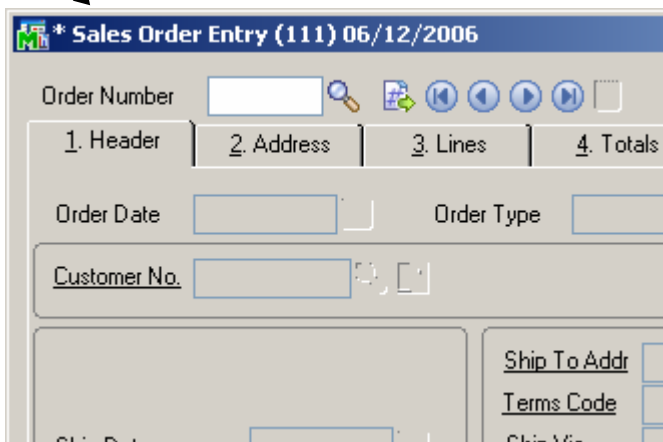
### Wait! Before You Install – Do You Use CUSTOM OFFICE?

**THIS IS AN IMPORTANT CAUTION:** If you have Custom Office installed, **and** if you have modified any SAGE 100 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 SAGE 100.

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**.

Enhancement	Level	Release Date	Serial Number	Unlocking Key
IIG Enhancement	5.10		AAAAAAAAAAAAAAAA	BBBBB

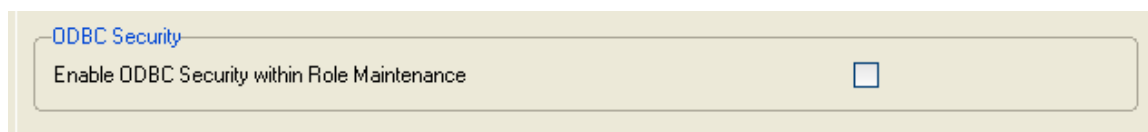
Enter **Serial Number** and **Unlocking Key** provided by IIG, and click **OK**.

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.

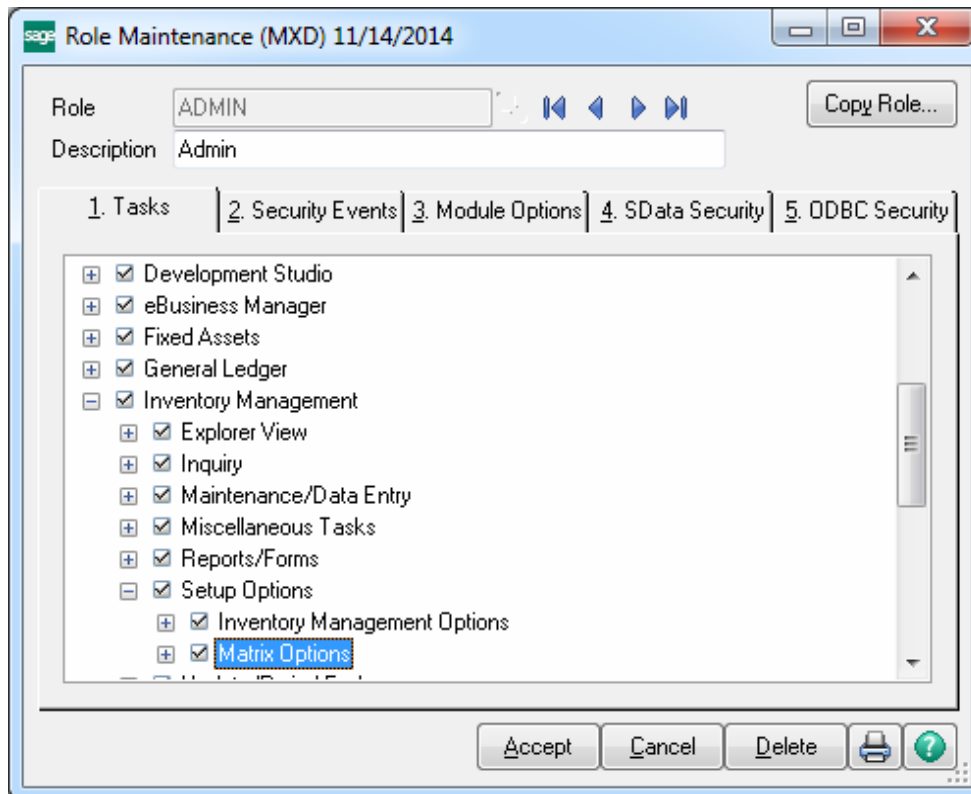
## ODBC Security

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.

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

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, and Packing List** and **Purchase Order** printings.

## Setup

### Matrix Options

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

The **Manual** button allows for viewing MXP enhancement document in PDF format. On the **Main** tab, select options for Matrix Code Categories and grid colors.

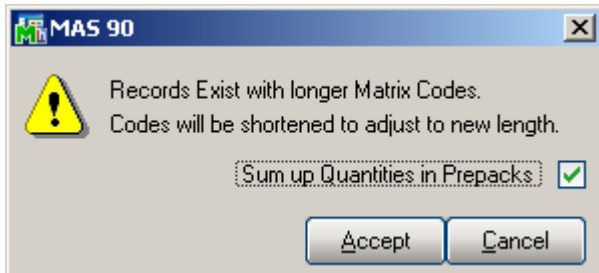
Enter **Descriptions** for **Categories 1** and **2**.

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

The **Lot Number preview** displays the format of the Lot Number with the selected settings. The symbols written in **blue** represent a **Category 1** Code; symbols in **red**

represent a **Category 2** Code. Code symbols are: “S” for String Type Code, “N” for Numeric Type Code.

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



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

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

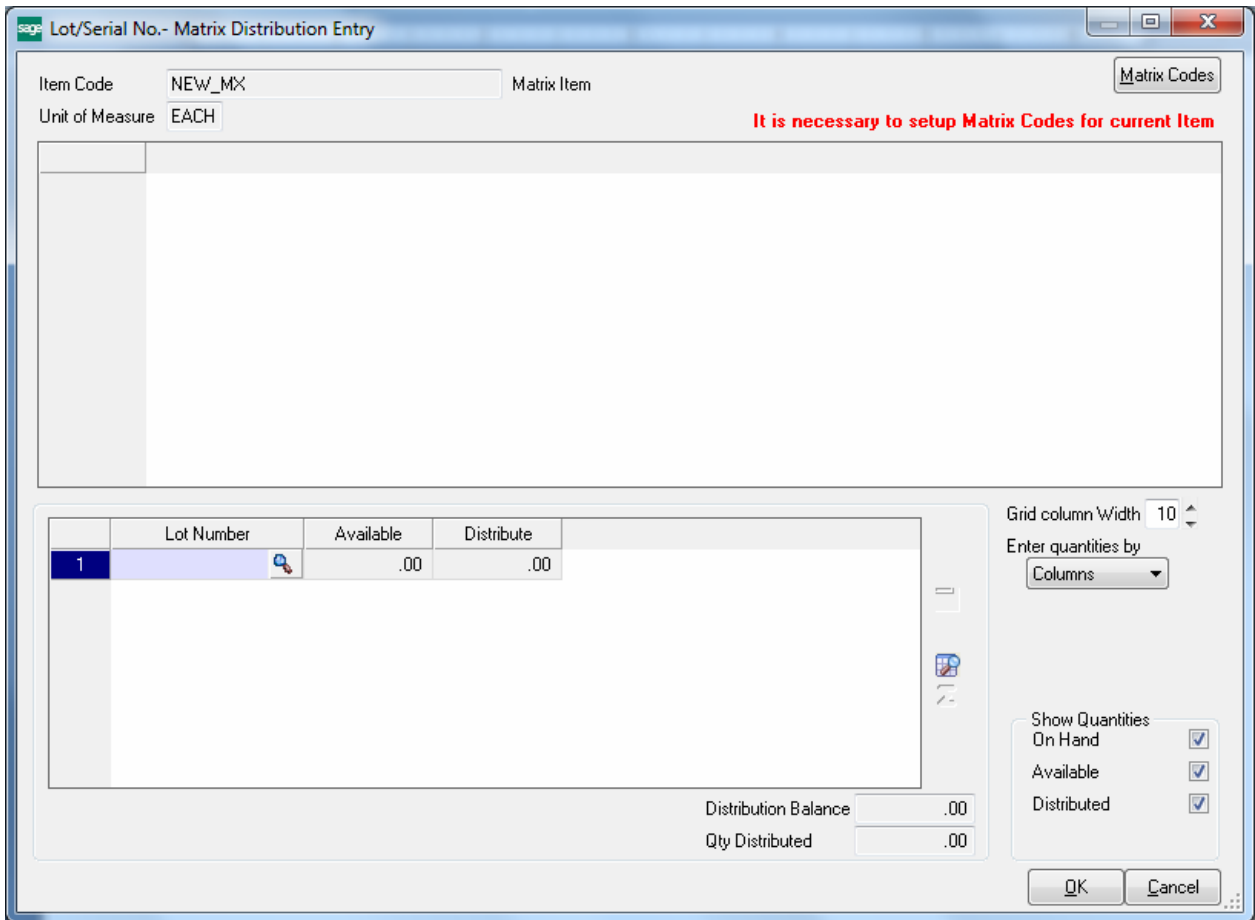
Select a Category in the **Grid cell Text color** field. The text in the cells of the matrix distribution grid will be displayed in the colors assigned to the Codes of the selected Category. Colors are assigned in the **Matrix Code Maintenance** program.

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

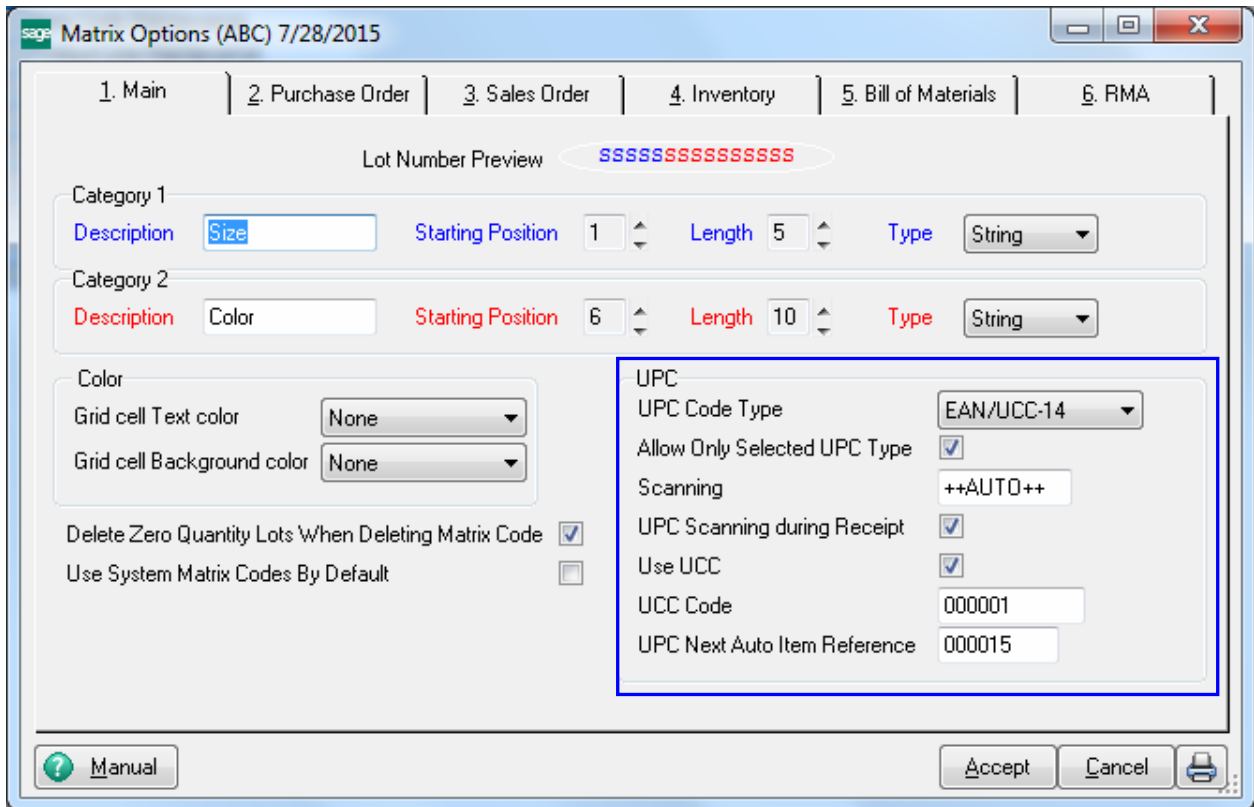
Check the **Delete Zero Quantity Lots When Deleting Matrix Code** box to have deleted the Lot Numbers, which do not have Quantity, corresponding to the Matrix Code being deleted for the item from the **Matrix Code Maintenance**. This option does not affect deletion of the System Matrix Codes.

Check the **Use System Matrix Code by Default** box if you want the System Matrix Codes to be applied by default for Matrix Items not having Matrix Codes setup. This option is not set by default. If this checkbox is not selected in the Matrix Option the user

will be prompted about adding Matrix Codes when entering a Matrix item not having Matrix Codes setup. The Matrix Codes button on the **Matrix Distribution Entry** allows the users, having respective permission, to set up Matrix Codes.



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

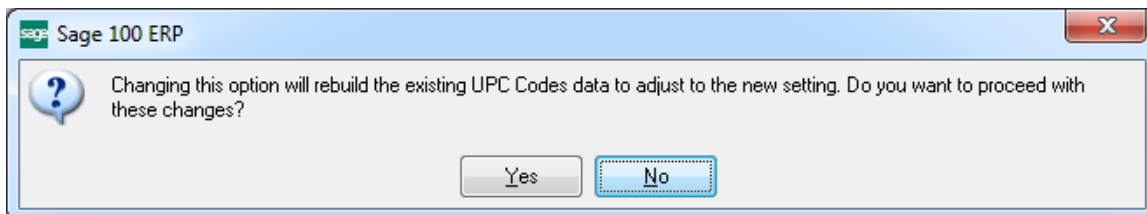


The **UPC Code Type** determines the default length to be used for the code – 12, 13 or 14 digits. The available options are UCC-12, EAN/UCC-13, EAN/UCC-14.

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.



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.

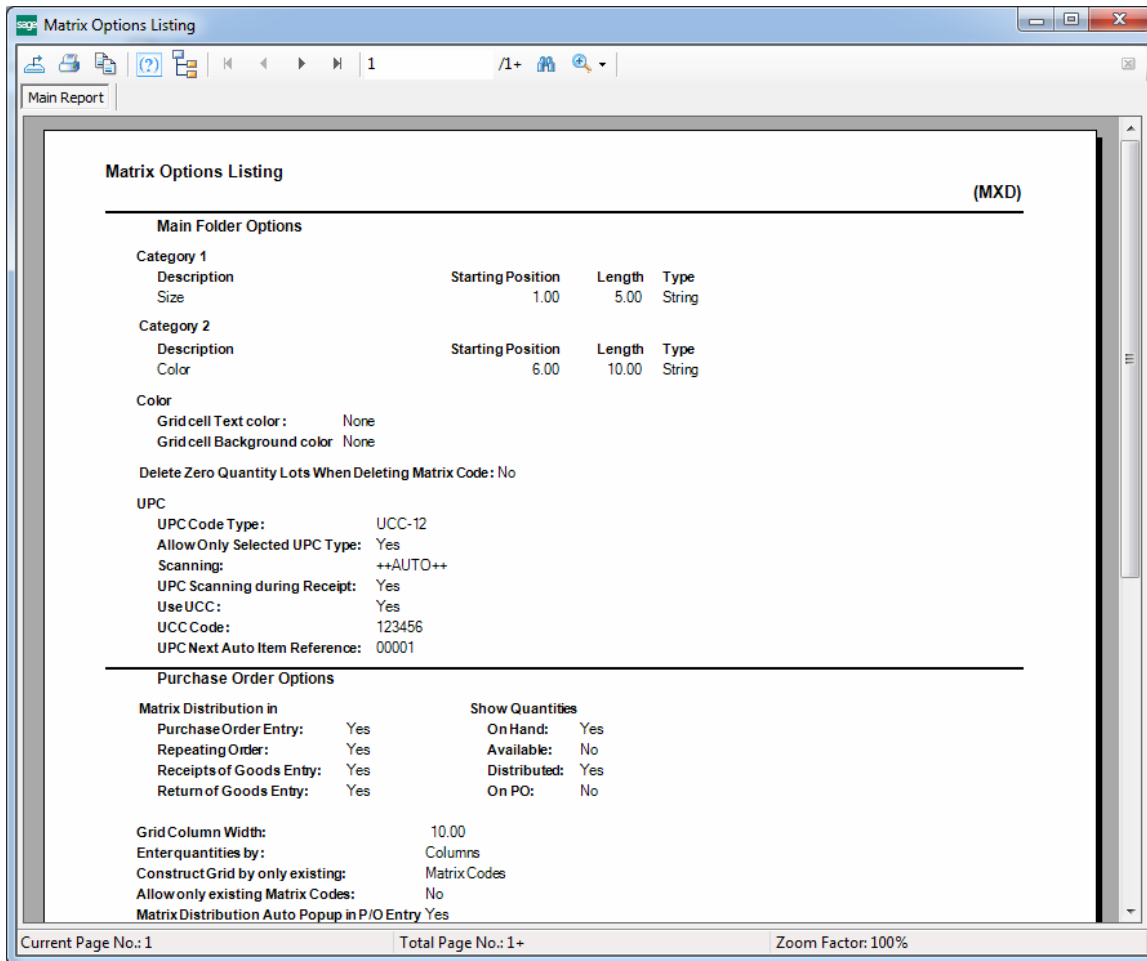
Check the **Use UCC** box, if your company manufactures rather than purchases and sells finished goods

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).

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.

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

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

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



grid. Select **Matrix Codes** to display item Matrix Codes from the **Matrix Code Maintenance**.

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

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

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

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

From the **Remove Lot Distribution from ROG** drop-down list, select **Yes** to remove lot distribution information if Received Quantity is changed to zero in the **Receipt of Goods Entry**. Select **No** not to remove the distribution, or **Prompt** to ask user in each Receipt Of Goods.

If the **Use Cost Discount % with Lot Costing** box is checked the standard **Vendor Cost Discount %** along with **MXP Lot Costing** will be used in Purchase Order Entry and Receipt of Goods Entry. Otherwise only the **MXP Lot Costing** for the selected item, if there is such specified in the MXP Lot Price/ Cost maintenance, will be used.

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

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

If the **Matrix Distribution in Sales Order Entry** is enabled, the Distribution for Matrix items can be also allowed for **Price Quotes**. When the **Price Quote** box is checked, the Matrix Distribution of the Price Quote is 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. In this case, the **Ordered** quantity cannot be entered on the line, and is set equal to the **Quantity Distributed** displayed on the **Matrix Distribution** screen. If the box is checked, it will also popup for non-zero quantities. In this case, the **Quantity Distributed** field on the **Matrix Distribution** screen is not populated and the distribution should be balanced against the quantity entered in the **Ordered** field of the line.

For Back Orders, the **Back Ordered** field is used instead of the **Ordered**.

If the **Matrix Distribution Auto Popup in S/O Entry** box is cleared, the screen will popup only for zero quantities.

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

The screenshot shows the Sage Matrix Options (MXD) 12/3/2014 dialog box. The 'Inventory' tab is selected. The 'Matrix Distribution in' section has checkboxes for 'Inventory Transaction Entry' and 'Physical Count Entry', both checked. The 'Show Quantities' section has checkboxes for 'On Hand' (unchecked), 'Available' (checked), and 'Distributed' (checked). The 'Grid Column Width' is set to 15. The 'Enter quantities by' dropdown is set to 'Columns'. At the bottom are buttons for 'Manual', 'Accept', 'Cancel', and a printer icon.

In the **Matrix Distribution in** section, check the boxes for the entries where the Matrix Distribution screen should popup for Matrix Items instead of the standard **Lot/Serial Distribution** screen.

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

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

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

Matrix Options (MXD) 12/3/2014

1. Main | 2. Purchase Order | 3. Sales Order | 4. Inventory | 5. Bill of Materials | 6. RMA

Matrix Distribution in

Production Entry

Auto Distribute Lines

Disassembly Entry

Show Quantities

On Hand

Available

Distributed

Grid Column Width 15

Enter quantities by Rows

Manual Accept Cancel

In the **Matrix Distribution in** section, check the boxes for the entries where the Matrix Distribution screen should popup for Matrix Items 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 **RMA** tab, select options for **Matrix Distribution** in the programs of the **Work Order** module.

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

Matrix Options (MXD) 12/3/2014

1. Main | 2. Purchase Order | 3. Sales Order | 4. Inventory | 5. Bill of Materials | 6. RMA

Matrix Distribution in

RMA Data Entry

RMA Receipts Entry

Show Quantities

Available

Distributed

Grid Column Width: 15

Enter quantities by: Columns

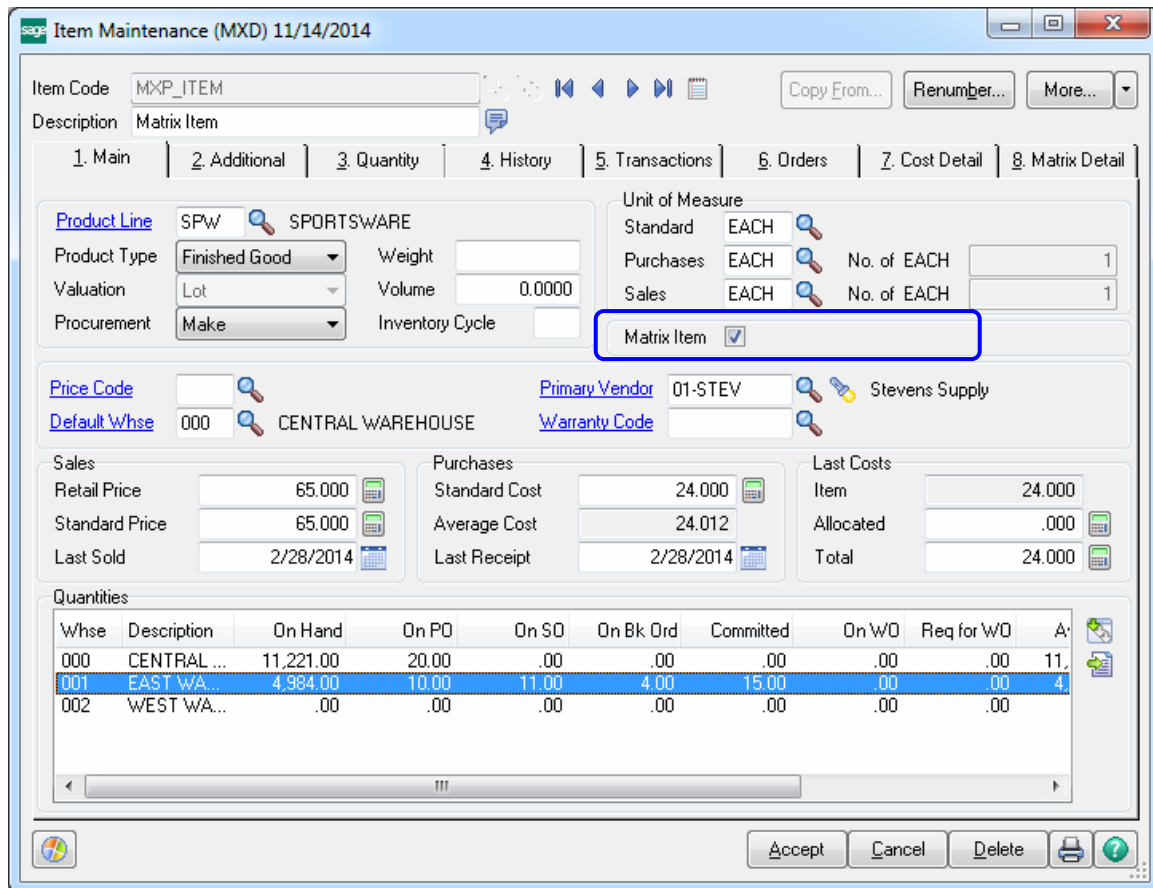
Manual | Accept | Cancel | Print

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.

