



Matrix Processing For MAS 90/200

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

www.iigservices.com



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

TRADEMARKS

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

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

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

Table of Contents

<u>Installation Instructions and Cautions.....</u>	<u>5</u>
<u>Wait! Before You Install – Do You Use CUSTOM OFFICE?.....</u>	<u>5</u>
<u>Registering IIG products.....</u>	<u>6</u>
<u>Setup.....</u>	<u>7</u>
<u>Matrix Options.....</u>	<u>7</u>
<u>Matrix Items.....</u>	<u>19</u>
<u>Customer Matrix Sales History.....</u>	<u>26</u>
<u>Matrix Codes.....</u>	<u>28</u>
<u>Prepacks.....</u>	<u>32</u>
<u>UPC Options.....</u>	<u>36</u>
<u>UPC Codes.....</u>	<u>38</u>
<u>Lot Pricing for Matrix Items.....</u>	<u>40</u>
<u>MXP Lot Price/Cost Maintenance.....</u>	<u>40</u>
<u>Average Price Calculation</u>	<u>42</u>
<u>Matrix Distribution.....</u>	<u>45</u>
<u>Purchase Order Entry.....</u>	<u>45</u>
<u>Receipt of Goods.....</u>	<u>52</u>
<u>Sales Order Entry.....</u>	<u>55</u>
<u>S/O Invoice Data Entry.....</u>	<u>59</u>
<u>Shipping Data Entry.....</u>	<u>62</u>
<u>Inventory Transaction Entry.....</u>	<u>63</u>
<u>Physical Count Entry.....</u>	<u>65</u>
<u>RMA Data and RMA Receipts Entry.....</u>	<u>66</u>
<u>Production Entry.....</u>	<u>67</u>
<u>Disassembly Entry.....</u>	<u>69</u>
<u>Work Order Transaction Entry.....</u>	<u>70</u>
<u>Work Order generation from Sales Orders.....</u>	<u>71</u>
<u>Auto Generate Work Orders from Sales Orders.....</u>	<u>71</u>
<u>Generated Work Orders.....</u>	<u>72</u>
<u>Sales Order Assignment.....</u>	<u>77</u>
<u>Predefined Distribution in Bills.....</u>	<u>78</u>
<u>Bill of Materials Maintenance.....</u>	<u>78</u>
<u>Work Order and Auto Issue.....</u>	<u>82</u>
<u>Inquiries.....</u>	<u>87</u>
<u>Invoice History Inquiry.....</u>	<u>87</u>
<u>Sales Order Inquiry.....</u>	<u>88</u>
<u>Purchase Order History.....</u>	<u>89</u>
<u>Printings.....</u>	<u>90</u>
<u>Matrix Sales History Report.....</u>	<u>90</u>
<u>Matrix Stock Status Report.....</u>	<u>91</u>

<u>Matrix Stock Status Report (grid)</u>	93
<u>Matrix Committed Report</u>	94
<u>Open Orders by Matrix Item Report</u>	95
<u>Open PO by Matrix Item Report</u>	97
<u>Sales Order and Invoice Printing</u>	99
<u>Inventory Valuation Report</u>	101
<u>Other Printings</u>	102
<u>Matrix Codes Sorting in Printings</u>	103
<u>Visual Integrator</u>	105
<u>Appendix</u>	111
<u>Printing Matrix Codes separately</u>	111

Installation Instructions and Cautions

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

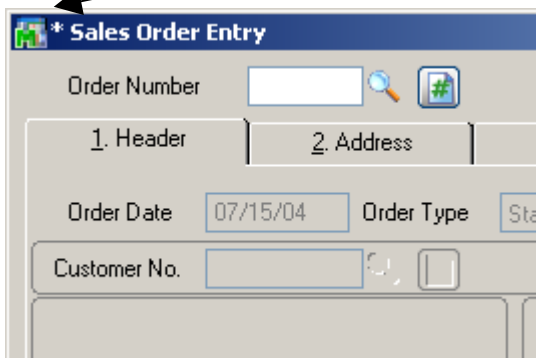
Wait! Before You Install – Do You Use CUSTOM OFFICE?

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

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

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

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



Registering IIG products

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

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

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

Enhancement	Level	Release Date	Serial Number	Unlocking Key
IIG Enhancement Name	4.00	07/19/04	AAAAAAAAAAAAAAAAAA	BBBBBB

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.

IIG Registration Form can be printed by using the **Print Registration Form** button.

Setup

Matrix Options

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

Matrix Options

1. Main | 2. Purchase Order | 3. Sales Order | 4. Inventory | 5. Bill of Materials | 6. Work Order | 7. RMA

Lot Number Preview: SSSSSSSSSSSSSSS

Category 1
Description: Size | Starting Position: 1 | Length: 5 | Type: String

Category 2
Description: Color | Starting Position: 6 | Length: 10 | Type: String

Color
Grid cell Text color: None | Grid cell Background color: Category2

Delete Zero Quantity Lots When Deleting Matrix Code

Accept | Cancel | ?

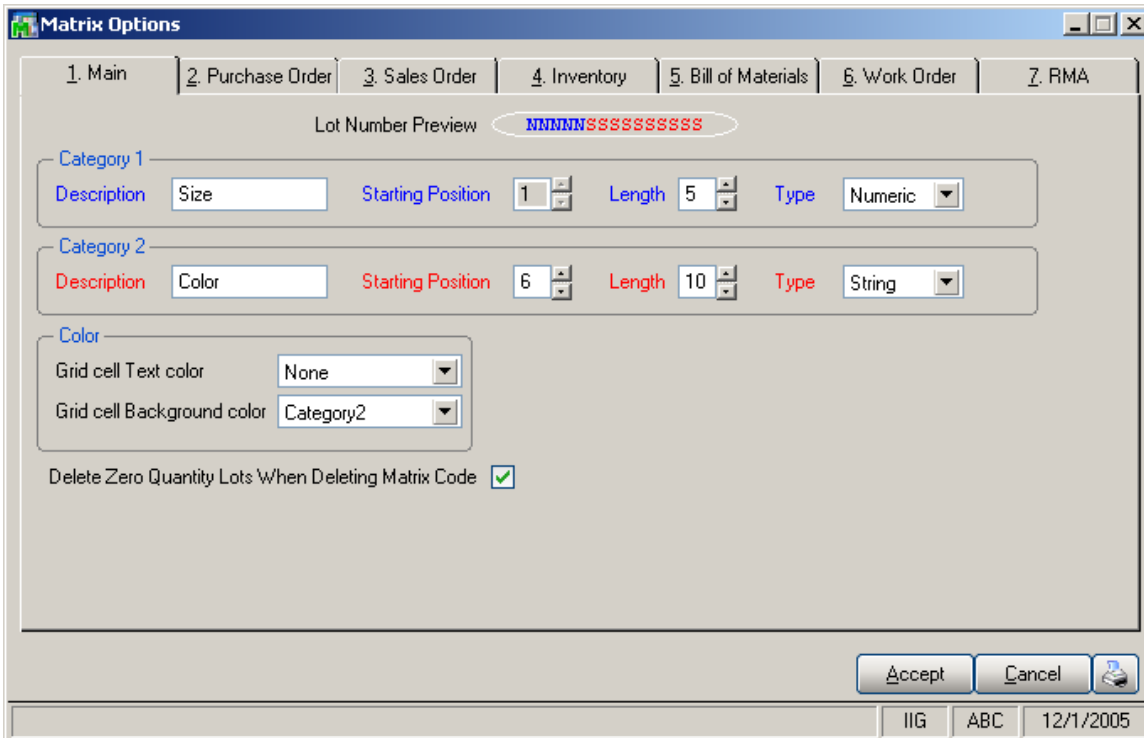
Select Type for the First Category | IIG | ABC | 12/1/2005

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

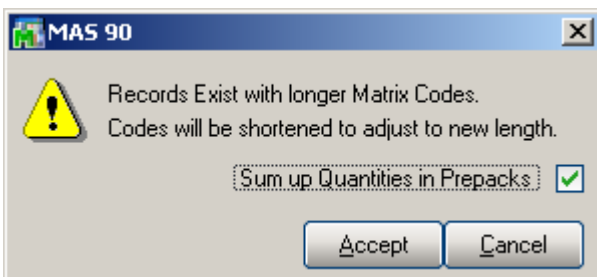
Enter **Descriptions** for **Categories** 1 and 2.

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

The **Lot Number preview** displays the format of the Lot Number with the selected settings. The symbols written in **blue** represent a **Category 1** Code; symbols written in **red** represent a **Category 2** Code. Code symbols are: “S” for String Type Code, “N” for Numeric Type Code.



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



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

Check the **Sum up Quantities in Prepacks** box to add up the quantities of all the initial Codes to be shortened to the new Code. If the **Sum up Quantities in Prepacks** box is cleared, only the quantities of the first one will be retained.