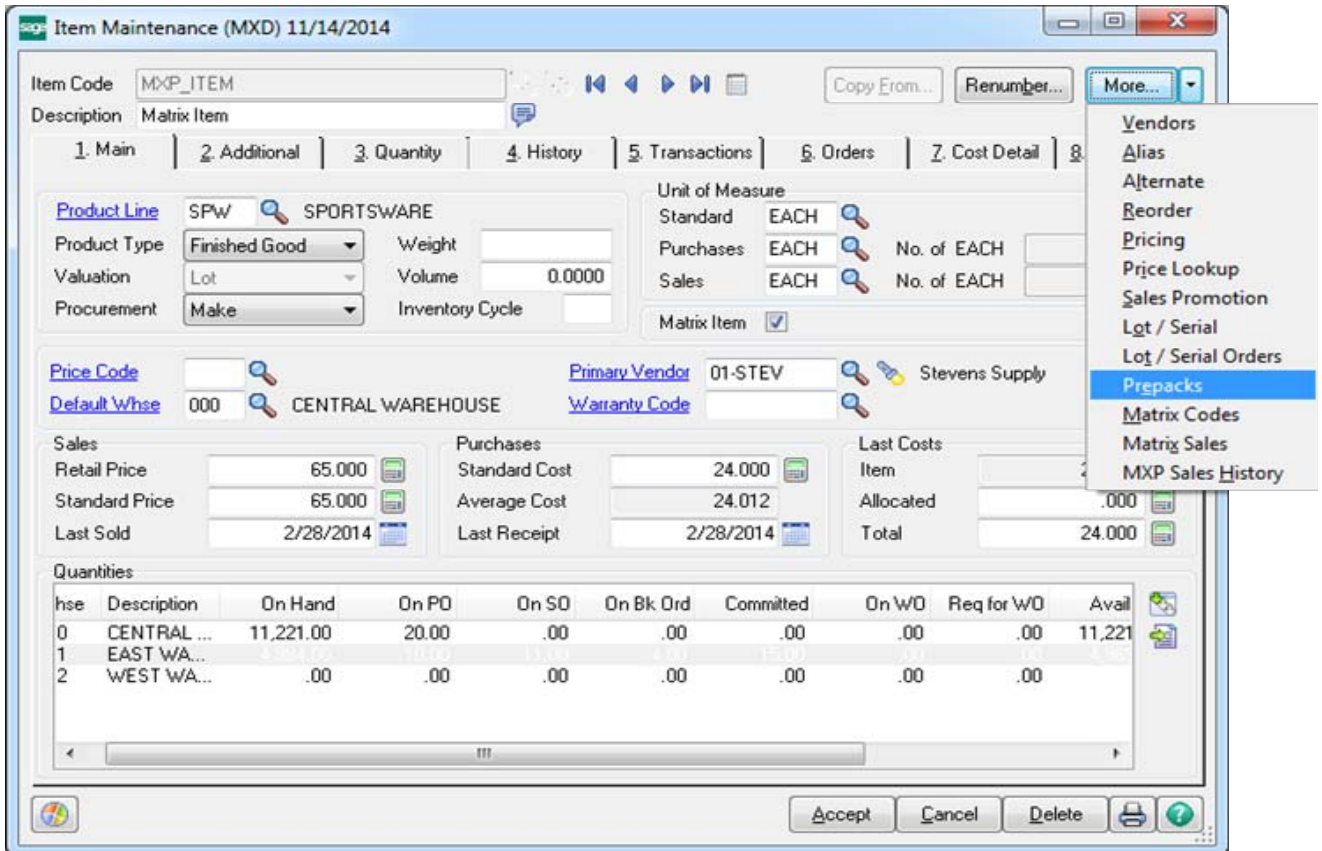
The Show Quantities section, Grid column Width field, and the Enter quantities by drop-down list are the same as on the Purchase Order tab. The settings apply to the programs of the RMA module. Matrix Items

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**.

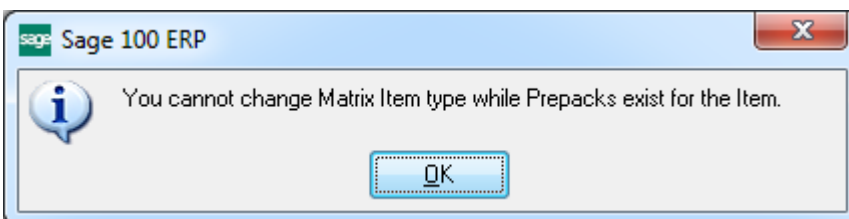


The **Prepacks**, **Matrix Codes**, **Matrix Sales** and **MXP Sales History** buttons are enabled only for Matrix Items.

[Prepacks](#) 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 available. Click the button to display the **Matrix Code Maintenance** screen.

	Matrix Code	Description	R	G	B	Color	Sort
1	L	LARGE	0	255	0	Green	3
2	M	MEDIUM	255	255	128	Yellow	2
3	S	SMALL	255	0	255	Magenta	1
4	XL	EXTRA LARGE	128	0	255	Purple	4
5	XXL	EXTRA EXTRA LARGE	255	255	255	White	5
6	XXXL	XXX LARGE	128	255	255	Cyan	6
7	XXXXL	XXXX LARGE	240	217	238	Pink	7
8			0	0	0		

Here the user can add new matrix codes for current 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.



Customer Sales History

Item Code: MXP\_ITEM Matrix Item

Customer No.: 01-ABF American Business Futures Ship To: 2

Name: American Business Futures

Size: S Color: RED

Period	Ending	Qty Sold	Sales \$	Cost of Sales	Qty Returned
01	Jan 31	.00	.00	.00	.00
02	Feb 28	2.00	130.00	48.00	.00
03	Mar 31	.00	.00	.00	.00
04	Apr 30	.00	.00	.00	.00
05	May 31	.00	.00	.00	.00
06	June 30	.00	.00	.00	.00
07	July 31	.00	.00	.00	.00
08	Aug 31	.00	.00	.00	.00
09	Sept 30	.00	.00	.00	.00
10	Oct 31	.00	.00	.00	.00
11	Nov 30	.00	.00	.00	.00
12	Dec 31	.00	.00	.00	.00
	Total	2.00	130.00	48.00	.00

Year: 2014

You can also drill down to the sales transaction history information

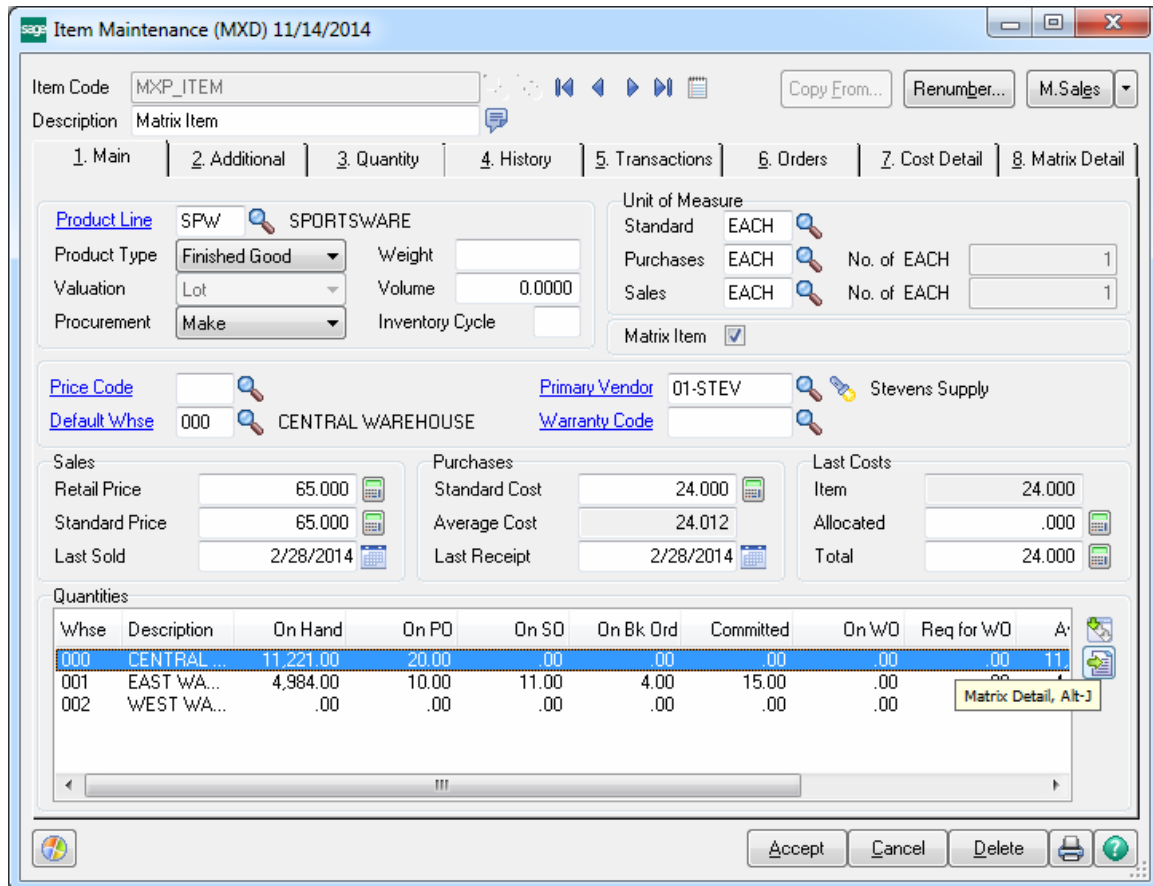
Sales Transaction History

Customer No.: 01-ABF American Business Futures Year: 2014 Period: 02

Item Code: MXP\_ITEM Matrix Item Ship To: 2

Trans Date	Type	Ref No.	Whse	Description	Quantity	Unit Cost	Extension	Item Cost
2/28/2014	SD	0100117...	001	EAST WA...	6.00	24.000	144.00	24.000

The **Matrix Detail** information is available from the Quantity grid on the Main tab and from 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 screenshot shows the SAP Matrix Detail window for Item Code MXP\_ITEM and Warehouse 000 CENTRAL WAREHOUSE. The grid displays quantities for sizes S, M, L, XL, XXL, XXXL, and XXXXL across different color variants. The bottom of the window includes options for 'Show Quantities' (On Hand, Available, On PO) and 'Construct Grid by only existing Matrix Codes'.

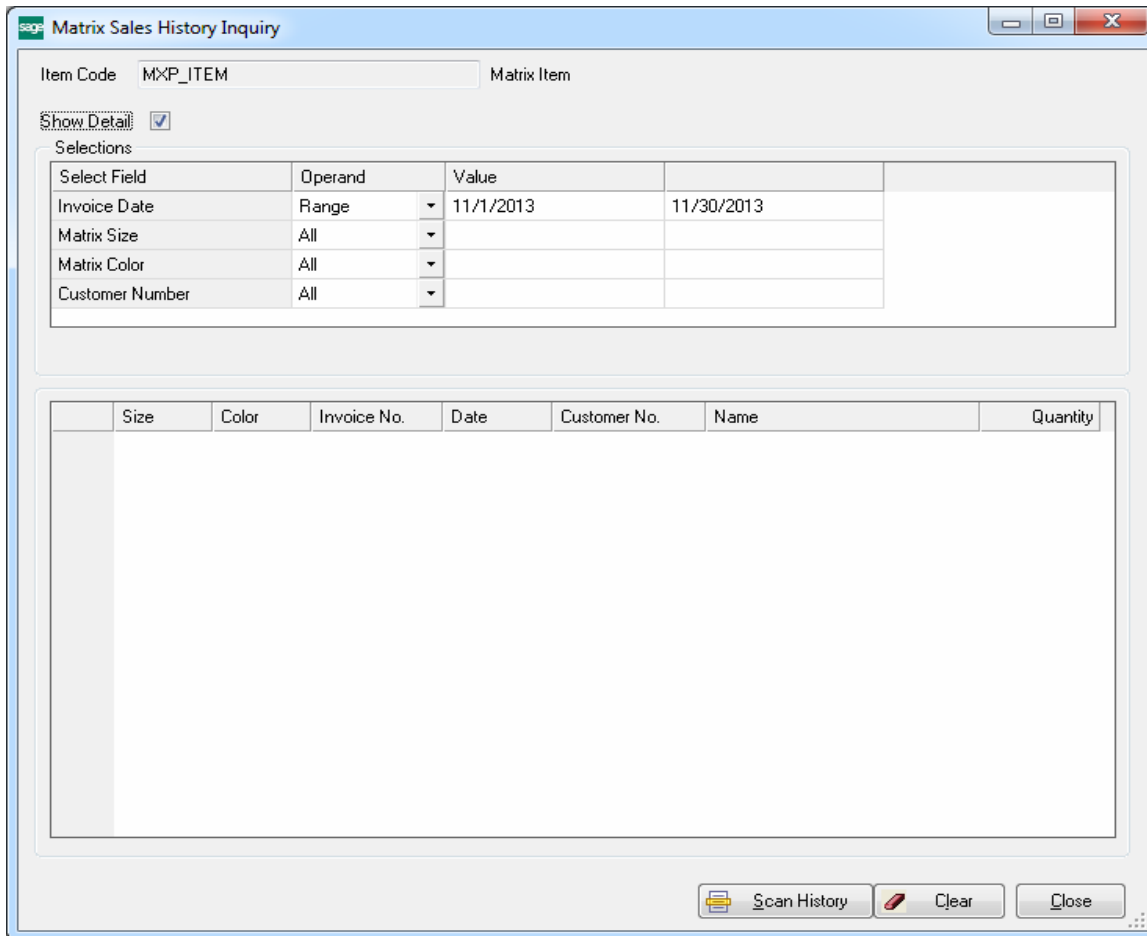
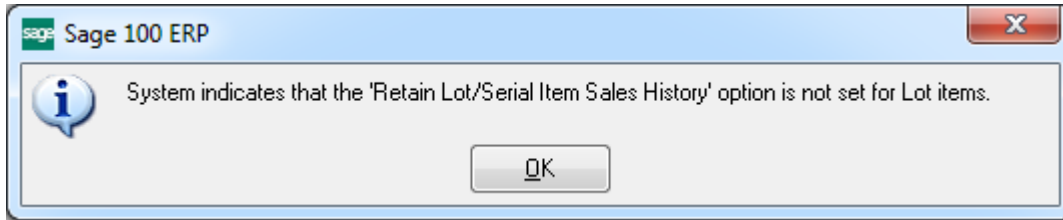
	S	M	L	XL	XXL	XXXL	XXXXL
WHITE	500.00/500.00/0	800.00/800.00/0	95.00/95.00/0	122.00/122.00/0			
BL_LT	500.00/500.00/0	80.00/80.00/0	95.00/95.00/20.00	10.00/10.00/0	50.00/50.00/0	15.00/15.00/0	6.00/6.00
YELL	500.00/500.00/0	80.00/80.00/0	100.00/100.00/0			12.00/12.00/0	8.00/8.00
GR_LT	500.00/500.00/0	100.00/100.00/0	95.00/95.00/0	5.00/5.00/0	10.00/10.00/0	11.00/11.00/0	
GRAY	500.00/500.00/0	100.00/100.00/0	35.00/35.00/0				
RED	500.00/500.00/0	100.00/100.00/0	10.00/10.00/0	10.00/10.00/0	0/0/0	0/0/0	
BLUE	5,000.00/5,000.00/0	89.00/89.00/0			0/0/0	0/0/0	
GREEN	475.00/475.00/0	100.00/100.00/0	8.00/8.00/0	10.00/10.00/0	0/0/0	0/0/0	
	500.00/500.00/0	90.00/90.00/0					

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

If the **Include in Quantity Available** option is set to “Purchase Order” or “PO s and WO s” in the Inventory Management Options the quantity On PO for Matrix Lot will be included in the quantity available calculation and reflected in the quantity available displayed on the Matrix Grid wherever it’s accessible. “On PO” quantity will be included in the availability calculation after the Purchase Order is accepted.

*Note: For Matrix lots the **Include in Quantity Available** option to include **On WO** quantity is not supported.*

Use the **MXP Sales History** popup menu button to view Matrix Item Sales history information by customer and by the Item Matrix codes. It is necessary to have the **Retain Lot/Serial Item History** option set for Lot Items in the Sales Order Options in order to be able to view Matrix **Sales History**, otherwise the following message appears:



**Matrix Sales History Inquiry** window is opened with Item Code defaulted to the one selected in the Item Maintenance.

**Show Detail** flag is set by default to allow viewing detail sales history information by customer, Invoice number, Invoice date.

If this flag is turned off the user may view matrix item sales history only by the Item Matrix Codes and the total quantities sold to customers for the selected period.

The **Invoice Date** is defaulted respectively to starting and ending dates of current inventory period setup in the Inventory Management options.

After making the necessary selections press the **Scan History** button to have the information loaded into the grid:

**Matrix Sales History Inquiry**

Item Code:  Matrix Item

Show Detail

Selections

Select Field	Operand	Value	
Invoice Date	Range	11/1/2013	11/30/2014
Matrix Size	All		
Matrix Color	All		
Customer Number	All		

	Size	Color	Invoice No.	Date	Customer No.	Name	Quantity
	L	BLACK	0100115	1/20/2014	01-ABF	American Business Futures	2.00
	L	GREEN	0100115	1/20/2014	01-ABF	American Business Futures	3.00
	L	RED	0100115	1/20/2014	01-ABF	American Business Futures	3.00
	M	WHITE	0100117	2/28/2014	01-ABF	American Business Futures	3.00
	S	BL_LT	0100117	2/28/2014	01-ABF	American Business Futures	1.00
	S	RED	0100117	2/28/2014	01-ABF	American Business Futures	2.00
	XL	GR_LT	0100115	1/20/2014	01-ABF	American Business Futures	2.00

## Customer Matrix Sales History

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

Click the **Items** menu.

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.

**Customer Sales History**

Customer No. 01-ABF American Business Futures

Item Code Description Size Color Ship To Compare PY

Period	Ending	Qty Sold	Sales \$	Cost of Sales	Qty Returned
01	Jan 31	.00	.00	.00	.00
02	Feb 28	.00	.00	.00	.00
03	Mar 31	.00	.00	.00	.00
04	Apr 30	.00	.00	.00	.00
05	May 31	.00	.00	.00	.00
06	June 30	.00	.00	.00	.00
07	July 31	.00	.00	.00	.00
08	Aug 31	.00	.00	.00	.00
09	Sept 30	.00	.00	.00	.00
10	Oct 31	.00	.00	.00	.00
11	Nov 30	.00	.00	.00	.00
12	Dec 31	.00	.00	.00	.00
	Total	.00	.00	.00	.00

2013

OK

**Customer / Item List**

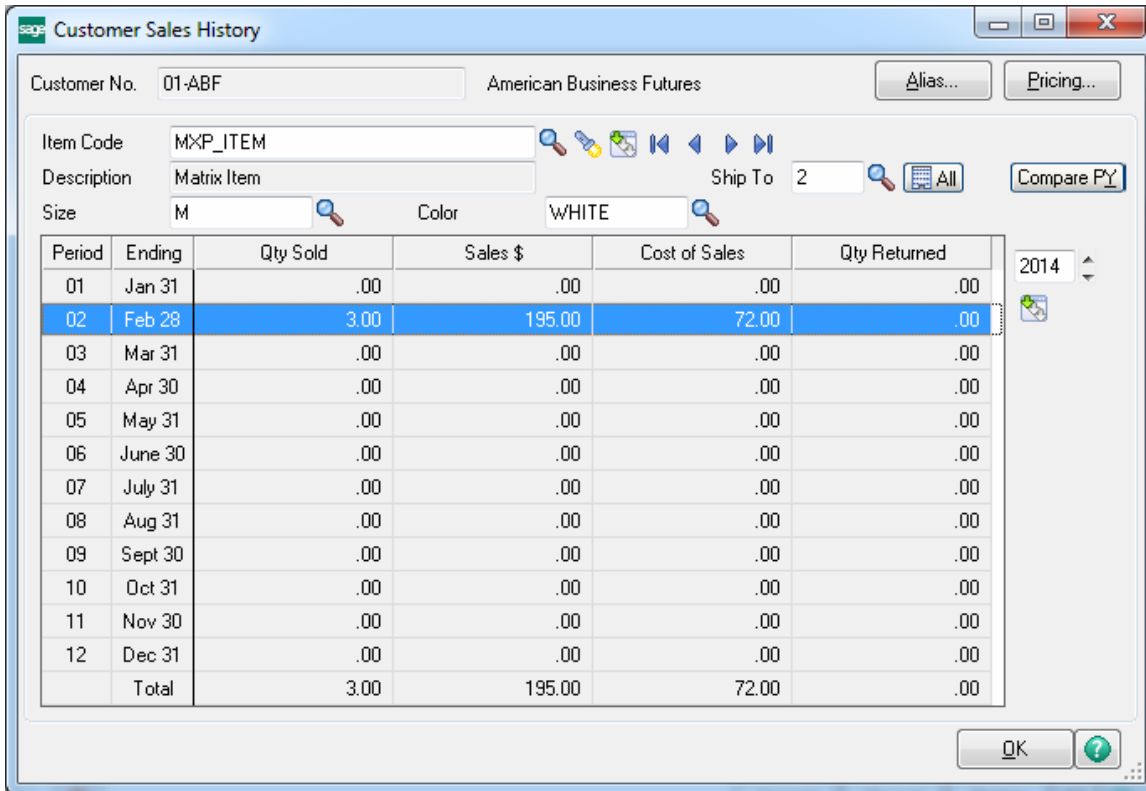
Item Code	Description	Lot Serial No	Ship To Code
BELT_WIDE	WIDE BELT	STD_BLUE	2
BLINKERS	BLINKERS	M_YELL	2
MXP_ITEM	Matrix Item	L_BLACK	2
MXP_ITEM	Matrix Item	L_GREEN	2
MXP_ITEM	Matrix Item	L_RED	2
MXP_ITEM	Matrix Item	M_WHITE	2
MXP_ITEM	Matrix Item	S_BL_LT	2
MXP_ITEM	Matrix Item	S_RED	2
MXP_ITEM	Matrix Item	XL_GR_LT	2
T-SHRT	T-SHIRT	L_GR_LT	2
T-SHRT	T-SHIRT	L_RED	2
T-SHRT	T-SHIRT	S_GR_LT	2
T-SHRT	T-SHIRT	XL_BLUE	2
T-SHRT	T-SHIRT	XL_WHITE	2

Search Item Code Begins with Find

Filters... Custom... Select Cancel

Found 16 records

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



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



Customer No. 01-ABF American Business Futures Year 2014 Period 02  
Item Code MXP\_ITEM Matrix Item Ship To 2

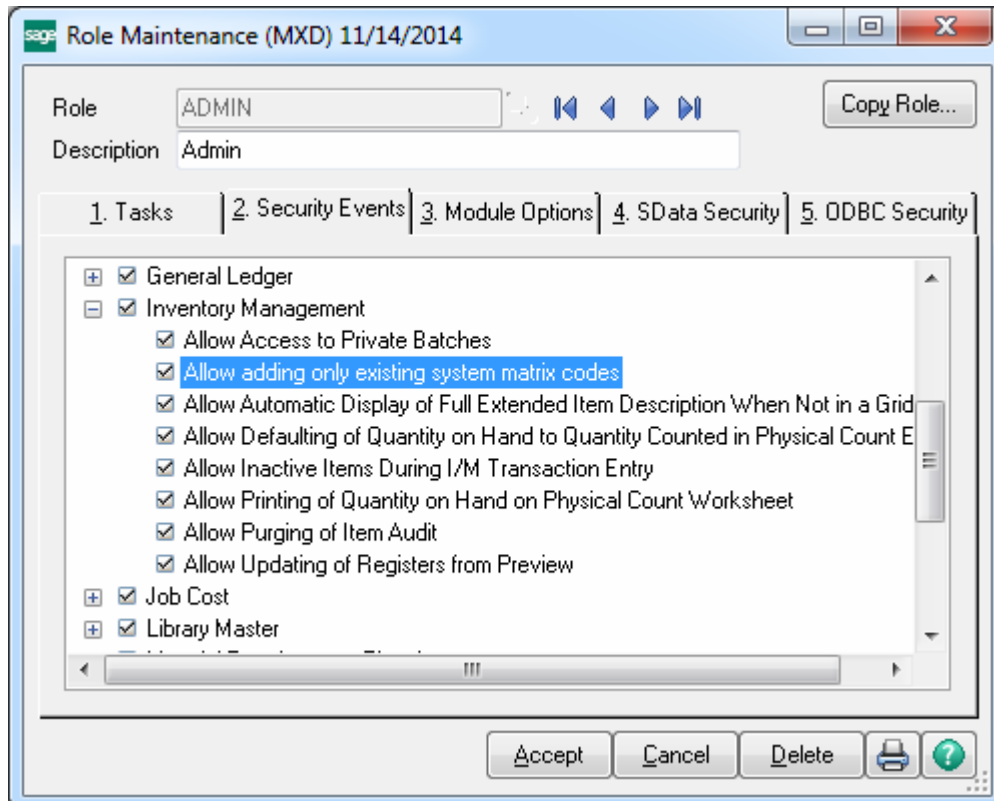
Trans Date	Type	Ref No.	Whse	Description	Quantity	Unit Cost	Extension	Item Cost
2/28/2014	SD	0100117...	001	EAST WA...	6.00	24.000	144.00	24.000

OK ?

## Matrix Codes Setup

### Role Maintenance

The **Allow adding only existing system matrix codes** security event allows only authorized users to add matrix codes for an Item other than the ones already setup in the system.



## Matrix Code Maintenance

Select the **Matrix Code Maintenance** program under the Inventory Management Setup menu. The **System Codes** button allows for adding system level matrix codes, which may be added to any Item as needed.

Matrix Code	Description	R	G	B	Color	Sort
-------------	-------------	---	---	---	-------	------

Upon pressing the **System Codes** button the **Matrix Code Maintenance** is opened with the Item Code defaulted to **\*SYSTEM\_MATRIX\*** with respective Description. Select the **Matrix Code Category Description** (Size/Color) and enter the Matrix Codes corresponding to that category.

Matrix Code Maintenance (MXD) 7/3/2015

Item Code: \*SYSTEM\_MATRIX\*    System Codes    Add From...  
 Description: \*SYSTEM MATRIX CODES\*    UPC

Matrix Code Category Description: Size







	Matrix Code	Description	R	G	B	Color	Sort
1	L	LARGE	255	255	255		3
2	S	SMALL	255	255	255		1
3	XL	EXTRA LARGE	255	255	255		4
4	XXL	EXTRA EXTRA LARGE	255	255	255		5
5	XXXL	THE LARGEST	255	255	255		6
6			0	0	0		

Accept    Cancel    Delete

Matrix Code Maintenance (MXD) 7/3/2015

Item Code: \*SYSTEM\_MATRIX\*    System Codes    Add From...  
 Description: \*SYSTEM MATRIX CODES\*    UPC

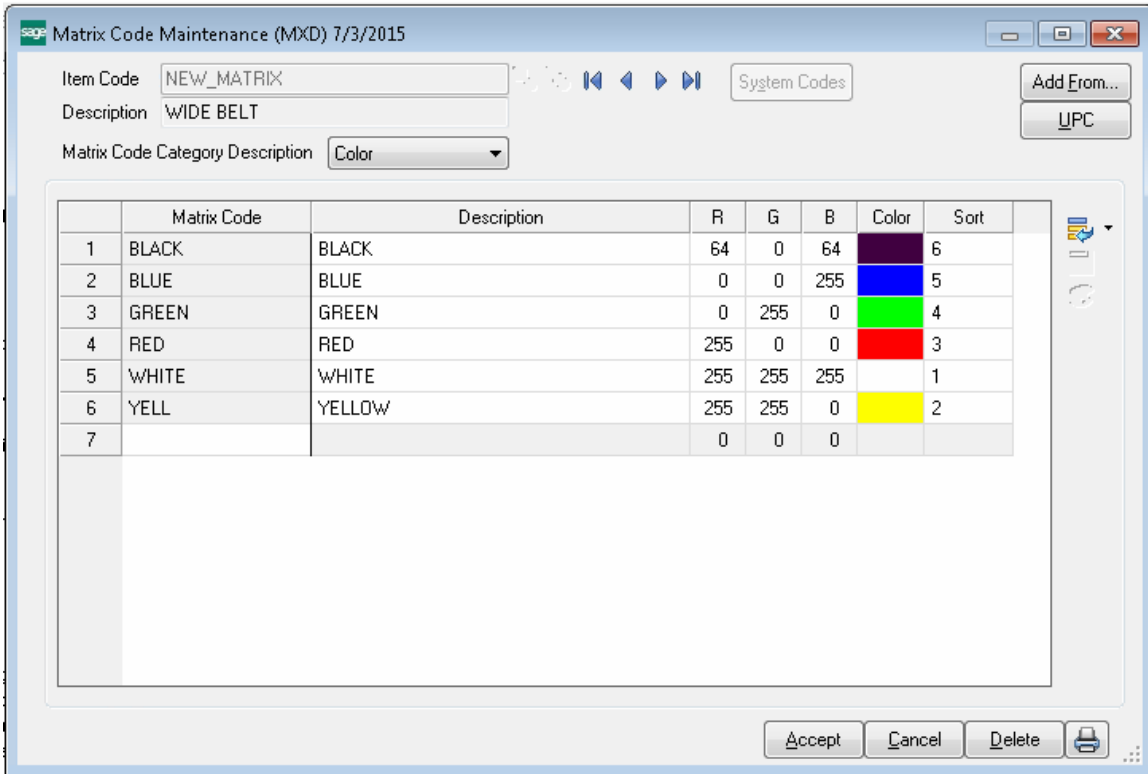
Matrix Code Category Description: Color

	Matrix Code	Description	R	G	B	Color	Sort
1	BLACK	BLACK	64	0	64		6
2	BLUE	BLUE	0	0	255		5
3	GREEN	GREEN	0	255	0		4
4	RED	RED	255	0	0		3
5	WHITE	WHITE	255	255	255		1
6	YELL	YELLOW	255	255	0		2
7			0	0	0		

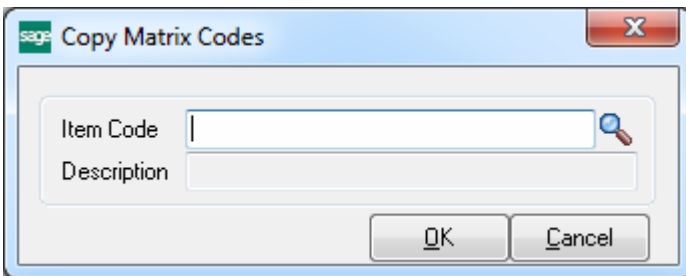
Accept    Cancel    Delete

You may enter also Description; specify the color either by entering respective R, G, and B codes or by selecting from color palette. The **Sort** field allows for setting the order of Matrix Codes displayed in the Matrix Distribution Grids.

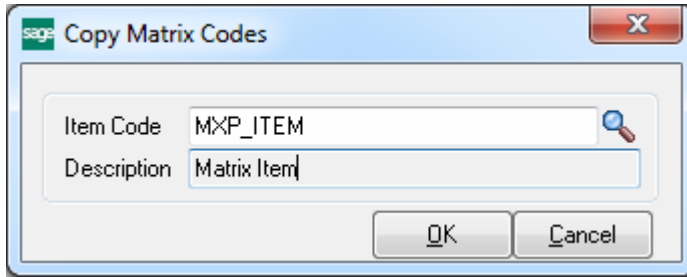
The **Add From** button allows for copying Matrix Codes from any item to the selected item's Matrix Codes.



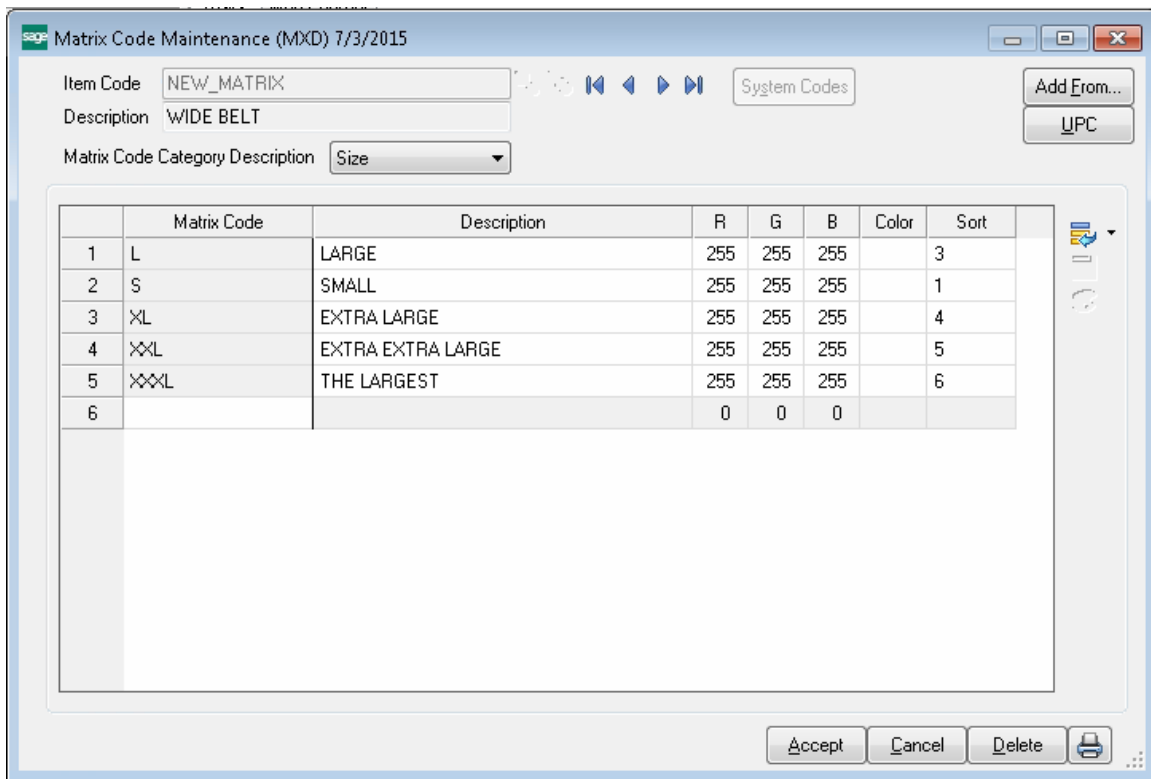
The **Copy Matrix Codes** window is opened upon pressing the **Add From...** button



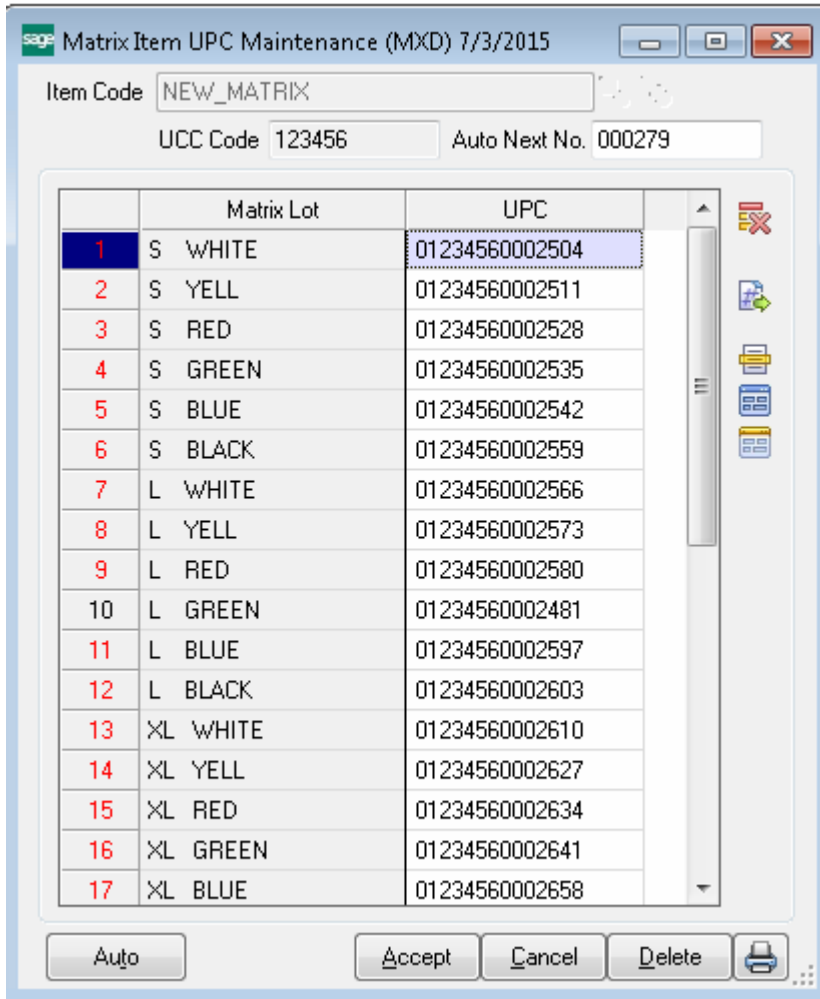
Select an Item you want the Matrix Codes to be copied from and press OK.



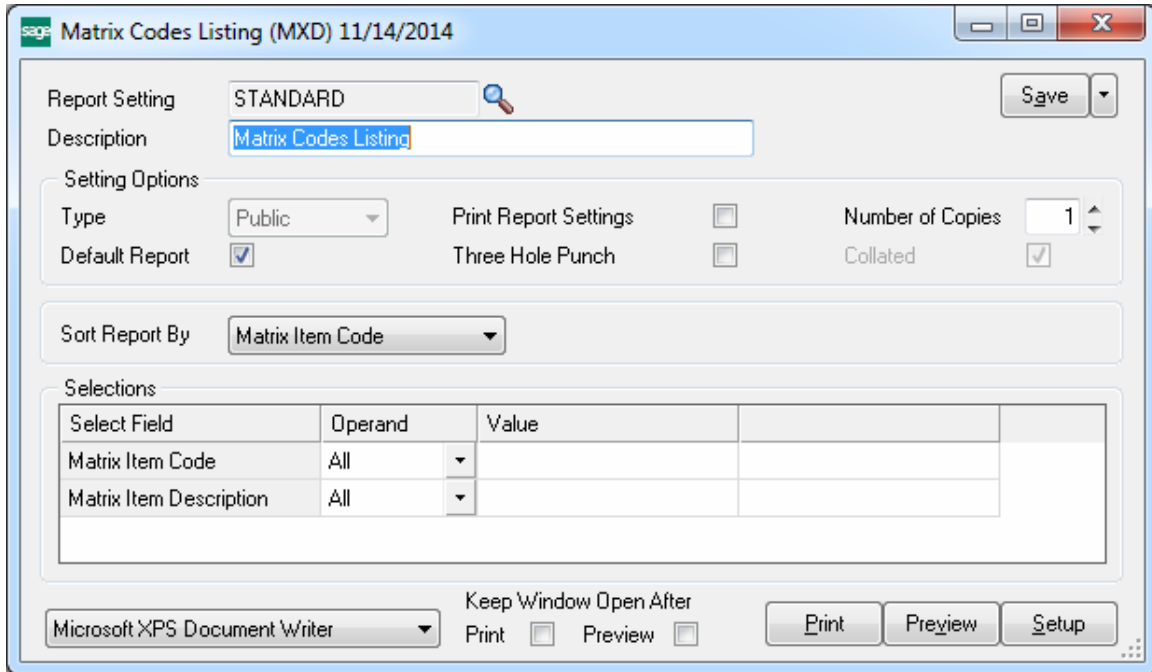
The Matrix Codes already entered for the destination Item will be retained, and the copied Codes will be added. If the Code being copied already exists, it is retained with all options and not overwritten by the added Code.



The **UPC** button links to **Matrix Item UPC Code Maintenance** for the selected Item. If there are UPC codes already generated for current Item Matrix Lots, they will be loaded.

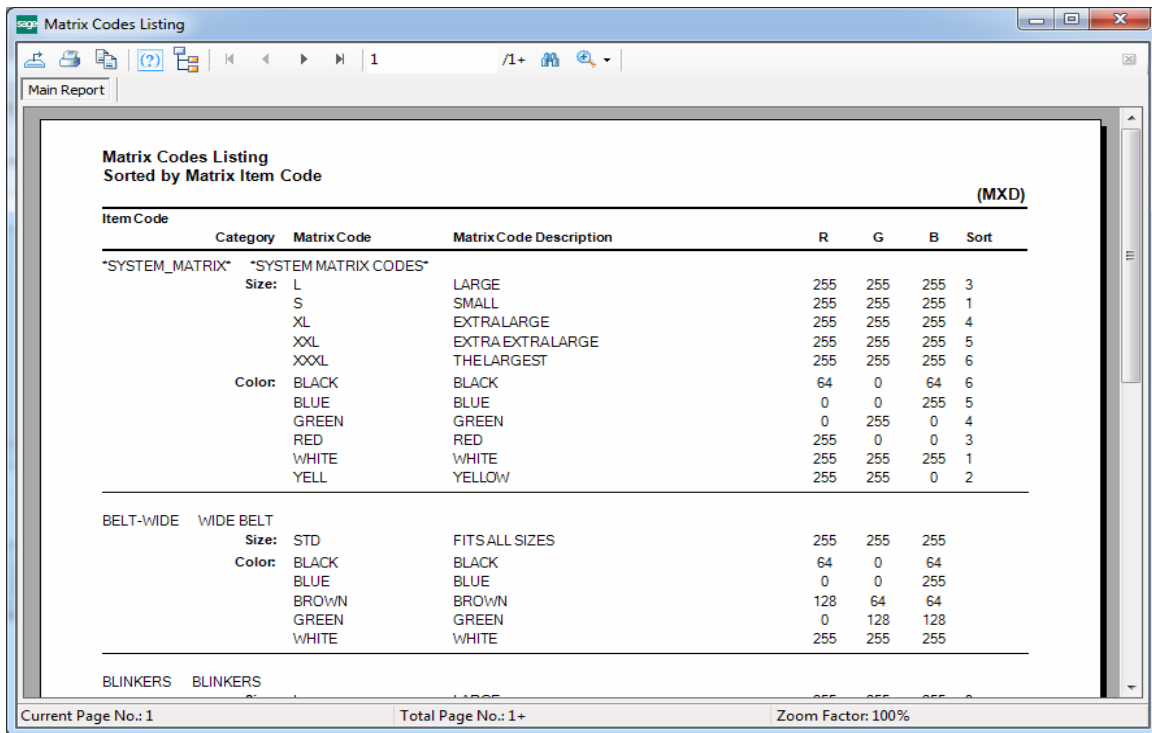


Print button allows printing the Matrix Codes listing:



The report can be printed sorted by Matrix Item Code or Matrix Item Description. Default setting is Matrix Item Code.

Here is an example of printout for the report sorted by Matrix Item Code:



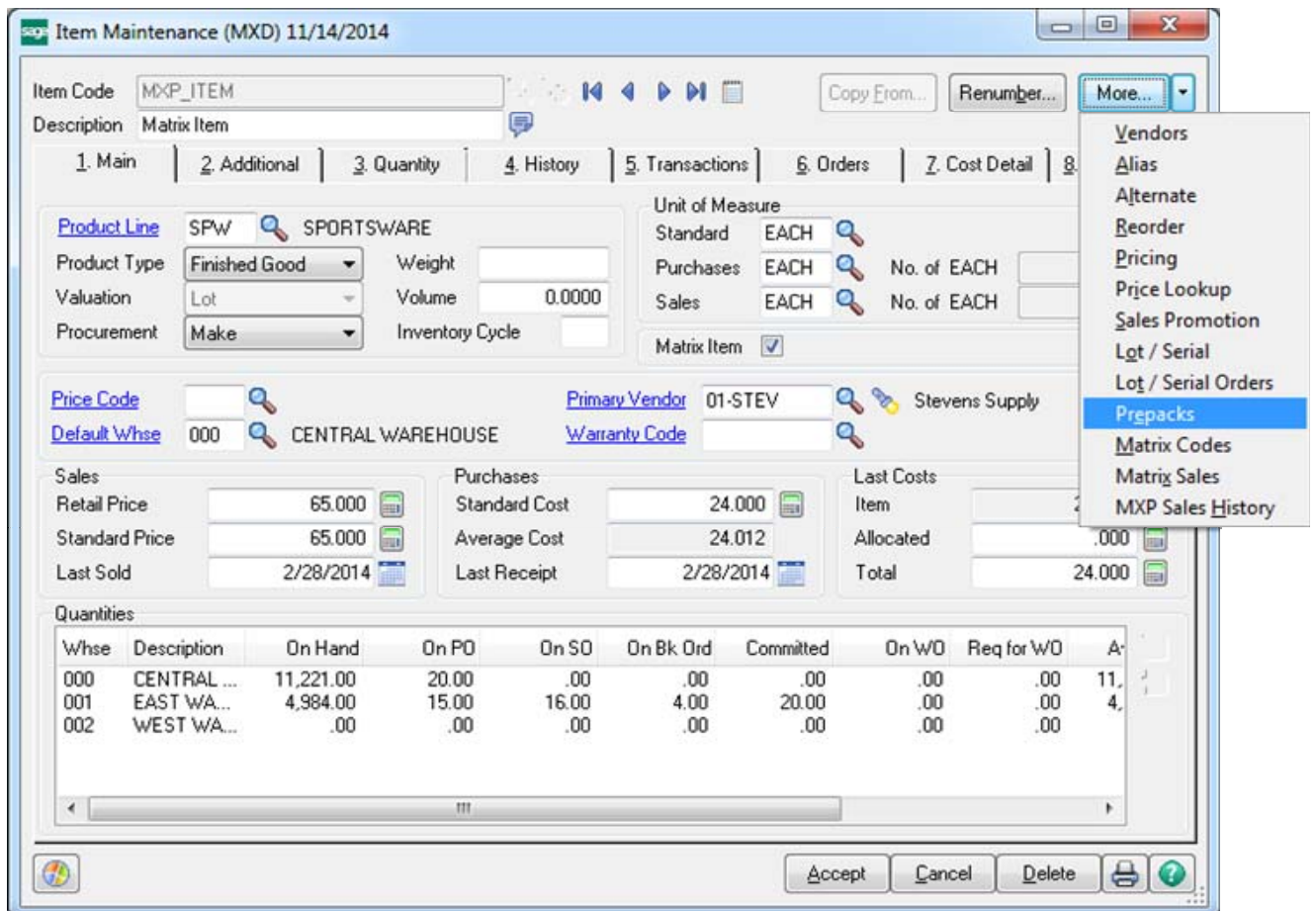
This report is accessible also from Inventory Management Reports menu.



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.

## Prepacks

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



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

Prepack Code Maintenance (MXD) 11/14/2014

Item Code: MXP\_ITEM Matrix Item

Customer No.:

Prepack Code: STD

Description: Standard

Enter quantities by: Columns

	S	M	L	XL	XXL	XXXL	XXXXL
WHITE	1.00	.00	1.00	.00	.00	.00	.00
BL_LT	.00	.00	.00	.00	.00	.00	.00
YELL	3.00	.00	.00	3.00	.00	.00	.00
GR_LT	.00	.00	.00	.00	.00	.00	.00
GRAY	.00	.00	.00	.00	.00	.00	.00
RED	.00	.00	.00	.00	.00	.00	.00
BLUE	.00	.00	.00	.00	.00	.00	.00
GREEN	1.00	.00	1.00	1.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00

Accept Cancel Delete

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:

Prepack Code Maintenance (MXD) 11/14/2014

Item Code: MXP\_ITEM Matrix Item  
Customer No.: 01-ABF American Business Futures

Prepack Code: LSIZE  
Description: L\_Size Items  
Enter quantities by: Columns

	S	M	L	XL	XXL	XXXL	XXXXL
WHITE	.00	.00	2.00	.00	.00	.00	.00
BL_LT	.00	.00	3.00	.00	.00	.00	.00
YELL	.00	.00	1.00	.00	.00	.00	.00
GR_LT	.00	.00	4.00	.00	.00	.00	.00
GRAY	.00	.00	3.00	.00	.00	.00	.00
RED	.00	.00	3.00	.00	.00	.00	.00
BLUE	.00	.00	2.00	.00	.00	.00	.00
GREEN	.00	.00	4.00	.00	.00	.00	.00
	.00	.00	2.00	.00	.00	.00	.00

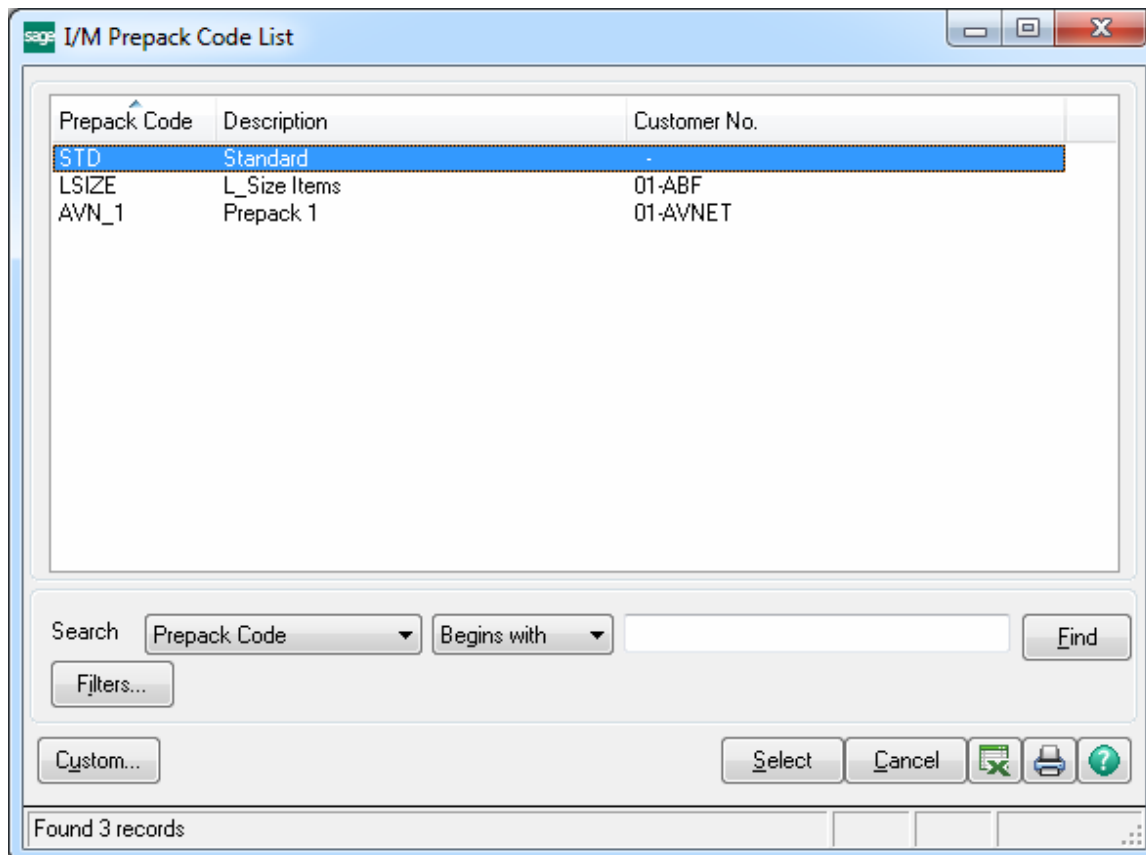
Accept Cancel Delete

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**). 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 **Accept**. Click **Cancel** to clear all the changes for the selected/entered **Prepack Code**. Click **Delete** to delete the selected **Prepack Code**.

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 the 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 **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

### Matrix Item UPC Maintenance

The **Matrix Item UPC Maintenance** program under the **Inventory Management Setup** menu allows for assigning UPC Codes to the Matrix Lot.

	Matrix Lot	UPC
22	L GR_LT	01234560002085
23	L GRAY	01234560002092
24	L RED	01234560002092
25	L GREEN	01234560002078
26	L BLACK	01234560002108
27	XL WHITE	01234560002115
28	XL BL_LT	01234560002122
29	XL GR_LT	01234560002139
30	XXL BL_LT	01234560002146
31	XXL GR_LT	01234560002153
32	XXXL BL_LT	01234560002160
33	XXXL YELL	01234560002177
34	XXXL GR_LT	01234560002184
35	XXXXLBL_LT	01234560002283
36	XXXXLYELL	01234560002290
37		

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** settings configured in the **Matrix Options**.

The **Assign UPC** button allows for assigning a UPC code to the selected line.



Load All Existing Lots, Alt-S

- this button allows loading all existing lots for the selected Item from IM\_ItemCost table.



Load Existing Matrix Codes, Alt-L

-this button allows loading all Matrix Codes setup for current Item in the Matrix Code Maintenance.



Load System Matrix Codes, Alt-M

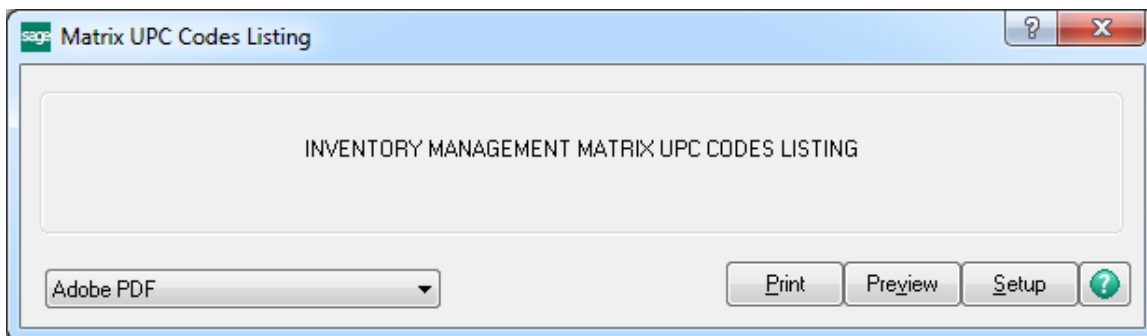
- this button allows loading the System Matrix Codes setup in the system.

The **Auto** button allows for assigning 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.

Print button allows for printing the Matrix UPC Codes Listing:



Here is an example of printout:

Matrix Item UPC Codes Listing (MXD)

Item Code	Description Matrix Lot	UPC
MXP_ITEM	MatrixItem	
	L BLACK	01234560002108
	L BL_LT	01234560002047
	L GRAY	01234560002092
	L GREEN	01234560002078
	L GR_LT	01234560002085
	L RED	01234560002061
	L WHITE	01234560002030
	L YELL	01234560002054
	M BLACK	01234560002191
	M BLUE	01234560002207
	M BL_LT	01234560002214
	M GRAY	01234560002221
	M GREEN	01234560002238
	M GR_LT	01234560002245
	M RED	01234560002252
	M WHITE	01234560002269
	M YELL	01234560002276
	S BLACK	01234560002023
	S BLUE	01234560002009
	S BL_LT	01234560001958
	S GRAY	01234560002016
	S GREEN	01234560001989
	S GR_LT	01234560001996
	S RED	01234560001977

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

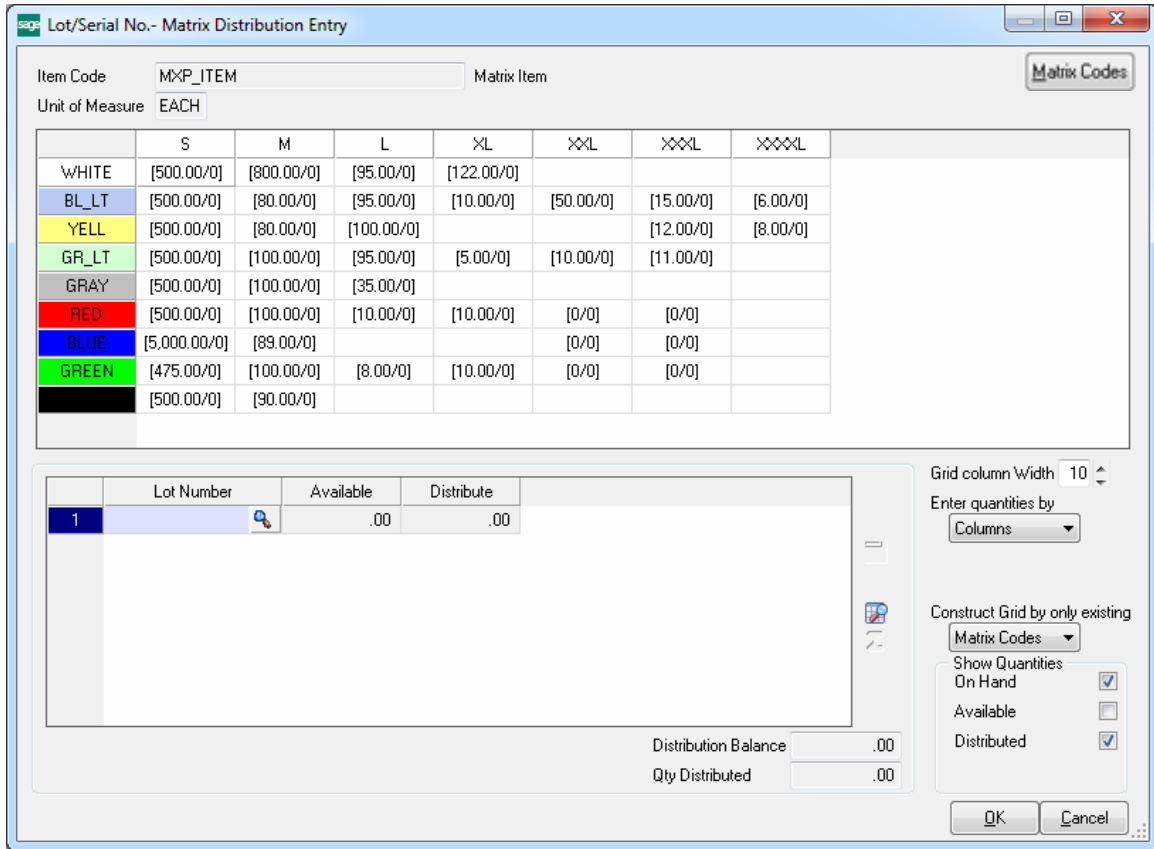
## Matrix Distribution

### Purchase Order Entry

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

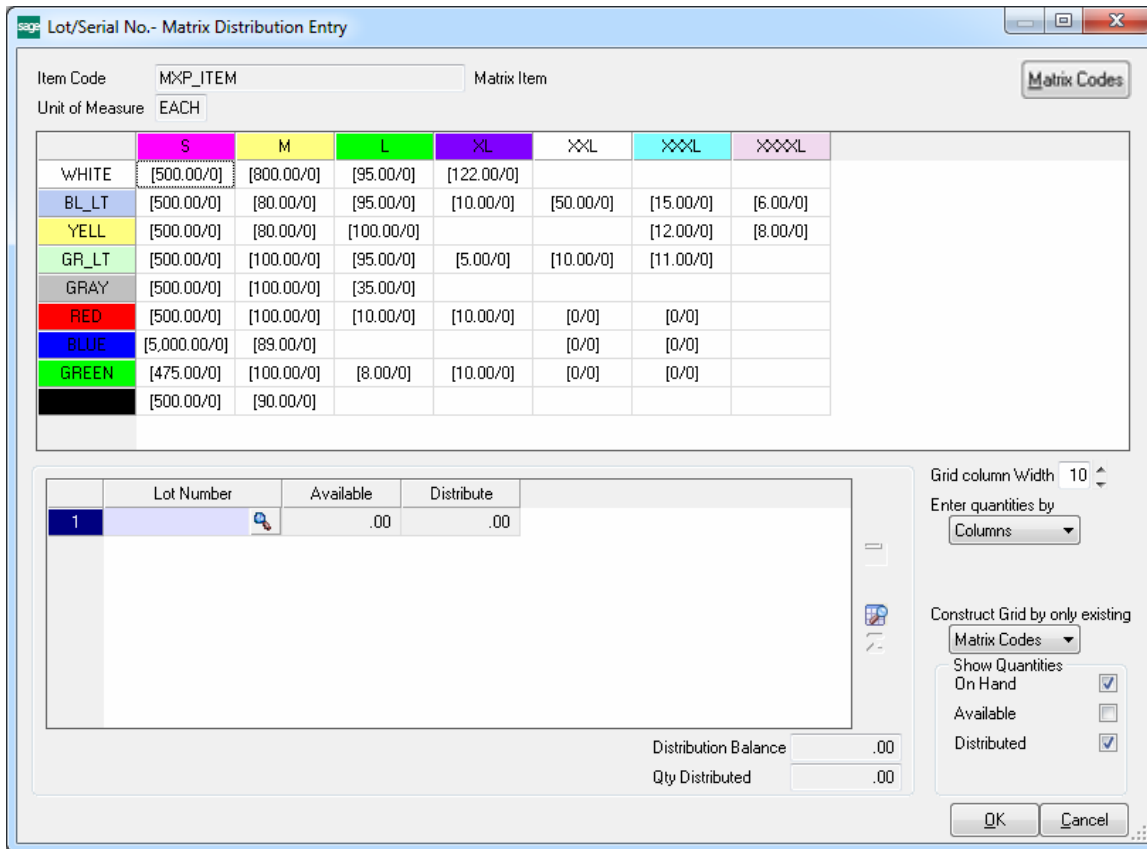
The Matrix Distribution is allowed for Standard Order Type and Repeating Orders (if corresponding checkbox is selected on the Purchase Order tab of the Matrix Options). For Repeating Orders the distributed quantities are not committed to the corresponding warehouse.

In the Lines tab, select a Matrix Item. If the Purchase Order Entry box is checked in the “**Matrix Distribution in**” section of the **Matrix Options** on the **Purchase Order** tab, the following **Matrix Distribution Entry** screen is displayed.



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 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.

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 order.

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 Lot Numbers (they are listed on the Lot Numbers List) already exist. Select Matrix Codes to display all Matrix Codes for the selected item from the Matrix Code Maintenance.

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 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.

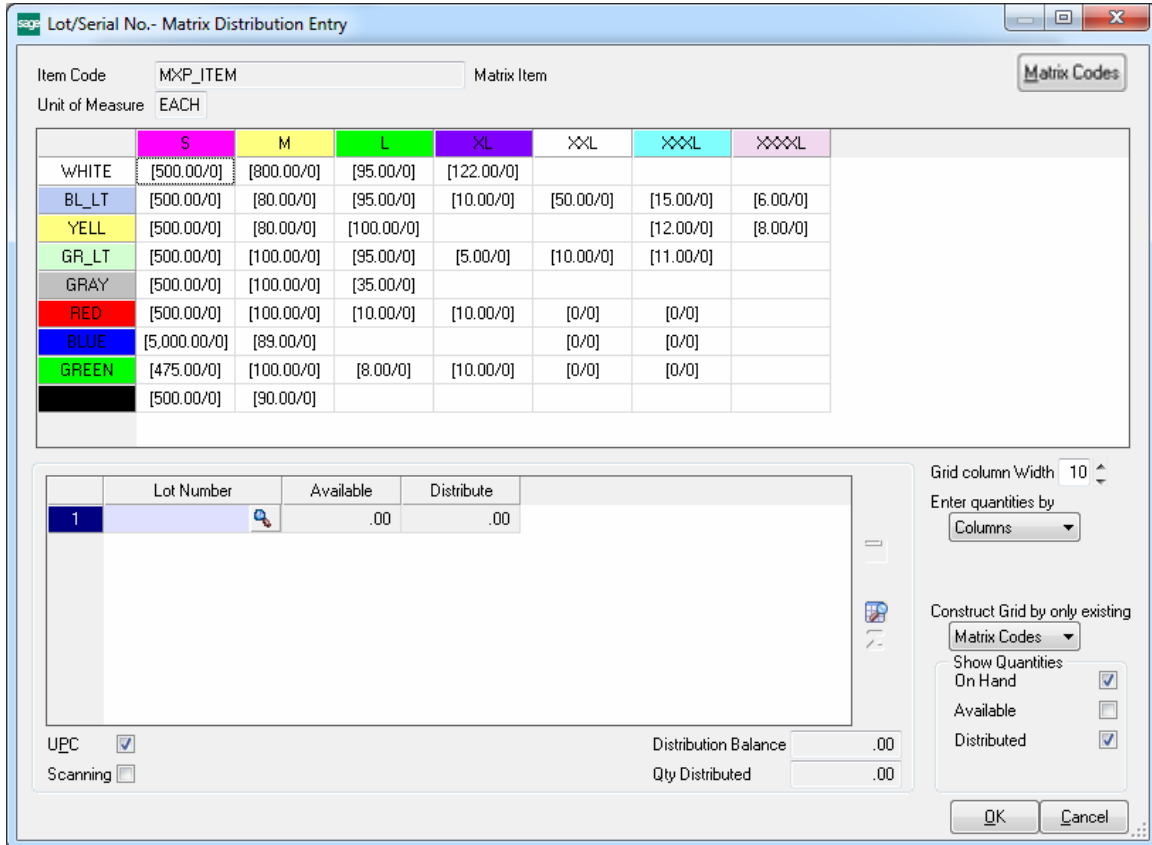
The **Distribution Balance** field displays the difference of Quantity Ordered and Quantity Distributed in the Matrix Distribution.

If the **Matrix Distribution Auto Popup in P/O Entry** box is cleared in the Matrix Options, the Quantity Distributed button is enabled only after entering the Quantity Ordered and the Matrix Distribution grid is auto popup upon moving the focus from the line.

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.

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.

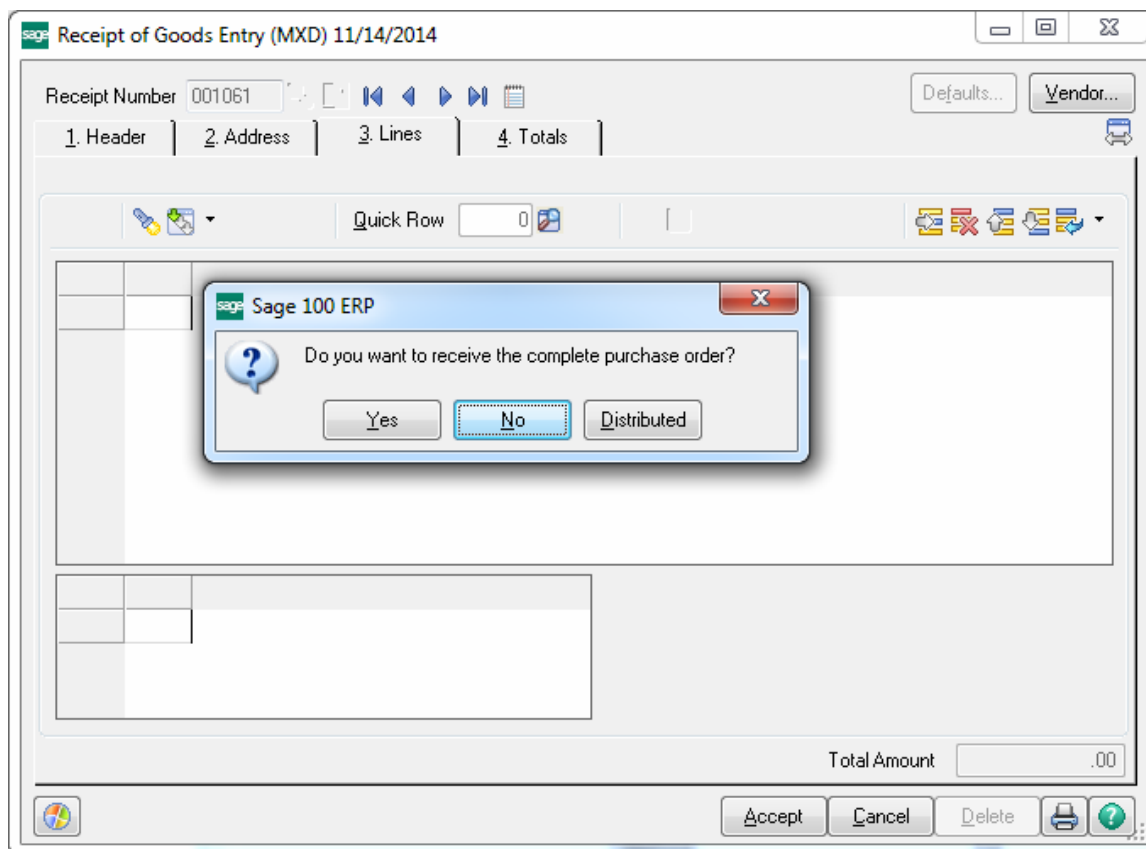
The **Quantity On PO** field displays the distributed quantities on Purchase Order.

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 is treated as regular Lot Number.

The **Scanning** sequence ( ++UPC++ by default) specified in the **UPC** section of **Matrix 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**.

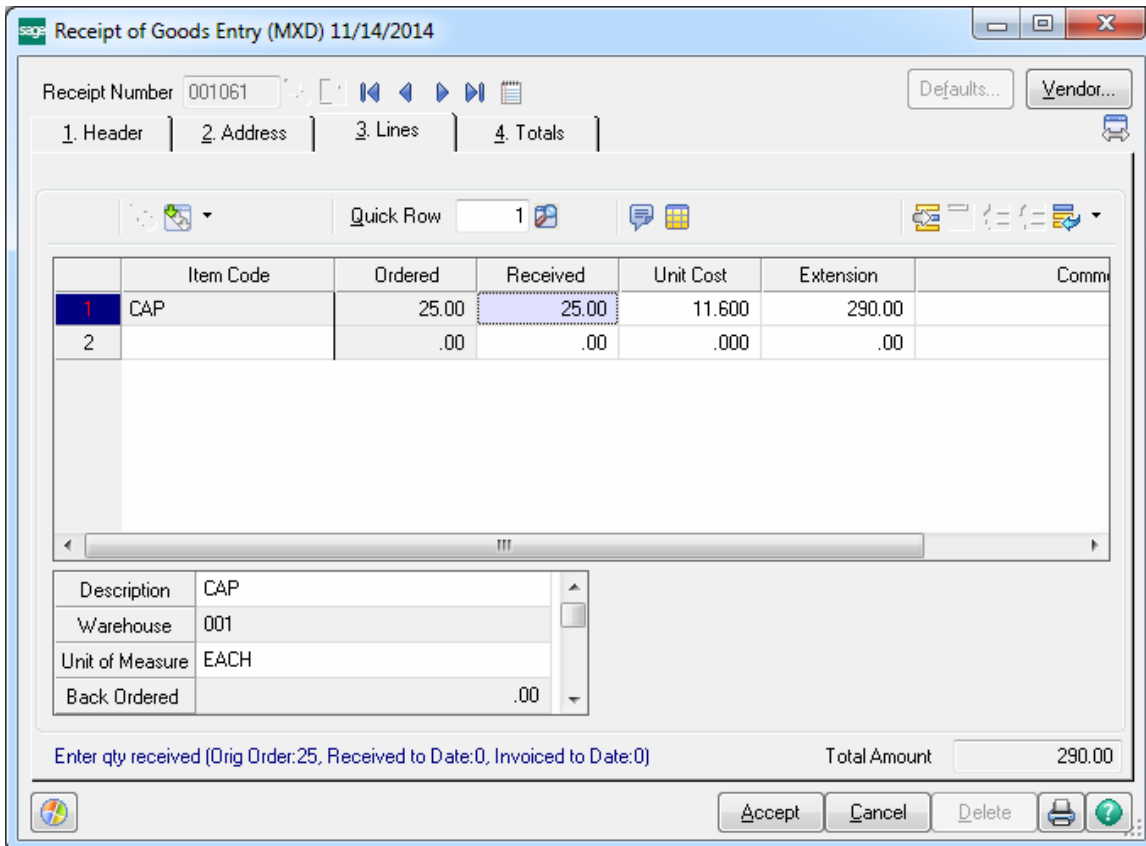
In this case the matrix item distribution is carried over from the Purchase Order to the Receipt. If the entire quantity distributed in the Purchase Order is not received, and the distribution of the Order is changed in the Receipt entry so that to back order the quantities from the same Matrix/Lots;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

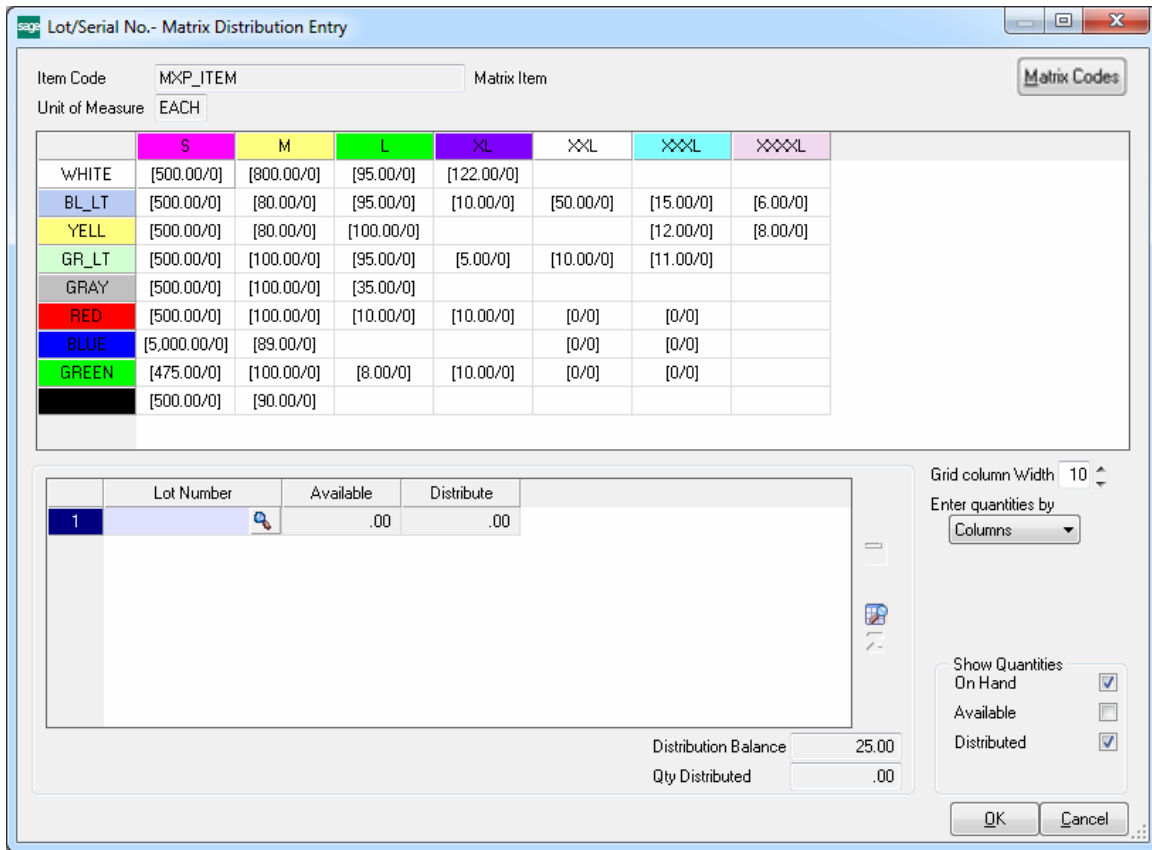
Selecting **Distributed** will load the lines of PO with the **Quantity Received** set equal to the quantities distributed in the Purchase Order and the quantities not distributed in the PO will be set as Backordered Quantity.



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.

	Item Code	Ordered	Back Ordered	Unit Price	Extension	Comment
1	MXP_ITEM	10.00	.00	65.000	650.00	
2		.00	.00	.000	.00	

Description: Matrix Item  
Warehouse: 001  
Unit Of Measure: EACH  
Shipped: .00

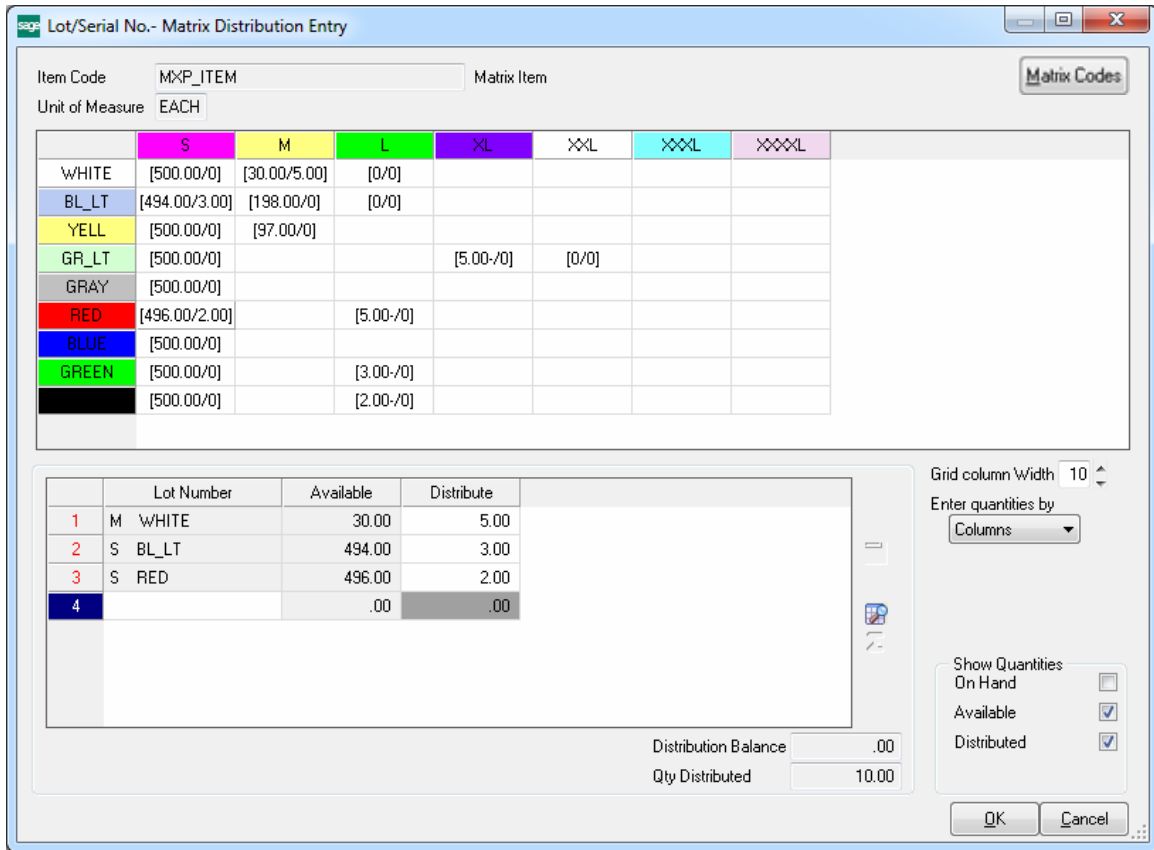
Available Quantity in this Warehouse is 4964 EACH  
Total Amount: 650.00

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.

If the **Matrix Distribution Auto Popup in S/O Entry** box is checked in the Options, the distribution screen is automatically popup when focus falls into the Ordered field.

If a UPC Code is scanned, when the focus is in the **Item Code** field, the program checks if the scanned UPC code is assigned to any Lot Number of the selected item, and auto distributes by that 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 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 in Price Quote** box is checked in the **Matrix Options**, the distribution for Matrix items is also available for Price Quote Sales Orders.

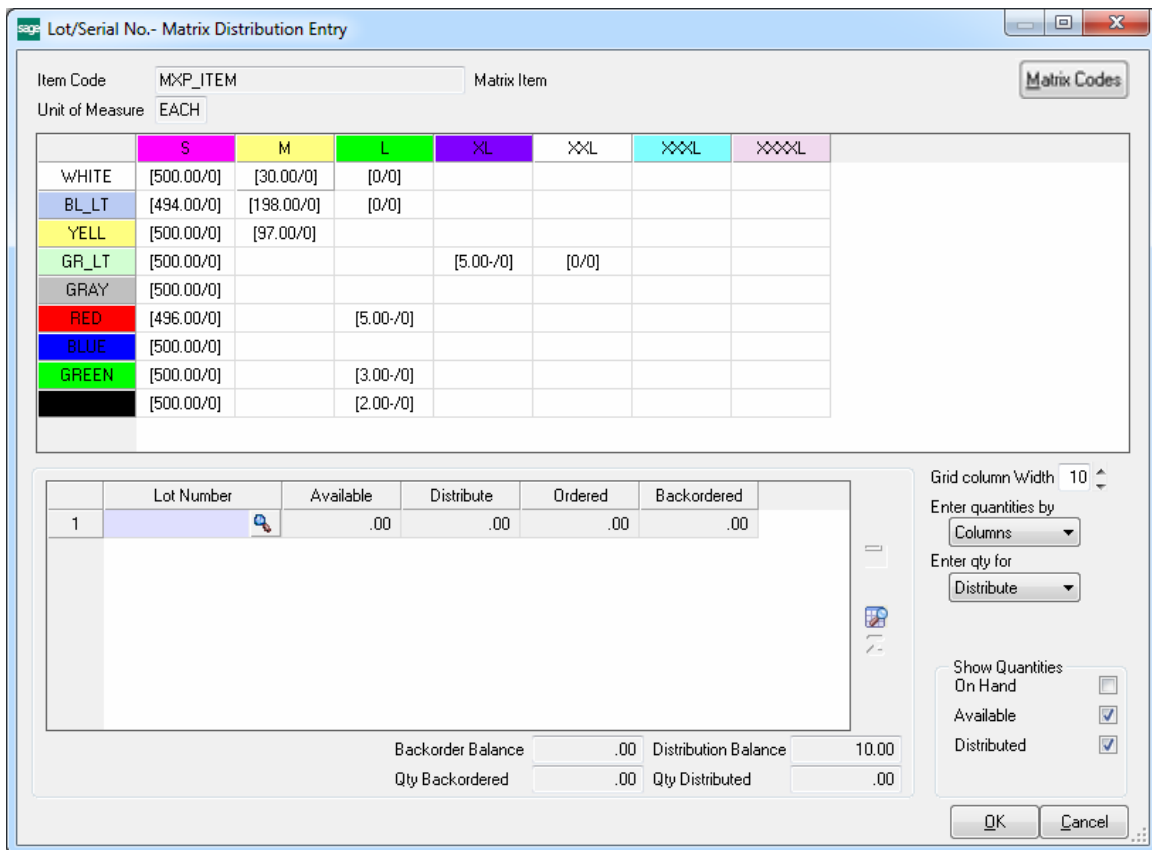
Matrix distribution entered for the Price Quote is preserved when converting to Standard Order.

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.

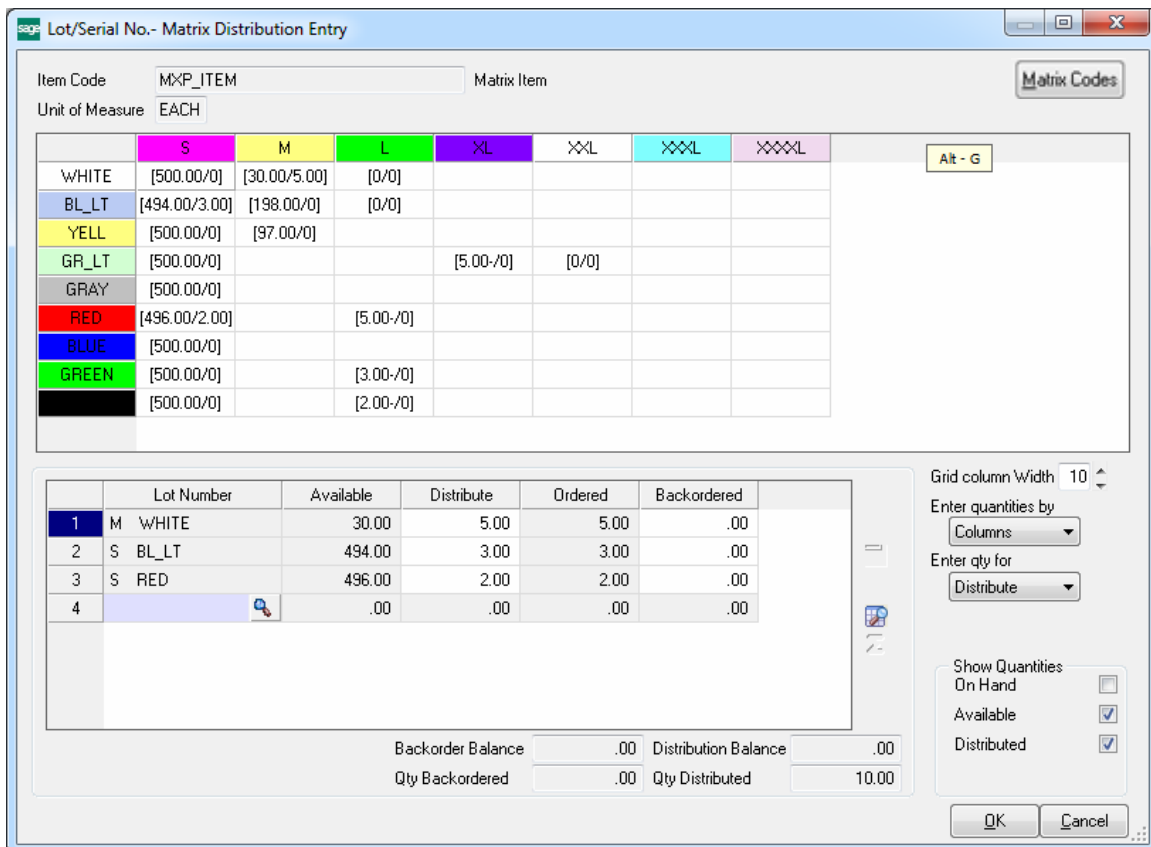
If a UPC Code is scanned (entered) while the focus is in the **Item Code** field, the program checks if the scanned UPC code is assigned to any Lot Number of the selected item, and distributes automatically by that Lot number.

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.

The Backorder quantity may be entered manually as well as calculated automatically upon entering the Distributed quantity. Upon entering the distributed quantity backordered quantity is automatically calculated as follows: “Qty Ordered – Qty Distributed”.



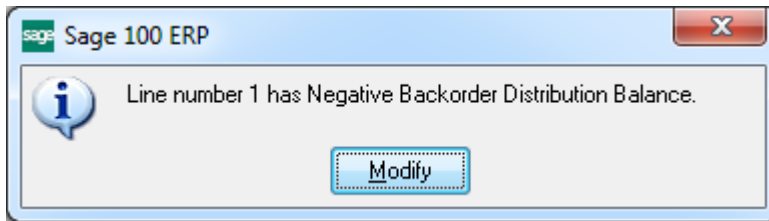
**Distribute-** quantities distributed for current Lot Number.

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

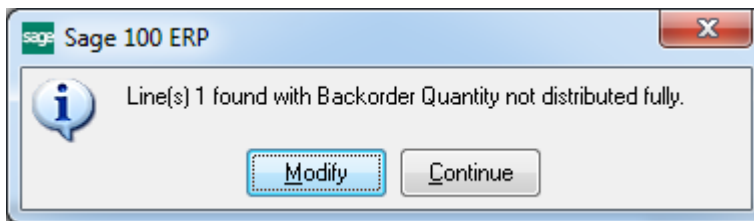
**Backordered** – allows for entry of the Lot Number quantities to be backordered.

**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.



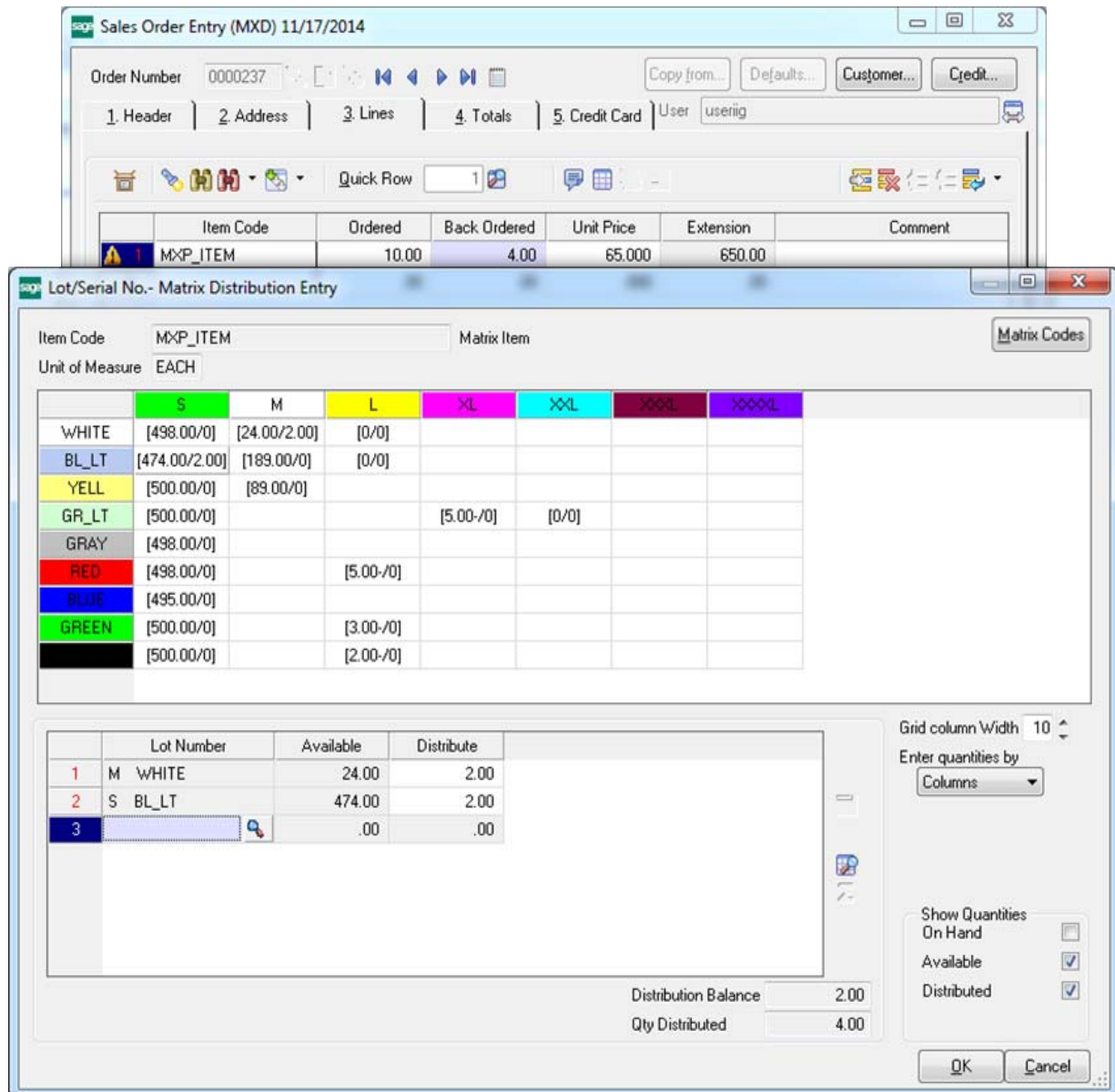
The user is allowed accepting the Invoice in case the Back Order Balance is not 0, that is there are Back Order quantities remaining to distribute.



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 with 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.

	Item on Order	Quantity on Order	In Package	Quantity in Package	Lot/Serial No	Quantity Available
1	MXP_ITEM	0.00	<input checked="" type="checkbox"/>	0.00	M YELL	0.00
2	MXP_ITEM	1.00	<input checked="" type="checkbox"/>	1.00	S BL_LT	0.00



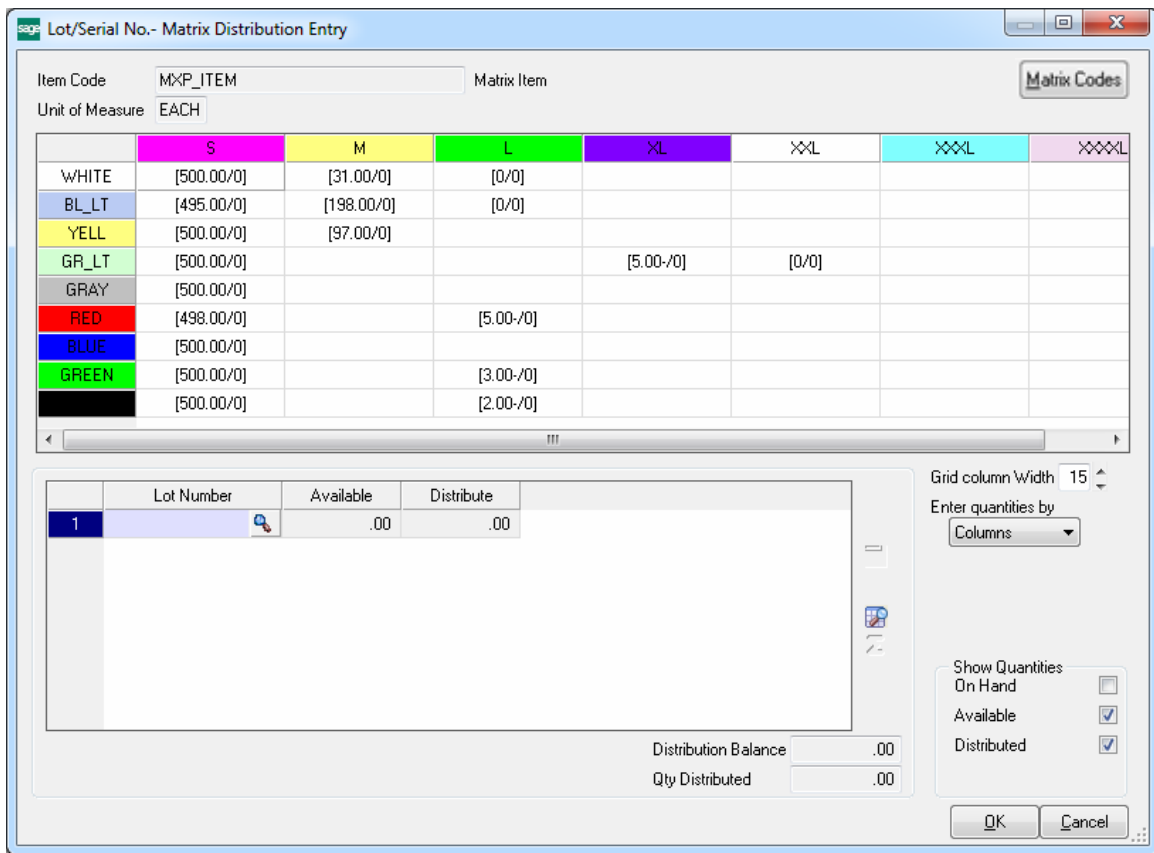
Inventory Transaction Entry

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

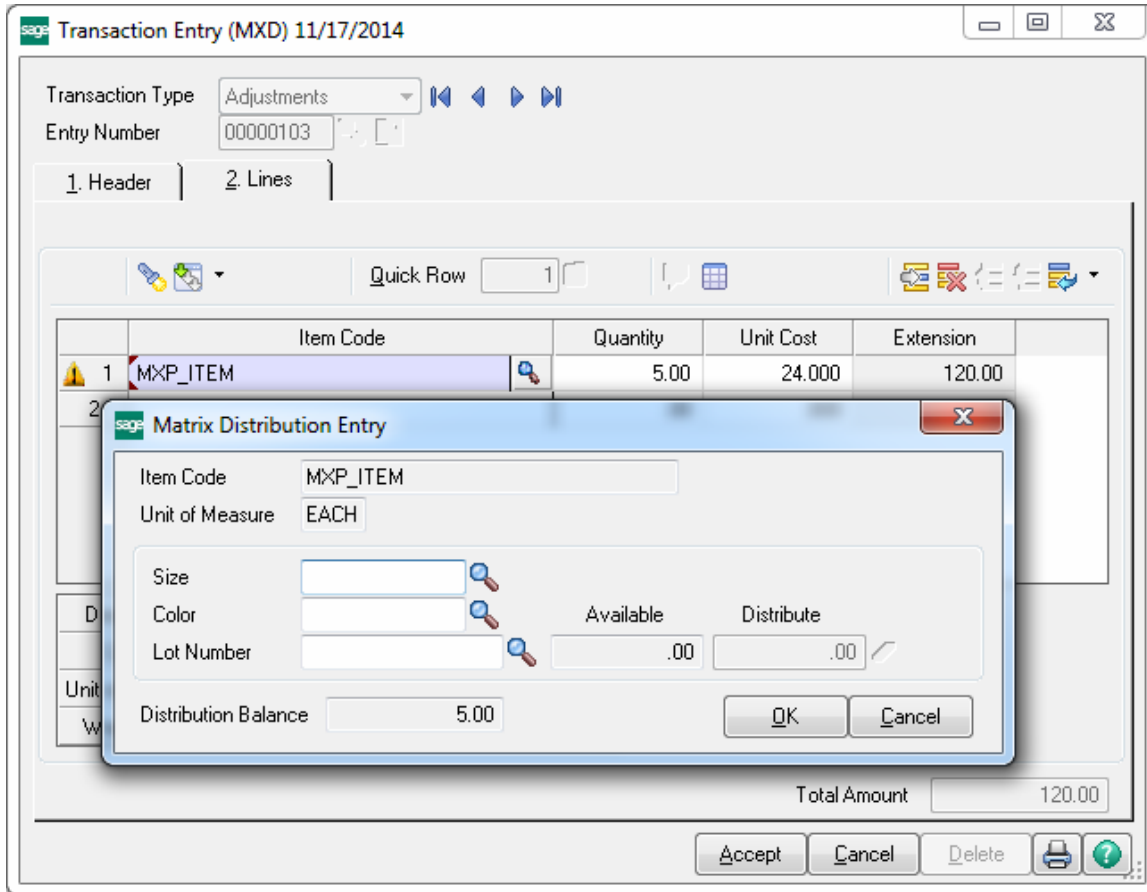
The Matrix Distribution screen is the same for Sales, Transfers, and Receipts transaction Types.

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.

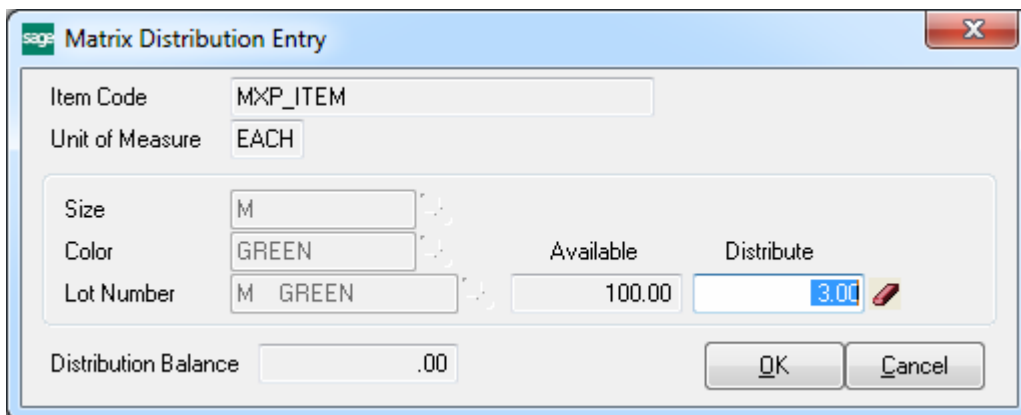
The Matrix Distribution screen is similar to the screen in the Sales Order Entry program.



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.



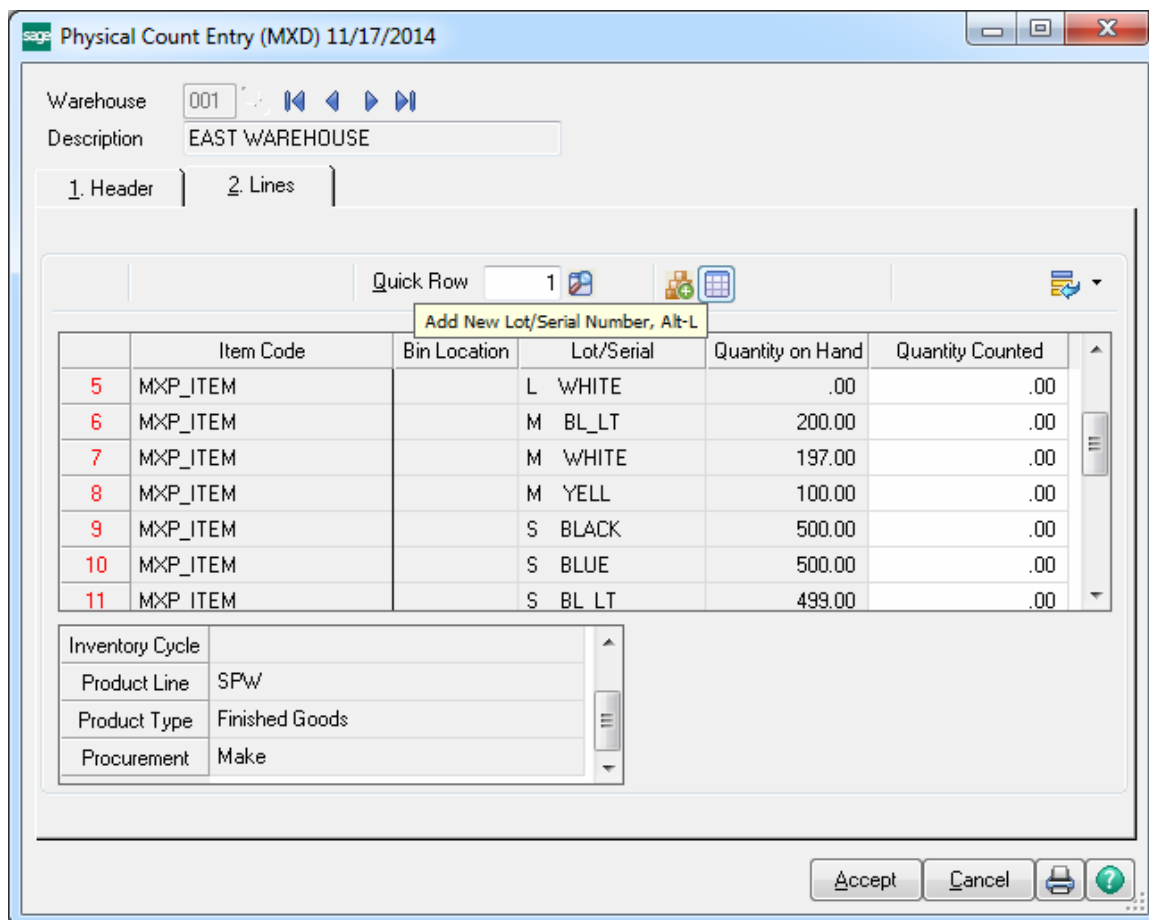
The user may select the Size and Color code to create the Lot Number automatically or specify an existing Lot Number.



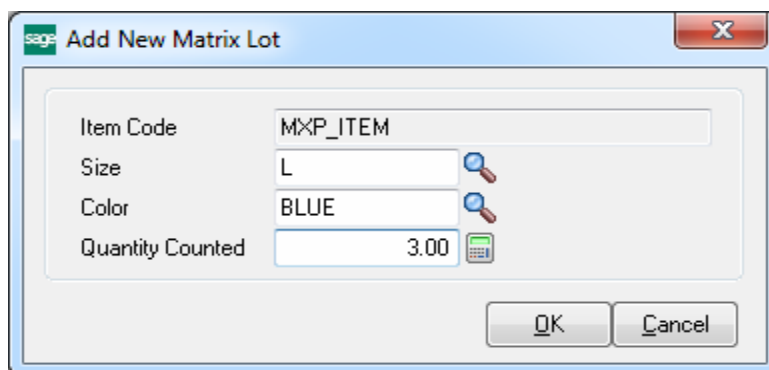
During the Transaction Register update checking is performed by the Matrix item Lot Committed Qty by warehouse and error log is printed to prevent the user from updating transaction journal if the Qty Committed in the *I/M Transactions for some lot number by Warehouse exceeds the Qty On Hand* for it.

### Physical Count Entry

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



On the **Lines** tab, clicking the **Add New Lot/Serial** button for Matrix Item displays the following screen instead of the standard:

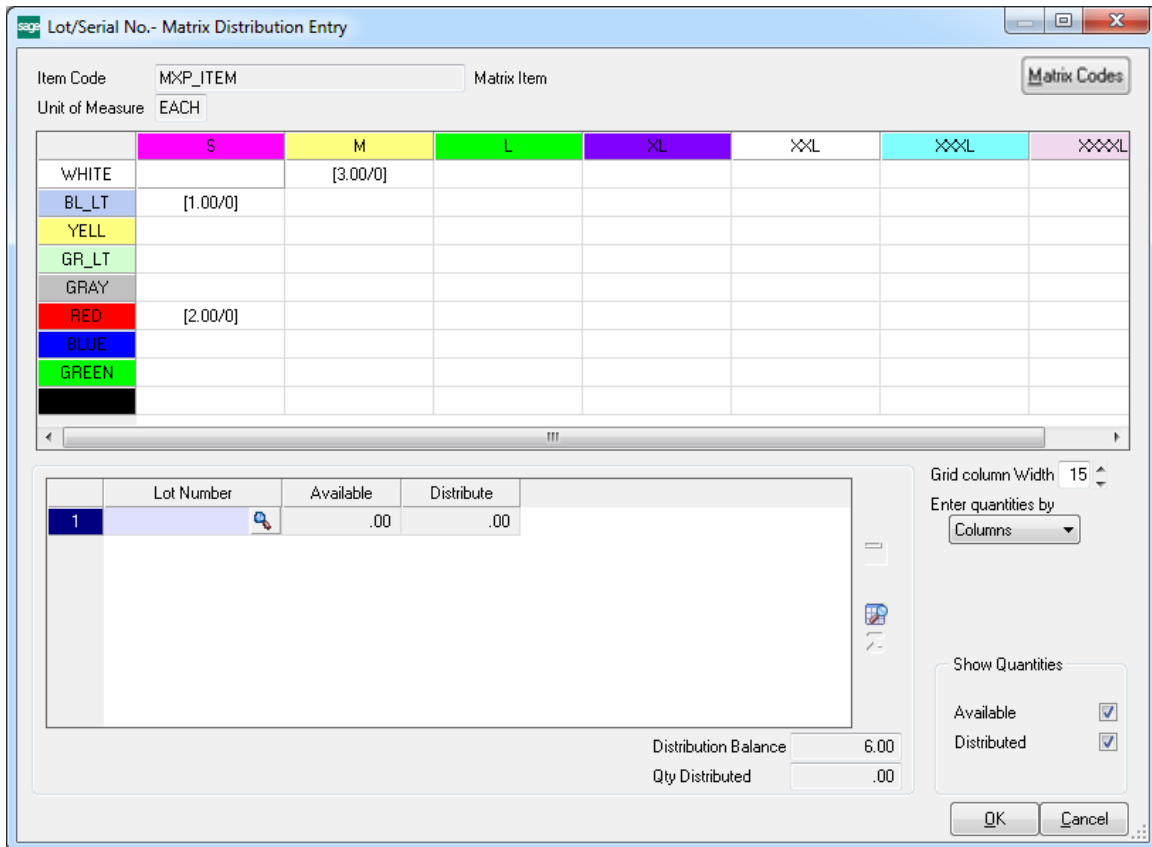


Enter Codes of the first and second Categories, which descriptions are displayed. You can enter new Matrix Codes, or enter/select existing Matrix Code from the lookup.

## 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 like the one in the **Invoice Data Entry** program.



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

## Production Entry

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

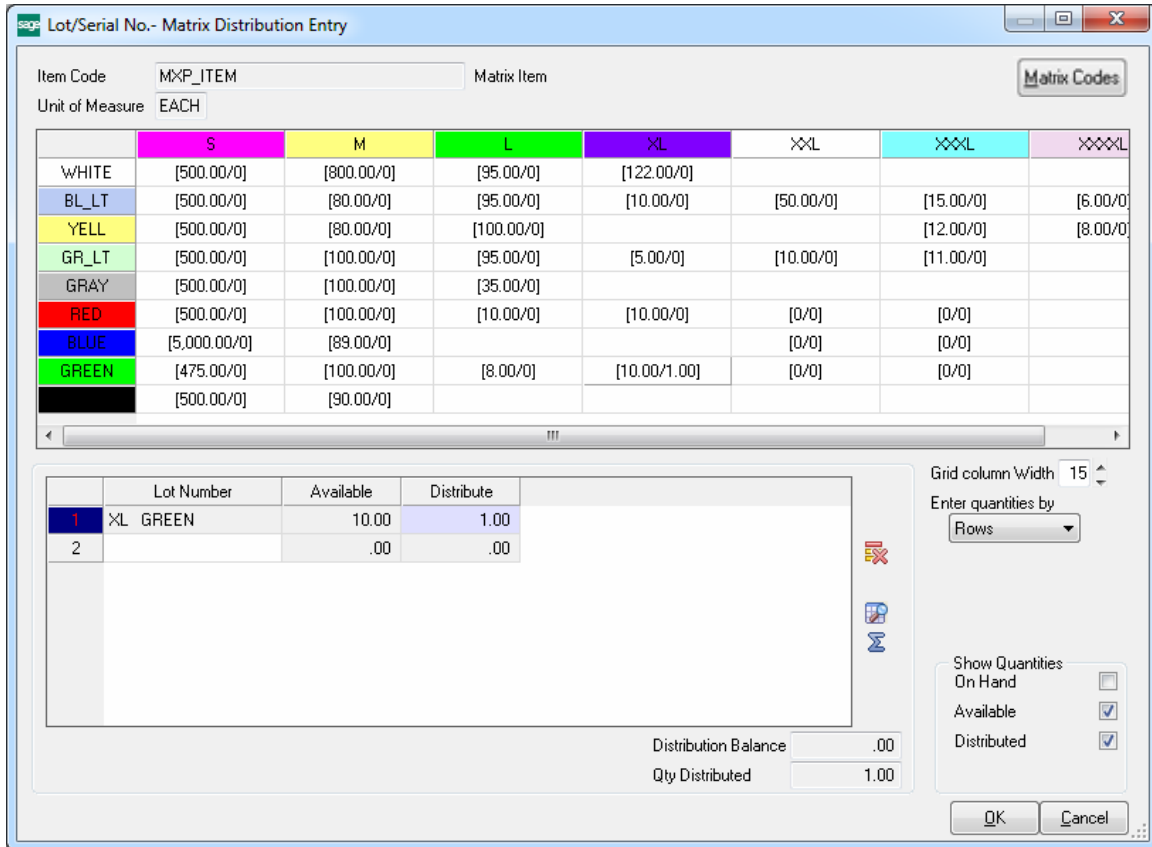
The screenshot shows the Sage Production Entry (MXD) 11/17/2014 window. The window title bar includes the Sage logo and the text "Production Entry (MXD) 11/17/2014". The main area contains several input fields and buttons:

- Production Number: 0000016
- Production Date: 11/17/2014
- Bill Number: MXP\_ITEM
- Bill Type: Standard
- Revision: 000
- Option Code: (empty)
- Quantity: 1.00
- Unit of Measure: EACH
- Parent Warehouse: 000 CENTRAL WAREHOUSE
- Component Warehouse: 000 CENTRAL WAREHOUSE
- Explode Sub-Assemblies:
- Matrix button (highlighted with a blue box)
- Auto Distribute Lines:

At the bottom of the window, there are buttons for "Accept", "Cancel", and "Delete", along with a printer icon and a help icon.

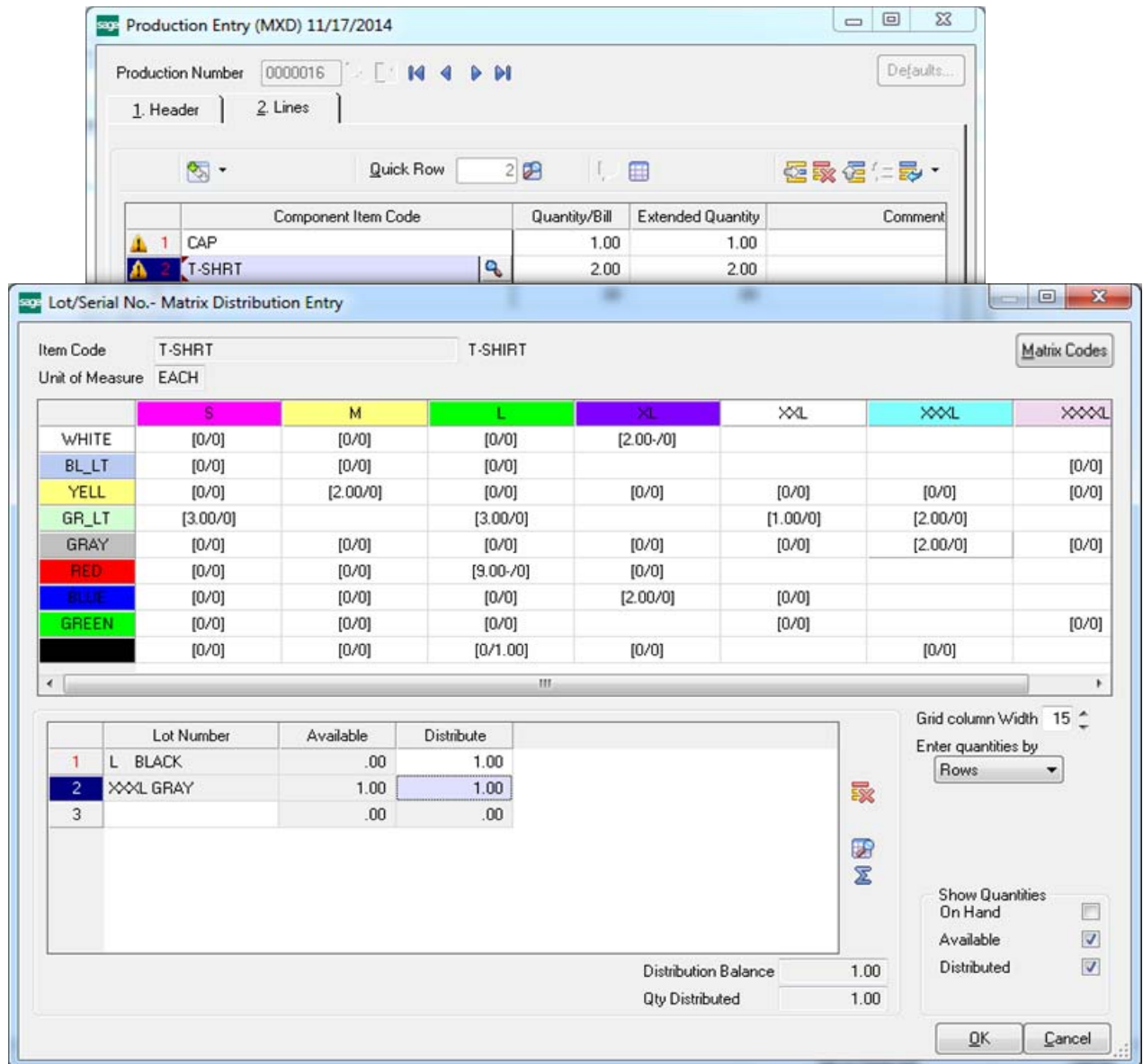
To distribute to **Lot Numbers** for Matrix Bill, click the **Matrix** button on the lines tab to open the **Matrix Distribution** screen. This button is not available for non-matrix component items.

The **Matrix** button allows for the selected Bill Number distribution:



The **Auto Distribute Lines** check box is available only if the **Auto Distribute Lines** is selected in the **Matrix Options**. Check the **Auto Distribute Lines** box 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**, 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.

The Matrix Distribution screen for the **Production Entry** program is the same as in the **Sales Order Entry** program.

## Disassembly Entry

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

The screenshot shows a software window titled "Disassembly Entry (MXD) 11/17/2014". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. The main content area is divided into several sections:

- Top Section:** "Disassembly Number" field with value "0000003" and navigation icons. A "Defaults..." button is on the right.
- Navigation:** "1. Header" and "2. Lines" tabs.
- Date Section:** "Disassembly Date" field with value "11/17/2014" and a calendar icon. A "Distribute..." button is on the right.
- Bill Information:** "Bill Number" field with value "MXP\_ITEM" and a magnifying glass icon. "Bill Type" dropdown menu with value "Standard".
- Item Details:** "Revision" field with value "000" and a magnifying glass icon. "Option Code" empty field. "Quantity" field with value "1.00". "Unit of Measure" dropdown menu with value "EACH".
- Warehouse and Type:** "Parent Warehouse" field with value "000" and a magnifying glass icon. "Component Warehouse" field with value "000" and a magnifying glass icon. "Disassembly Type" dropdown menu with value "Produced Item". "Explode Sub-Assemblies" checkbox, which is currently unchecked.
- Bottom Section:** A row of buttons: "Accept", "Cancel", "Delete", a printer icon, and a help icon.

The **Distribute** button opens the Matrix Distribution grid for the selected Bill Number.



Item Code: MXP\_ITEM      Matrix Item: Matrix Codes  
 Unit of Measure: EACH

	S	M	L	XL	XXL	XXXL	XXXXL
WHITE	[500.00/0]	[800.00/0]	[95.00/0]	[122.00/0]			
BL_LT	[500.00/0]	[80.00/0]	[95.00/0]	[10.00/0]	[50.00/0]	[15.00/0]	[6.00/0]
YELL	[500.00/0]	[80.00/0]	[100.00/0]			[12.00/0]	[8.00/0]
GR_LT	[500.00/0]	[100.00/0]	[95.00/0]	[5.00/0]	[10.00/0]	[11.00/0]	
GRAY	[500.00/0]	[100.00/0]	[35.00/0]				
RED	[500.00/0]	[100.00/0]	[10.00/0]	[10.00/0]	[0/0]	[0/0]	
BLUE	[5.000.00/0]	[89.00/0]			[0/0]	[0/0]	
GREEN	[475.00/0]	[100.00/0]	[8.00/0]	[9.00/1.00]	[0/0]	[0/0]	
	[500.00/0]	[90.00/0]					

	Lot Number	Available	Distribute
1	XL GREEN	9.00	1.00
2		.00	.00

Grid column Width: 15  
 Enter quantities by: Rows  
 Show Quantities: On Hand  Available  Distributed   
 Distribution Balance: .00      Qty Distributed: 1.00  
 [OK] [Cancel]

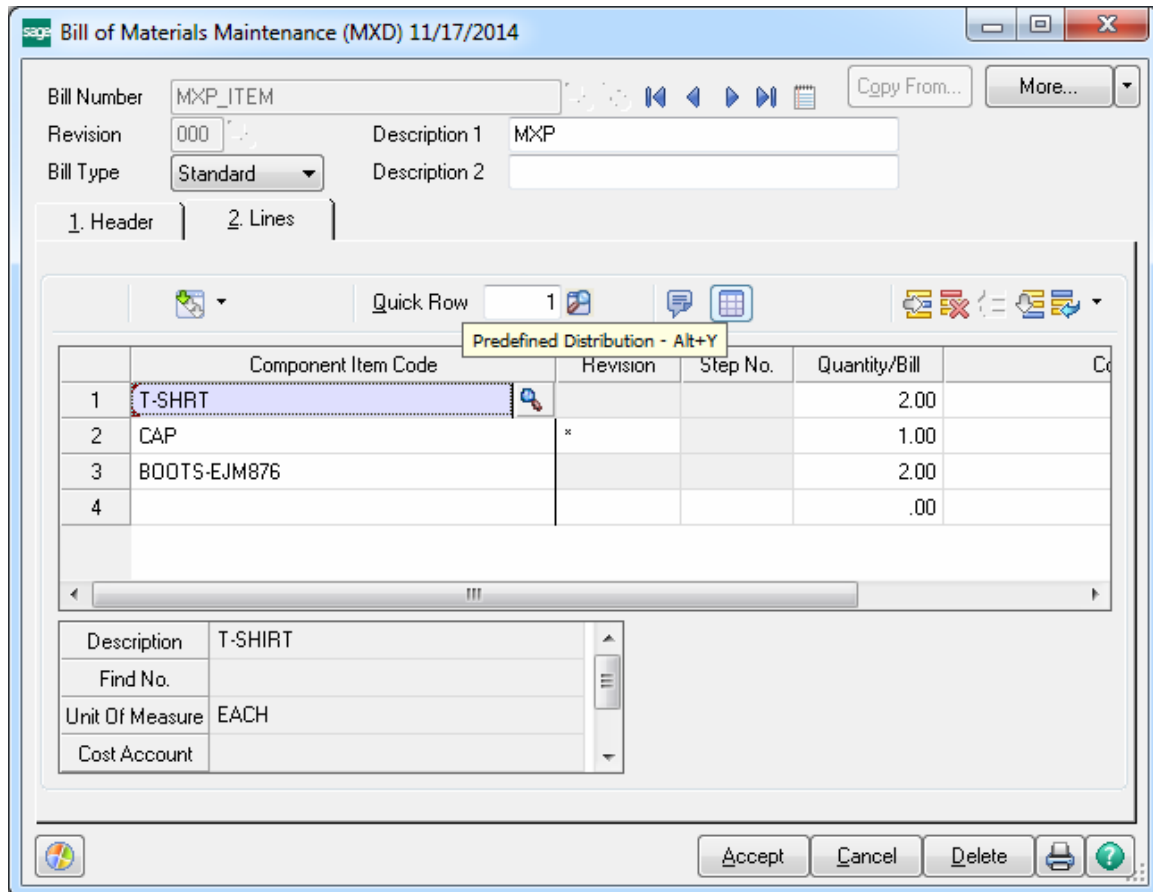
The Matrix Distribution screen for the **Disassembly Entry** program is the same as in the **Production Entry** program.

## 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 for Standard Type Matrix Bill items.



Bill of Materials Maintenance (MXD) 11/17/2014

Bill Number: MXP\_ITEM  
Revision: 000  
Bill Type: Standard  
Description 1: MXP  
Description 2:

1. Header | 2. Lines

Quick Row: 1

Predefined Distribution - Alt+Y

	Component Item Code	Revision	Step No.	Quantity/Bill	Co
1	T-SHRT			2.00	
2	CAP	*		1.00	
3	BOOTS-EJM876			2.00	
4				.00	

Description: T-SHIRT  
Find No.:  
Unit Of Measure: EACH  
Cost Account:

Accept Cancel Delete

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

The screenshot shows a software window titled "Predefined Distribution Maintenance". At the top, there are two input fields: "Bill Number" with the value "MXP\_ITEM" and "Item Code" with the value "T-SHIRT". Below these is a "Bill Lot No." field containing "L BLACK", accompanied by search and refresh icons. A table with two columns, "Component Lot Number" and "Quantity", is currently empty. At the bottom of the window, there are two more input fields: "Balance" with the value "2.00" and "Quantity" with the value "2.00". A "Close" button is located in the bottom right corner.

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** (so that **Balance** at the bottom of the screen is zero), to use the **Predefined Distribution** feature effectively.

Predefined Distribution Maintenance

Bill Number: MXP\_ITEM      MXP

Item Code: T-SHIRT      T-SHIRT

Bill Lot No. L BLACK

	Component Lot Number	Quantity
1	L BLACK	1.00
2	L WHITE	1.00
3		.00

Balance: .00      Quantity: 2.00

Close

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.

Predefined Distribution Maintenance

Bill Number MXP\_ITEM MXP

Item Code T-SHIRT T-SHIRT

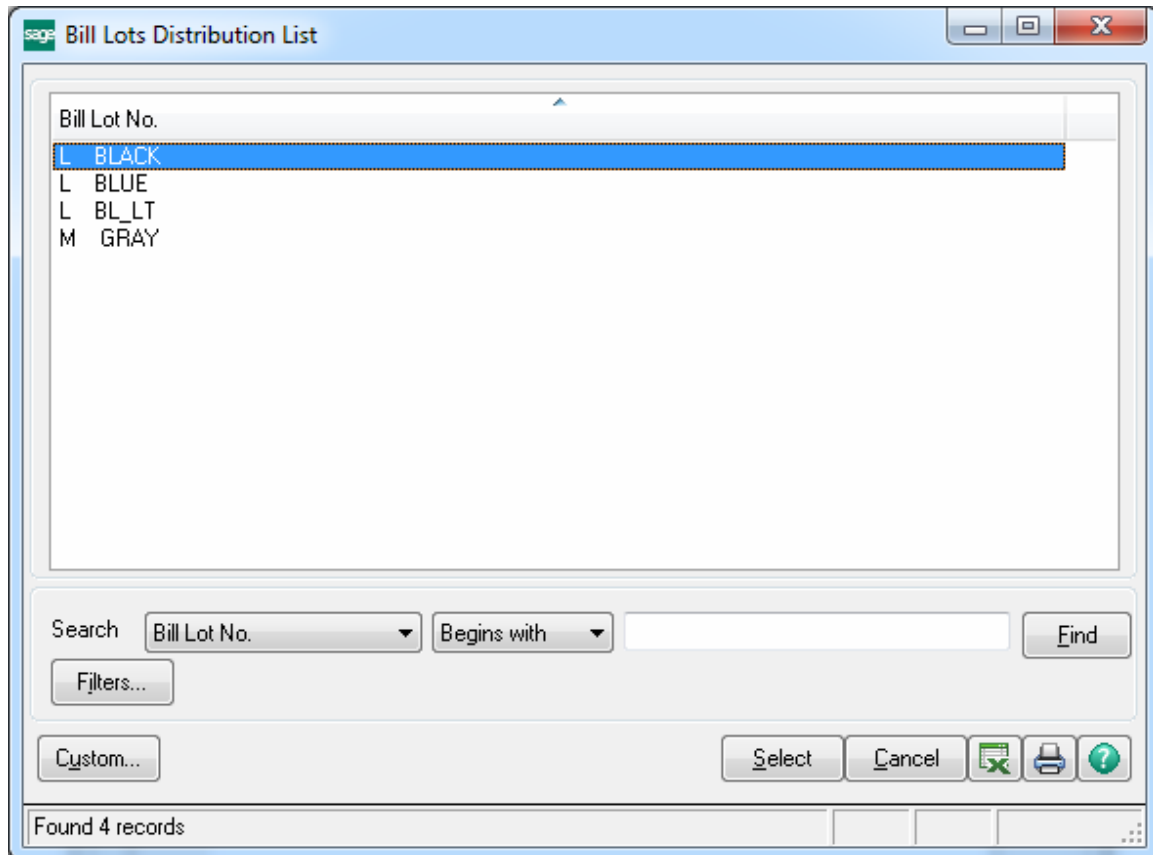
Bill Lot No. L BLACK

Existing Bill Lots List

	Component	Quantity
1	L BLACK	1.00
2	L WHITE	1.00
3		.00

Balance .00      Quantity 2.00

Close



## Inquiries

### 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.

Purchase Order Inquiry (MXD) 11/17/2014

Order Number: 0010074

1. Header | 2. Address | 3. Lines | 4. Totals

User: useriig

Quick Row: 1

	Item Code	Ordered	Back Ordered	Unit Cost	Extension	Cor
1	MXP_ITEM	5.00	.00	24.000	120.00	

Lot/Serial Distribution, Alt-J

Description	Matrix Item
Warehouse	001
Unit of Measure	EACH
Qty Received	.00

Total Amount: 120.00

Quick Print... OK

Lot/Serial No.- Matrix Distribution Inquiry

Item Code: MXP\_ITEM Matrix Item

Unit of Measure: EACH

Matrix Codes

	S	M	L	XL	XXL	XXXL	XXXXL
WHITE	[500.00/0]	[197.00/0]	[0/0]				
BL_LT	[499.00/0]	[200.00/0]	[0/2.00]				
YELL	[500.00/0]	[100.00/0]					
GR_LT	[500.00/0]			[2.00-/0]	[0/0]		
GRAY	[500.00/0]						
RED	[498.00/0]		[3.00-/0]				
BLUE	[500.00/0]						
GREEN	[500.00/0]		[3.00-/0]				
	[500.00/0]		[2.00-/3.00]				

	Lot Number	Available	Distribute
1	L BLACK	2.00	3.00
2	L BL_LT	.00	2.00

Distribution Balance: .00

Qty Distributed: 5.00

Grid column Width: 10

Enter quantities by: Columns

Construct Grid by only existing: Matrix Codes

Show Quantities On Hand:

Available:

Distributed:

OK

The **Lot/Serial No Matrix Distribution Inquiry** is accessible also from Sales Order Inquiry.

## 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.

Matrix Sales History Report (MXD) 11/17/2014

Report Setting: STANDARD

Description: Matrix Sales History Report

Setting Options:

- Type: Public
- Print Report Settings:
- Number of Copies: 1
- Default Report:
- Three Hole Punch:
- Collated:

Calendar Years:

- All Years:
- Starting: 2014
- Ending: 2014
- Include Ship-to Detail:

Product Types to Print:

- All Types:
- Finished Goods:
- Raw Materials:
- Discontinued:

Procurement Types to Print:

- All Types:
- Make:
- Buy:
- Subcontract:
- Print Inactive Items:

Data to Print:

- Quantity Sold:
- Gross Profit Percent:
- Quantity Returned:
- Dollars Sold:
- Cost of Goods Sold:

Selections:

Select Field	Operand	Value
Item Code	All	
Product Line	All	
Primary Vendor Number	All	
Item Description	All	
Customer Number	All	
Year to Date Dollars Sold	All	

Microsoft XPS Document Writer

Keep Window Open After Print:  Preview:

Print Preview Setup



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).

Inventory Sales by Matrix History Report  
Year Equal To: 2014 (MXD)

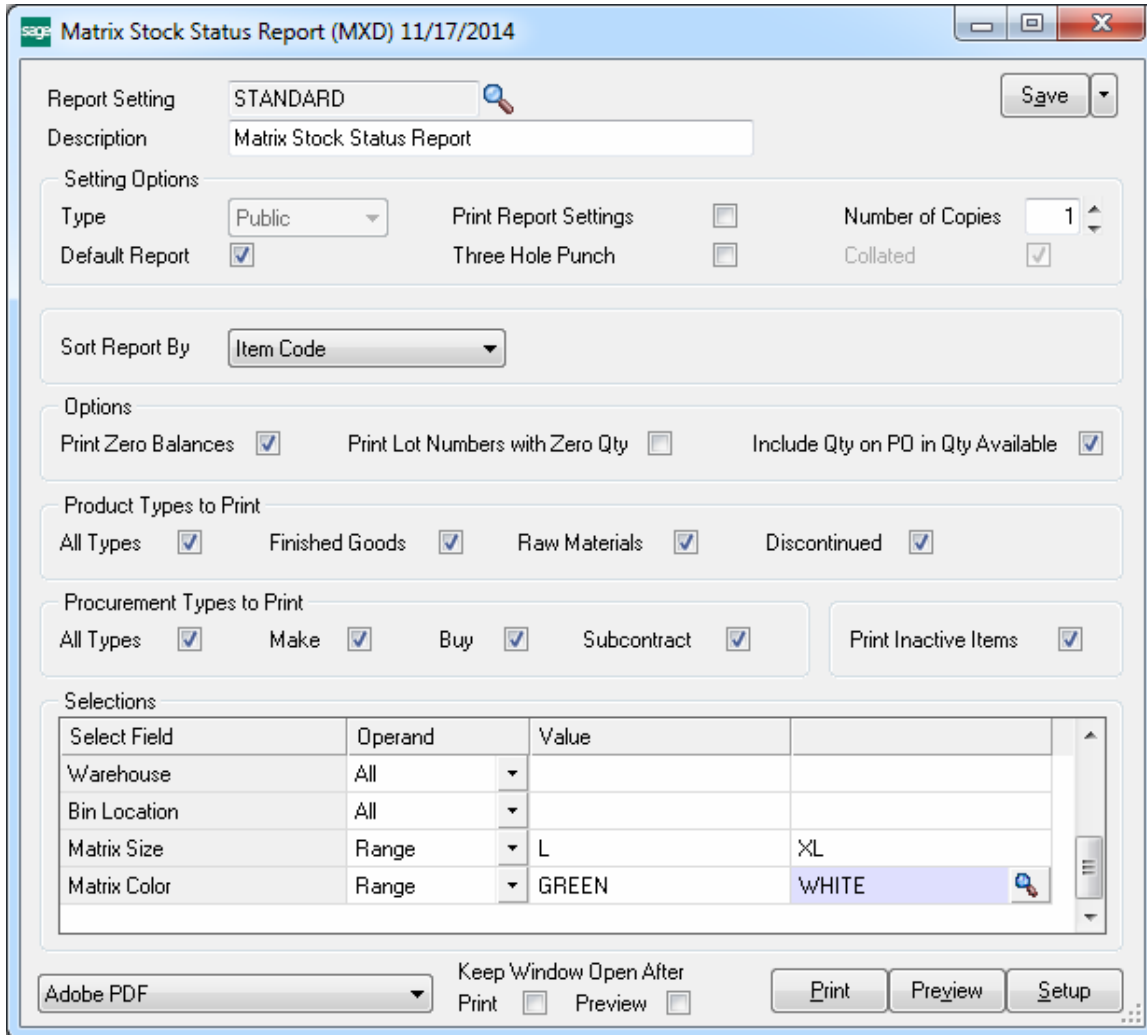
Item Code	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
MXP_ITEM												
Size	S											
Color												
Customer Number:	01-ABF American Business Futures											
Quantity Sold:	0	1	0	0	0	0	0	0	0	0	0	0
Dollars Sold:	0	65	0	0	0	0	0	0	0	0	0	0
Gross Profit Percent:	0.00%	83.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cost of Goods Sold:	0	24	0	0	0	0	0	0	0	0	0	0
Quantity Returned:	0	0	0	0	0	0	0	0	0	0	0	0
Size	S											
Color												
Customer Number:	01-ABF American Business Futures											
Quantity Sold:	0	2	0	0	0	0	0	0	0	0	0	0
Dollars Sold:	0	130	0	0	0	0	0	0	0	0	0	0
Gross Profit Percent:	0.00%	83.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

## 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).

The Include Qty on PO in Qty Available option is turned on by default to include the quantity on PO in the Quantity available calculation for Matrix lot.

Only Lot Numbers existing for an Item are printed in the report. Checking the Print Lot Numbers with Zero Qty box allows printing Lot Numbers with no quantity available. Here is an example of the printout:

Matrix Stock Status Report

Main Report

Matrix Stock Status Report  
Sorted by Item Code (MXD)

Item Code /Description Primary Vendor Number	Product Line	Product Type	Unit Of Measure	Whse	Size	Color	Quantity		Reorder Point	Average Cost			
							On Hand	Available					
BELT-WIDE WIDE BELT 02-BROWN	SPW	Finished Good	EACH	000	STD	GREEN	3.00	8.00	Cycle: 0.00	388.000			
					STD	WHITE	3.00	8.00					
					Warehouse 000 Total:		6.00	16.00					
Item BELT-WIDE Total:							6.00	16.00	0.00				
BLINKERS BLINKERS 01-CONT	SPW	Finished Good	EACH	000	S	WHITE	0.00	0.00	Cycle: 0.00	33.420			
					M	WHITE	0.00	0.00					
					M	GR_LT	8.00	8.00					
					M	RED	2.00	2.00					
					L	GREEN	5.00	5.00					
					XL	GR_LT	2.00	2.00					
					XL	RED	5.00	5.00					
					XL	GREEN	8.00	8.00					
					Warehouse 000 Total:		30.00	30.00					
						001	S	WHITE			0.00	3.00	0.00
						S	RED	0.00			0.00	0.00	
	L	WHITE	3.00	8.00	8.00								
	XL	WHITE	0.00	1.00	1.00								
	XL	RED	0.00	4.00	4.00								
Warehouse 001 Total:		3.00	16.00										
Item BLINKERS Total:							27.00	14.00	0.00				
CAP CAP 01-CONT	SPW	Finished Good	EACH	000	S	WHITE	4.00	4.00	Cycle: 0.00	11.592			
					S	RED	12.00	22.00					
					L	WHITE	0.00	3.00					
					L	GREEN	12.00	21.00					
					XL	WHITE	2.00	0.00					
						001	S	RED			0.00	1.00	0.00
						L	WHITE	0.00			6.00	6.00	
Warehouse 001 Total:		0.00	7.00										
Item CAP Total:							30.00	37.00	0.00				
MXP2_ITEM Matrix 01-STEV	SPW	Finished Good	EACH	000	S	WHITE	180.00	180.00	Cycle: 0.00	20.000			
					S	RED	200.00	200.00					
					S	GREEN	200.00	200.00					
					L	WHITE	400.00	400.00					
					Warehouse 000 Total:		980.00	980.00					
						001	S	WHITE			10.00	20.00	0.00
						S	RED	33.00			33.00	33.00	
						S	GREEN	50.00			50.00	50.00	
						L	WHITE	50.00			50.00	50.00	
						L	RED	90.00			90.00	90.00	
						XL	WHITE	1.00			8.00	8.00	
Warehouse 001 Total:		212.00	197.00										
Item MXP2_ITEM Total:							1,192.00	1,177.00	0.00				

Current Page No.: 1      Total Page No.: 1+      Zoom Factor: 100%

## Matrix Stock Status Report (Grid)

Select the **Matrix Stock Status Report (Grid)** if you want the information to be printed by a grid:



**Report Setting** STANDARD

**Description** Matrix Committed Report

**Setting Options**

Type: Public  Print Report Settings  Number of Copies: 1

Default Report:  Three Hole Punch:  Collated:

**Sort Report By** Item Code

**Options**

Print Zero Balances:  Print Lot Numbers with Zero Qty:

**Product Types to Print**

All Types:  Finished Goods:  Raw Materials:  Discontinued:

**Procurement Types to Print**

All Types:  Make:  Buy:  Subcontract:

**Selections**

Select Field	Operand	Value
STYLE	All	
CATALOGUE REF#	All	
Matrix Size	Range	L XL
Matrix Color	Range	GREEN WHITE

Adobe PDF  Keep Window Open After Print  Preview

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

Here is an example of the printout:

**Matrix Committed Report**  
Sorted by Item Code (MXD)

Item Code/Description	Primary Vendor Number	Product Line	Product Type	Unit Of Measure	Warehouse	Size	Color	On Hand	On Purchase Order	On Sales Order	Quantity On Back Order	Other Committed	Available
Average Cost : 388.030													
BELT-WIDE WIDE BELT													
02-BROWN	SPW	Finished Good	EACH	000									
						STD	GREEN	3.00	5.00	0.00	0.00	0.00	3.00
						STD	WHITE	3.00	5.00	0.00	0.00	0.00	3.00
						<b>Warehouse 000 Total:</b>		<b>6.00</b>	<b>10.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.00</b>
						<b>Item BELT-WIDE Total:</b>		<b>6.00</b>	<b>10.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.00</b>
Average Cost : 33.420													
BLINKERS BLINKERS													
01-CONT	SPW	Finished Good	EACH	000									
						S	WHITE	0.00	1.00	1.00	0.00	0.00	1.00-
						S	RED	0.00	2.00	0.00	0.00	0.00	0.00
						M	WHITE	0.00	2.00	2.00	0.00	0.00	2.00-
						M	GR_LT	8.00	0.00	0.00	0.00	0.00	8.00
						M	RED	2.00	0.00	0.00	0.00	0.00	2.00-
						M	GREEN	0.00	1.00	0.00	0.00	0.00	0.00
						L	GREEN	5.00	0.00	0.00	0.00	0.00	5.00
						XL	GR_LT	2.00	0.00	0.00	0.00	0.00	2.00
						XL	RED	5.00	0.00	0.00	0.00	0.00	5.00
						XL	GREEN	8.00	0.00	0.00	0.00	0.00	8.00
						<b>Warehouse 000 Total:</b>		<b>30.00</b>	<b>6.00</b>	<b>3.00</b>	<b>0.00</b>	<b>0.00</b>	<b>27.00</b>
					001	S	WHITE	0.00	0.00	2.00	1.00	0.00	3.00-
					001	S	RED	0.00	1.00	1.00	0.00	0.00	1.00-
					001	L	WHITE	3.00-	0.00	0.00	5.00	0.00	8.00-
					001	XL	WHITE	0.00	2.00	2.00	1.00	0.00	3.00-
					001	XL	RED	0.00	0.00	4.00	0.00	0.00	4.00-
					001	<b>Warehouse 001 Total:</b>		<b>3.00-</b>	<b>3.00</b>	<b>9.00</b>	<b>7.00</b>	<b>0.00</b>	<b>19.00-</b>
					001	<b>Item BLINKERS Total:</b>		<b>27.00</b>	<b>9.00</b>	<b>12.00</b>	<b>7.00</b>	<b>0.00</b>	<b>6.00</b>
Average Cost : 11.592													
CAP CAP													
01-CONT	SPW	Finished Good	EACH	000									
						S	WHITE	4.00	0.00	0.00	0.00	0.00	4.00
						S	RED	12.00	10.00	0.00	0.00	0.00	12.00
						L	WHITE	0.00	0.00	2.00	1.00	0.00	3.00-
						L	GREEN	12.00	12.00	1.00	2.00	0.00	9.00
						XL	WHITE	2.00	0.00	0.00	0.00	2.00	0.00
						XL	RED	0.00	5.00	0.00	0.00	0.00	0.00
						<b>Warehouse 000 Total:</b>		<b>30.00</b>	<b>27.00</b>	<b>3.00</b>	<b>3.00</b>	<b>2.00</b>	<b>22.00</b>
					001	S	RED	0.00	0.00	1.00	0.00	0.00	1.00-
					001	L	WHITE	0.00	0.00	1.00	5.00	0.00	6.00-
					001	<b>Warehouse 001 Total:</b>		<b>0.00</b>	<b>0.00</b>	<b>2.00</b>	<b>5.00</b>	<b>0.00</b>	<b>7.00-</b>
					001	<b>Item CAP Total:</b>		<b>30.00</b>	<b>27.00</b>	<b>5.00</b>	<b>8.00</b>	<b>2.00</b>	<b>15.00</b>

Current Page No.: 1      Total Page No.: 1+      Zoom Factor: 100%

The quantity **Available** printed on the report is calculated as follows: **“Qty On Hand + Qty On Purchase Order – Qty On Sales Order”** if the Include in Quantity Available option is set to **“Purchase Orders”** or **“POs and WOs”**, otherwise it is calculated as **“Qty On Hand– Qty On Sales Order”**.

*Note: The quantities committed on WO, IM Transactions and B/M Entries are not taken into account during Available quantity calculation.*

## 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.

Inventory Valuation Report

Main Report

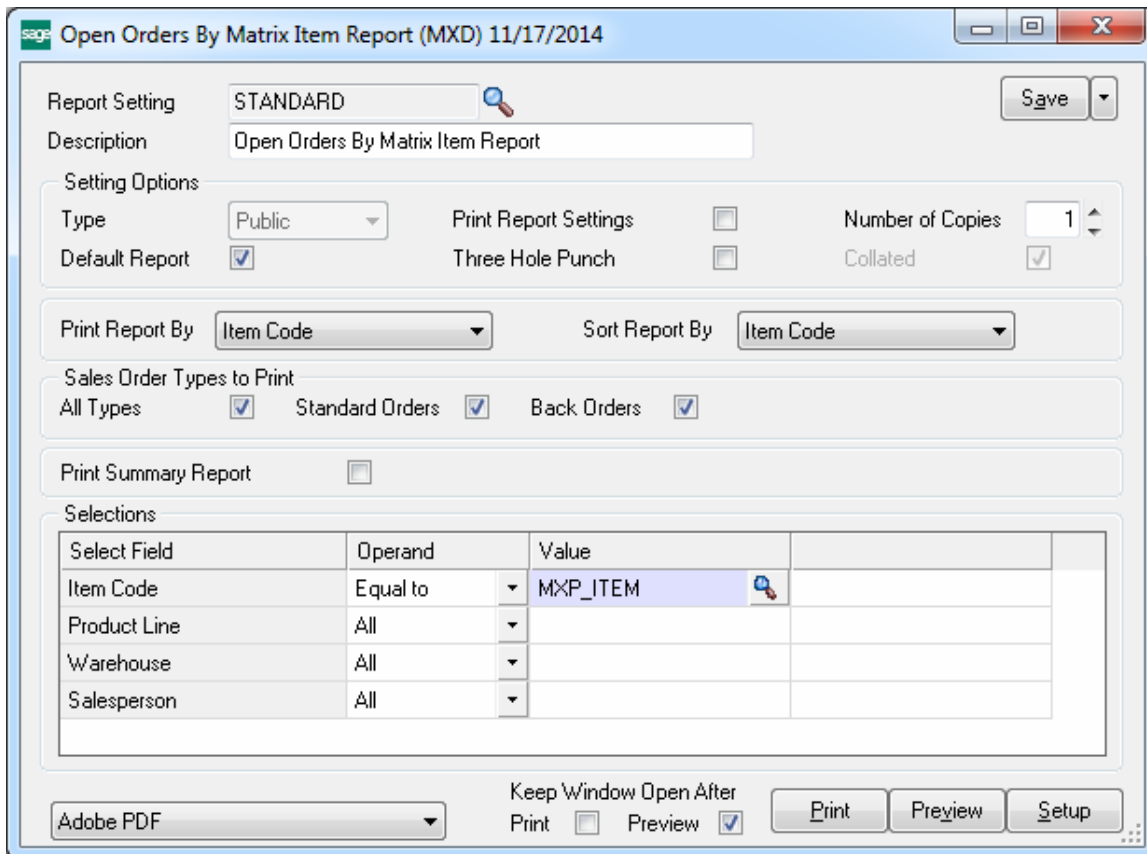
Inventory Valuation Report  
Sorted by Item Code (MXD)

Item Code Product Line	Item Description Product Type Valuation	Unit of Measure	Whse	Ld/Serial Number	Receipt Number	Receipt Date	Quantity On Hand	Unit Cost	Inventory Value
<b>SPEAKERS</b>									
WF&A	Finished Good	FIFO	EACH	000			0.00	0.000	0.00
SPWARE	Kit	Average Cost	EACH	000			7.00	156.667	1,096.67
				001			0.00	160.000	0.00
				002			0.00	156.667	0.00
<b>Item SPWARE Total:</b>							7.00	156.667	1,096.67
<b>STEREO/CD PKGGE AM/FM/STEREO/CASSETTE/CD PLAYR</b>									
WF&A	Finished Good	FIFO	EACH	000			0.00	0.000	0.00
T-SHIRT	Finished Good	Lot	EACH	000					
			Size L	Color BLACK	G001012	9/12/2003	1.00	24.000	24.00
			Size L	Color GR_LT	00000014	2/6/2009	10.00	24.000	240.00
			Size L	Color RED	G001012	9/12/2003	4.00	24.000	96.00
			Size M	Color GREEN	00000014	11/12/2013	2.00	24.000	48.00
			Size M	Color YELL	00000014	2/6/2009	4.00	24.000	96.00
			Size S	Color GR_LT	00000014	2/6/2009	3.00	24.000	72.00
			Size XL	Color BLUE	G001012	9/12/2003	2.00	24.000	48.00
			Size XL	Color WHITE	G001012	9/12/2003	2.00	24.000	48.00
			Size XXL	Color GR_LT	00000014	2/6/2009	2.00	24.000	48.00
			Size XXXL	Color GRAY	G001046	8/27/2010	2.00	24.000	48.00
			Size XXXL	Color GR_LT	00000014	2/6/2009	2.00	24.000	48.00
<b>Item Warehouse 000 Total:</b>							22.00	24.000	528.00
			001				0.00	0.000	0.00
			002				0.00	0.000	0.00
			099						
			Size XL	Color BLUE	I0100111	11/12/2013	1.00	24.000	24.00
			Size XXI	Color GR_LT	I0100111	11/12/2013	1.00	24.000	24.00

Current Page No.: 9      Total Page No.: 10      Zoom Factor: 100%

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 Salesperson and sorted by Item Code:



**Open Orders By Matrix Item Report**  
For Order Types: All (MXD)

Item Code Order No	Type	Description	Promise Order Date	Date	Customer Number/Name	Whse	Quantity			Net Order	Extension	
							Ordered	Shipped	Back Ordered			
0000220	Ssd	Matrix Item	2/28/2014	2/28/2014	01-ABF	Product Line : SPW	U/M: EACH	5.00	0.00	0.00	5.00	325.00
		Size: M										
		Size: M										
0000221	Ssd	Matrix Item	2/28/2014	2/28/2014	01-ABF			5.00	0.00	0.00	5.00	325.00
		Size: L										
		Size: XL										
0000222	Back	Matrix Item	2/28/2014	2/28/2014	01-ABF			10.00	8.00	4.00	4.00	260.00
		Size: S										
		Size: M										
0000224	Ssd	Matrix Item	11/14/2014	11/14/2014	01-ABF			5.00	0.00	0.00	5.00	325.00
		Size: M										
0000227	Ssd	Matrix Item	11/14/2014	11/14/2014	01-ABF			10.00	0.00	4.00	10.00	650.00
		Size: S										
		Size: M										
							Item MXP_ITEM Total:	35.00	6.00	8.00	29.00	1,885.00
							Report Total:	35.00	6.00	8.00	29.00	1,885.00

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

Here is an example of the summary report printout:

**Open Orders By Matrix Item Report**  
For Order Types: All (MXD)

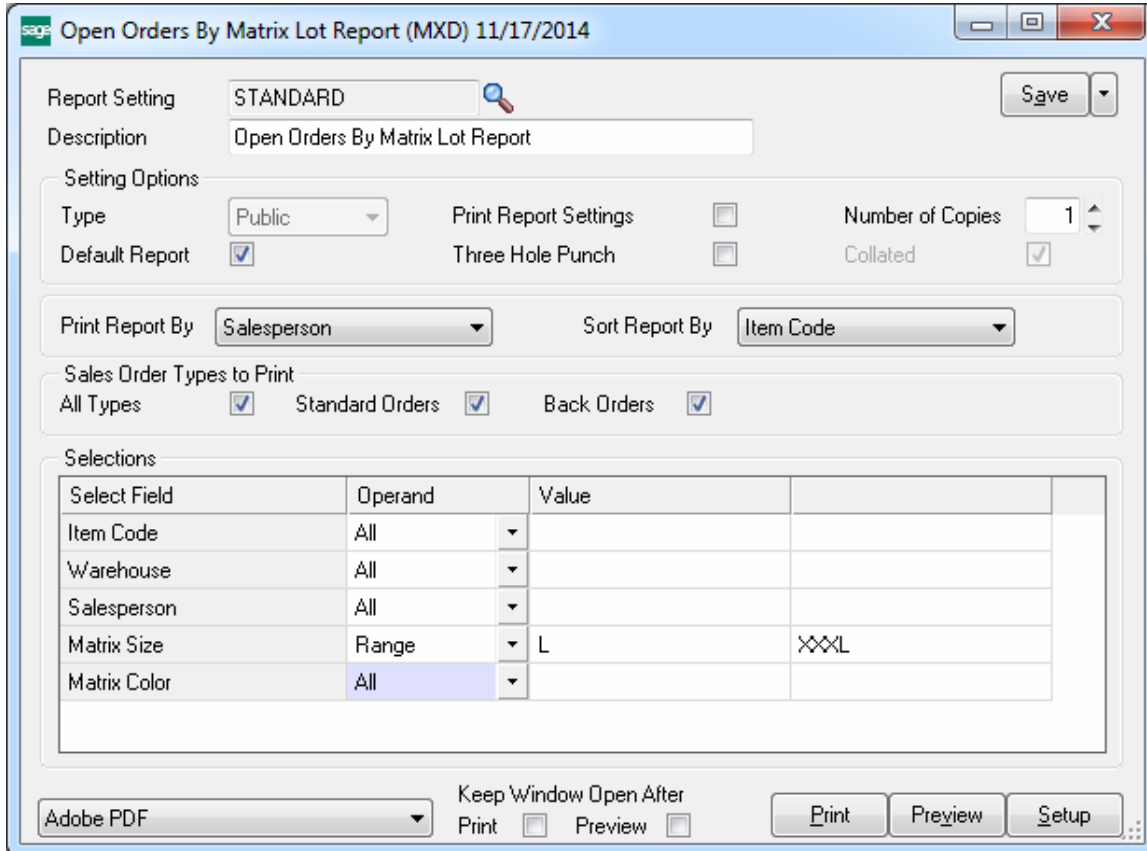
Item Code	Description	Prod:SPW	U/M: EACH	Quantity			Net Order	Item Total	
				Ordered	Shipped	Back Ordered			
MXP_ITEM	Matrix Item			35.00	6.00	8.00	29.00	1,885.00	
				Report Total:	35.00	6.00	8.00	29.00	1,885.00

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

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

Open Orders By Matrix Lot Report

Main Report

Open Orders By Matrix Lot Report  
For Order Types: All (MXD)

Salesperson No / Name								
Item Code / Description	Size	Color	Order No.	Type	Ord. Date	Customer Number / Name	White	Quantity Ordered
01-3100 Jim Kentley								
<b>BELT-WIDE WIDE BELT</b>								
							Product Line :SPW	U/M: EACH
STD	0000184	Black	Std	2/6/2009	01-ABF American Business Futures		000	1.00
							Size: STD Color: BLACK Total:	1.00
STD	0000184	Blue	Std	2/6/2009	01-ABF American Business Futures		000	1.00
	0000219	Back	12/3/2013	01-ABF American Business Futures			001	1.00
							Size: STD Color: BLUE Total:	2.00
							Item BELT-WIDE Total:	3.00
<b>BLINKER \$ BLINKER \$</b>								
							Product Line :SPW	U/M: EACH
\$	0000174	White	Back	5/12/2003	01-ABF American Business Futures		001	1.00
	0000187	Std	6/24/2009	01-ABF American Business Futures			001	2.00
	0000220	Std	2/28/2014	01-ABF American Business Futures			000	1.00
							Size: \$ Color: WHITE Total:	4.00
\$	0000221	Red	Std	2/28/2014	01-ABF American Business Futures		001	1.00
							Size: \$ Color: RED Total:	1.00
M	0000220	White	Std	2/28/2014	01-ABF American Business Futures		000	2.00
							Size: M Color: WHITE Total:	2.00
L	0000188	White	Back	6/24/2009	01-ABF American Business Futures		001	5.00
							Size: L Color: WHITE Total:	5.00
L	0000184	Black	Std	2/6/2009	01-ABF American Business Futures		000	3.00
	0000186	Back	6/24/2009	01-ABF American Business Futures			000	1.00
	0000219	Back	12/3/2013	01-ABF American Business Futures			000	1.00
							Size: L Color: BLACK Total:	5.00
XL	0000174	White	Back	5/12/2003	01-ABF American Business Futures		001	1.00
	0000221	Std	2/28/2014	01-ABF American Business Futures			001	2.00
							Size: XL Color: WHITE Total:	3.00
XL	0000184	Red	Std	2/6/2009	01-ABF American Business Futures		001	2.00
	0000187	Std	6/24/2009	01-ABF American Business Futures			001	2.00
							Size: XL Color: RED Total:	4.00
							Item BLINKER \$ Total:	24.00

Current Page No.: 1 Total Page No.: 1+ Zoom Factor: 100%

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

Open Orders By Matrix Lot Report

Main Report

Open Orders By Matrix Lot Report  
For Order Types: All (MXD)

Item Code/Description Size	Color	Order No.	Type	Ord. Date	Customer Number /Name	Salesperson No /Name	White	Quantity Ordered
<b>BELT-WIDE WIDE BELT</b>								
0000184	BLACK	Std		2/8/2009	01-ABF American Business Futures	01-0100 Jim Kentley	000	1.00
							Size: STD Color: BLACK Total:	1.00
0000184	BLUE	Std		2/8/2009	01-ABF American Business Futures	01-0100 Jim Kentley	000	1.00
0000219	Back			12/3/2013	01-ABF American Business Futures	01-0100 Jim Kentley	001	1.00
							Size: STD Color: BLUE Total:	2.00
							Item BELT-WIDE Total:	3.00
<b>BLINKER S BLINKERS</b>								
Product Line: SPW U/M: EACH								
0000174	WHITE	Back		5/12/2003	01-ABF American Business Futures	01-0100 Jim Kentley	001	1.00
0000187	Std			6/24/2009	01-ABF American Business Futures	01-0100 Jim Kentley	001	2.00
0000220	Std			2/28/2014	01-ABF American Business Futures	01-0100 Jim Kentley	000	1.00
							Size: S Color: WHITE Total:	4.00
0000221	RED	Std		2/28/2014	01-ABF American Business Futures	01-0100 Jim Kentley	001	1.00
							Size: S Color: RED Total:	1.00
0000220	WHITE	Std		2/28/2014	01-ABF American Business Futures	01-0100 Jim Kentley	000	2.00
							Size: M Color: WHITE Total:	2.00
0000188	WHITE	Back		8/24/2009	01-ABF American Business Futures	01-0100 Jim Kentley	001	5.00
							Size: L Color: WHITE Total:	5.00
0000184	BLACK	Std		2/8/2009	01-ABF American Business Futures	01-0100 Jim Kentley	000	3.00
0000188	Back			6/24/2009	01-ABF American Business Futures	01-0100 Jim Kentley	000	1.00
0000219	Back			12/3/2013	01-ABF American Business Futures	01-0100 Jim Kentley	000	1.00
							Size: L Color: BLACK Total:	5.00
0000174	WHITE	Back		5/12/2003	01-ABF American Business Futures	01-0100 Jim Kentley	001	1.00
0000221	Std			2/28/2014	01-ABF American Business Futures	01-0100 Jim Kentley	001	2.00
							Size: XL Color: WHITE Total:	3.00
0000184	RED	Std		2/8/2009	01-ABF American Business Futures	01-0100 Jim Kentley	001	2.00
0000187	Std			6/24/2009	01-ABF American Business Futures	01-0100 Jim Kentley	001	2.00
							Size: XL Color: RED Total:	4.00
							Item BLINKER S Total:	24.00
<b>CAP CAP</b>								
Product Line: SPW U/M: EACH								
0000180	RED	Std		12/5/2003	02-CUSTOM Custom Craft Products	02-0300 Harvey Earlwright	001	1.00
							Size: S Color: RED Total:	1.00

Current Page No.: 1 Total Page No.: 1+ Zoom Factor: 100%

Matrix Codes Invoice History Report

The **Matrix Codes Invoice History Report** added under the Sales Order Reports menu provides detail/summary sales history information about the Matrix Codes.

Report Setting: STANDARD

Description: Matrix Codes Invoice History Report

Setting Options:

- Type: Public
- Print Report Settings:
- Number of Copies: 1
- Default Report:
- Three Hole Punch:
- Collated:

Print Summary Report:

Select Field	Operand	Value
Matrix Size	Range	L
Matrix Color	All	
Item Code	All	
Item Description	All	
Invoice Date	All	
Invoice Number	All	
Customer Number	All	
Salesperson	All	

Adobe PDF | Keep Window Open After Print  Preview  | Print | Preview | Setup

Here is an example of printout for summary report form:

**Matrix Codes Invoice History Report** (MXD)

Item Code / Description	Quantity
<b>BELT-WIDE WIDE BELT</b>	
Size: STD Color: BLACK	28.00
Size: STD Color: BLUE	15.00
Size: STD Color: GREEN	5.00
Size: STD Color: WHITE	3.00
<b>BLINKERS BLINKERS</b>	
Size: S Color: BLUE	2.00
Size: M Color: WHITE	2.00
Size: M Color: YELL	2.00
Size: M Color: BLUE	3.00
Size: M Color: GREEN	2.00
Size: L Color: WHITE	9.00
Size: L Color: BLUE	7.00
Size: L Color: GREEN	2.00
Size: XL Color: BLUE	1.00
<b>CAP CAP</b>	
Size: S Color: WHITE	2.00
Size: S Color: RED	1.00
Size: S Color: BLACK	1.00
Size: L Color: WHITE	4.00
Size: L Color: BLUE	2.00
<b>MXP_ITEM Matrix Item</b>	
Size: S Color: BLU	1.00
Size: S Color: RED	2.00
Size: M Color: WHITE	3.00

Current Page No.: 1 Total Page No.: 1 Zoom Factor: 100%

Here is an example of printout for detail report form:

**Matrix Codes Invoice History Report** (MXD)

Item Code / Description	Invoice Number	Invoice Date	Customer Number / Name	Salesperson No / Name	UIM	Quantity
<b>BELT-WIDE WIDE BELT</b>						
Size: STD Color: BLACK						
0100091	10/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	5.00	
0100097	12/25/2003	01-SHEPARD Shepard Motorworks	01-0200 Shelly Westland	EACH	1.00	
0100097	10/13/2009	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	20.00	
0100099	8/27/2010	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	2.00	
Size: STD Color: BLUE						
0100091	10/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	10.00	
0100097	12/25/2003	01-SHEPARD Shepard Motorworks	01-0200 Shelly Westland	EACH	1.00	
0100070	8/5/2003	02-ORANGE Orange Door & Window Co.	02-0300 Harvey Earhwright	EACH	1.00	
0100099	8/27/2010	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	2.00	
0100114	12/3/2013	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	1.00	
Size: STD Color: GREEN						
0100091	10/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	2.00	
0100097	12/25/2003	01-SHEPARD Shepard Motorworks	01-0200 Shelly Westland	EACH	1.00	
0100099	8/27/2010	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	2.00	
Size: STD Color: WHITE						
0100091	10/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	3.00	
<b>BLINKERS BLINKERS</b>						
Size: S Color: BLUE						
0100061	10/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	1.00	
0100064	7/25/2003	01-SHEPARD Shepard Motorworks	01-0200 Shelly Westland	EACH	1.00	
Size: M Color: WHITE						
0100068	12/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	2.00	
Size: M Color: YELL						
0100114	12/3/2013	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	2.00	
Size: M Color: BLUE						
0100061	10/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	2.00	
0100064	7/25/2003	01-SHEPARD Shepard Motorworks	01-0200 Shelly Westland	EACH	1.00	
Size: M Color: GREEN						
0100061	10/5/2003	01-ABF American Business Futures	01-0100 Jim Kentley	EACH	1.00	

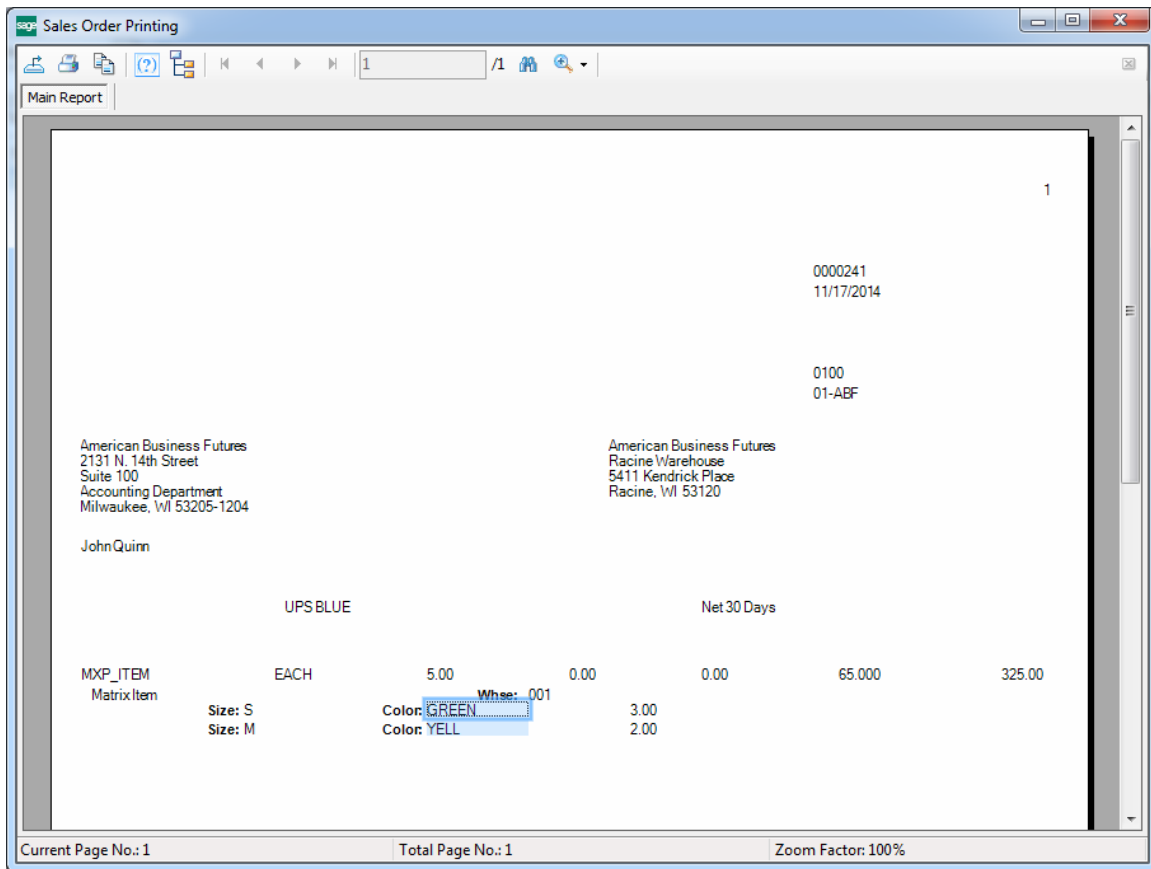
Current Page No.: 1 Total Page No.: 1+ Zoom Factor: 100%

Other Printing Forms

**Preprinted Laser**

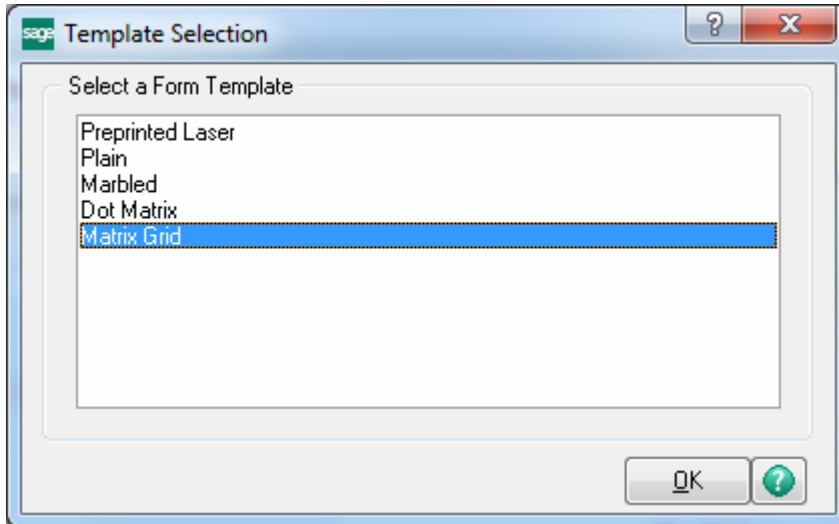
The **Preprinted** form of graphical printing in **Sales Order**, **S/O Invoice**, **Picking Sheet**, and **Purchase Order** have been modified to display Lot Numbers for Matrix Items as a pair of Matrix Codes with their Category Descriptions.

Here is an example of printout:



## 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.



Sage Sales Order Printing (MXD) 11/17/2014

Form Code: MXP

Description: Matrix Grid

Number of Copies: 1   Collated:  Multi-Part Form Enabled:

Sort Orders By: Order Number

Order Type to Print: All  Print Comments: Partial   
Print Bill Options:

Print Lot/Serial Distributions:

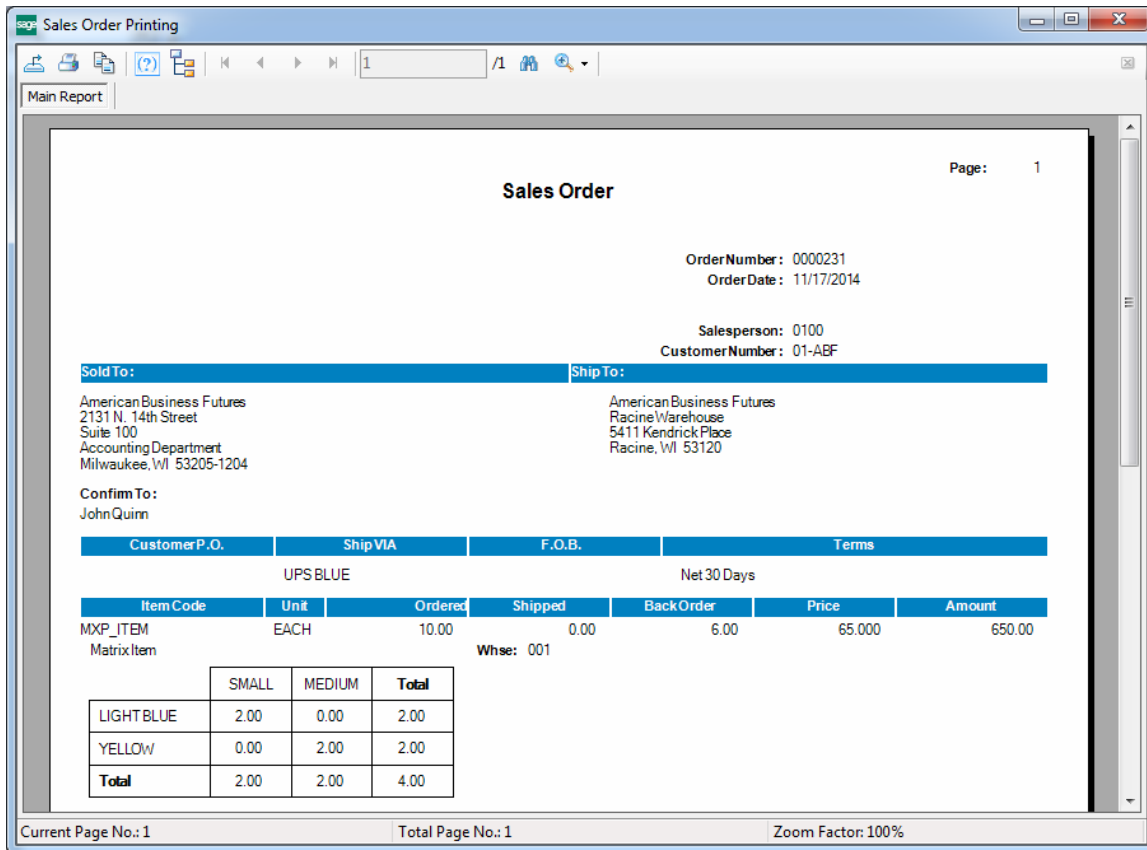
Line 1 Message:   
Line 2 Message:

Selections

Select Field	Operand	Value	
Order Number	All <input type="button" value="down"/>		
Warehouse Code	All <input type="button" value="down"/>		

Microsoft XPS Document Writer

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



The Invoice and Packing List printings by Matrix Grid form print the Quantity Shipped and Backordered for Matrix Lot.

Here is an example of printout for Invoice Printing:



**Packing List Printing** [Window Title Bar]

Main Report [Navigation Bar]

Page: 2

**Packing List**

MXPDemo company

Shipping Number : 0100130  
 Ship Date : 4/9/2015

Order Number : 0000237  
 Order Date : 4/9/2015  
 Salesperson : 0100  
 Customer Number : 01-ABF

<b>Sold To:</b>		<b>Ship To:</b>	
American Business Futures 2131 N. 14th Street Suite 100 Accounting Department Milwaukee, WI 53205-1204		American Business Futures Racine Warehouse 5411 Kendrick Place Racine, WI 53120	

Confirm To: John Quinn      Number of Packages: 1

Customer P. O.	Ship VIA	F. O. B.	Terms
	UPS BLUE		Net30 Days

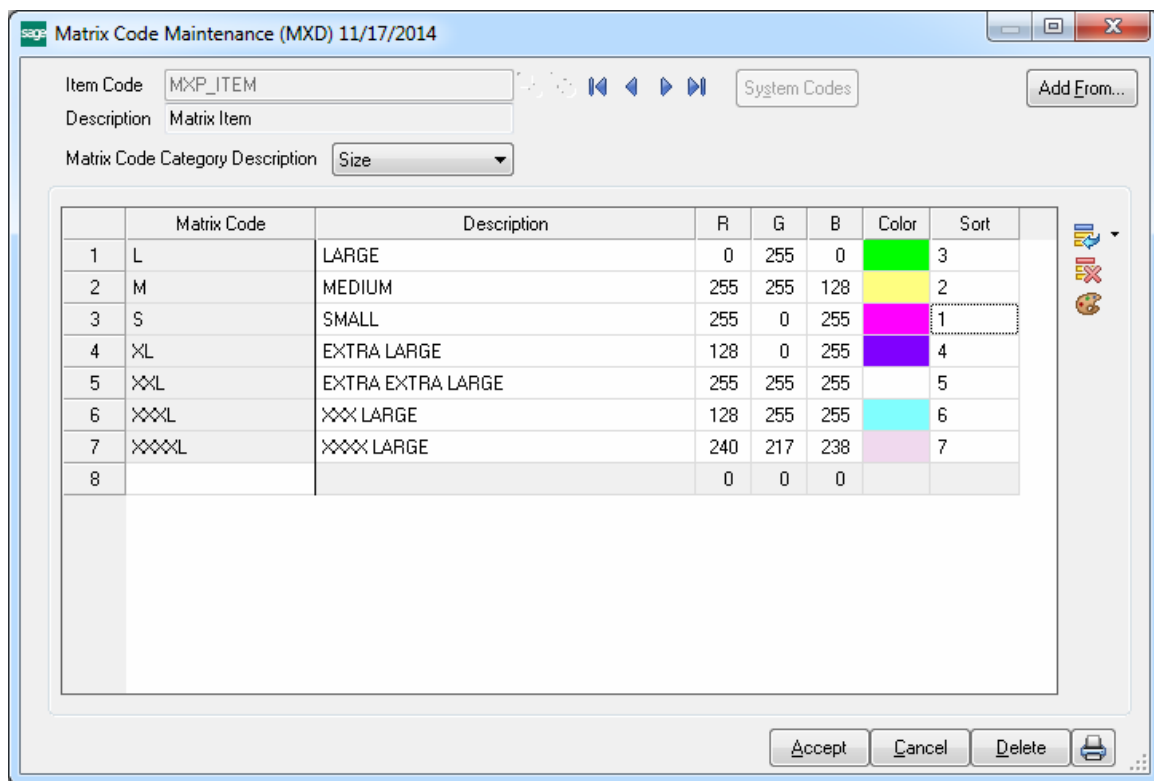
Item Number	Unit	Ordered	Shipped	Backordered
CAP	EACH	7.00	5.00	2.00
CAP		Warehouse: 000		
		M	SMALL	Total
RED	Ordered	0.00	0.00	0.00
	Shipped	0.00	3.00	3.00
	Backord	0.00	0.00	0.00
GREEN	Ordered	0.00	0.00	0.00
	Shipped	2.00	0.00	2.00
	Backord	2.00	0.00	2.00
<b>Total</b>	Ordered	0.00	0.00	0.00
	Shipped	2.00	3.00	5.00
	Backord	2.00	0.00	2.00
2480-8-50	EACH	3.00	3.00	0.00
DESK FILE 8" CAP 50		Warehouse: 001		
LotNumber: 111		2.00		
LotNumber: JAN10		1.00		
MXP_ITEM	EACH	5.00	4.00	1.00

Current Page No.: 2      Total Page No.: 2      Zoom Factor: 100%

Matrix Codes Sorting in Printings

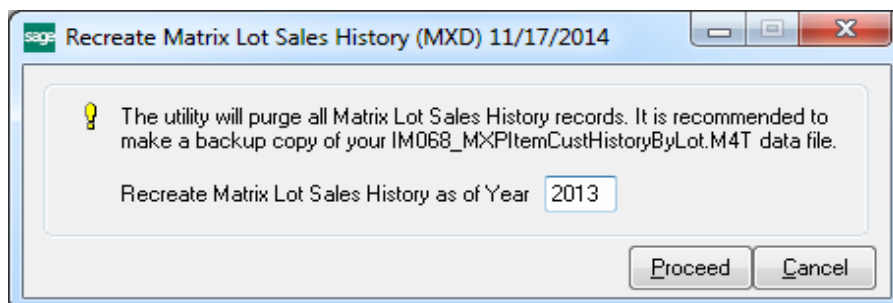
The following printings display information in the order according to the **Sort** field value of **Matrix Codes Matrix Code Maintenance**:

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



## 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.

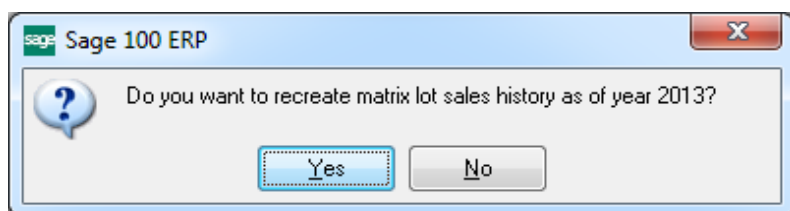


**Recreate Matrix Lot Sales History as of Year**- Enter the year to be used for recreating Matrix Lot Sales History.

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.

## Rebuild Sort Files

The **Rebuild Sort Files** utility has been modified to take into account also the On PO Qty for Matrix Lots while recalculating committed lot/serial quantities.