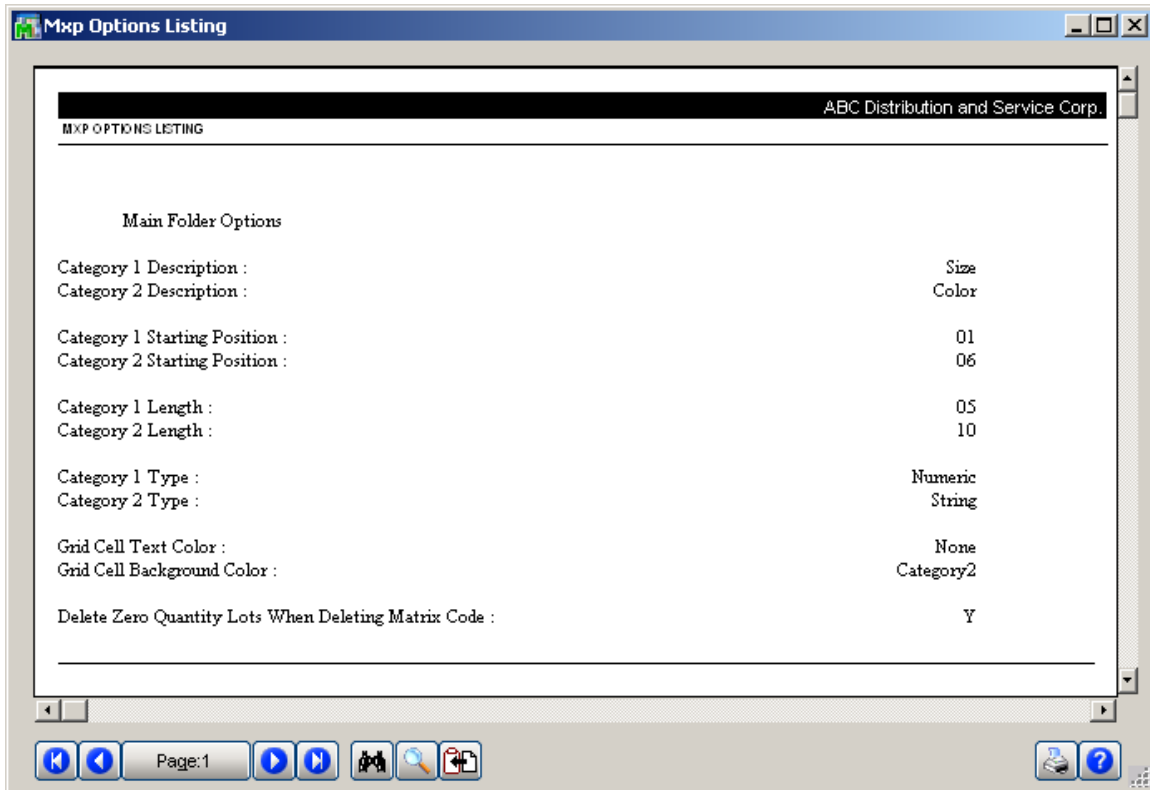
If the **Type** of a Category is changed from **String** to **Numeric**, the Matrix Codes, containing other symbols beside digits, will be displayed in red on the **Matrix Codes Maintenance** screen.

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

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

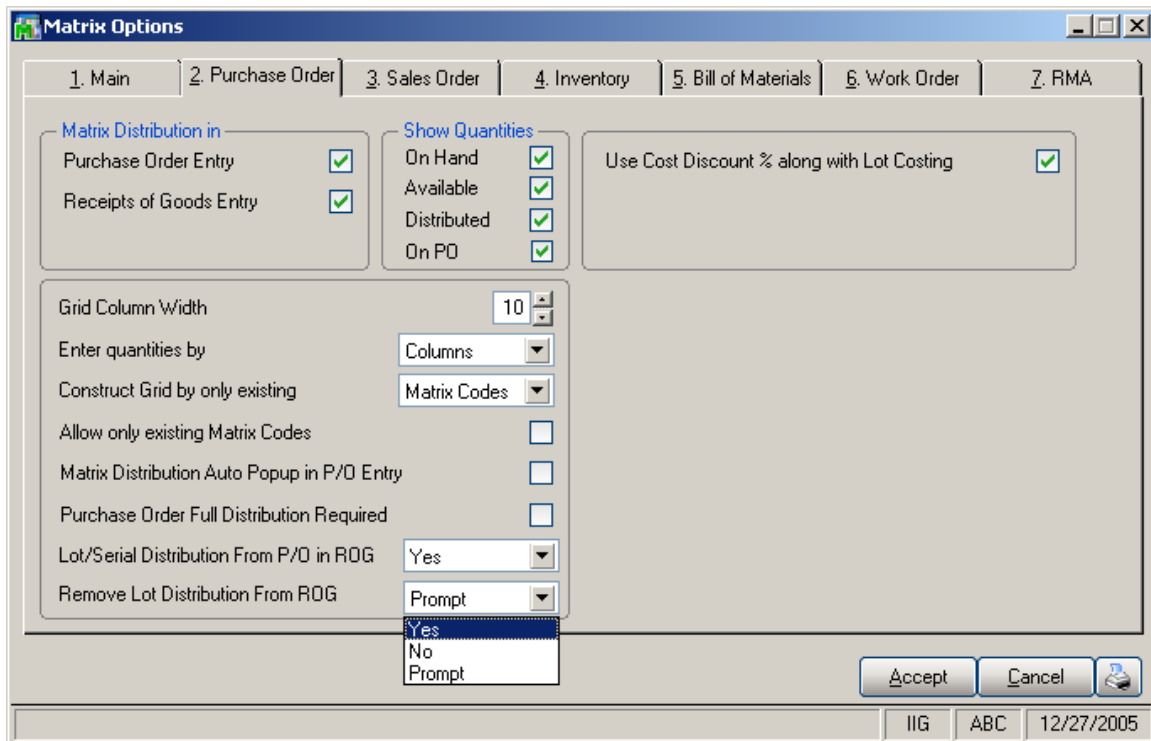
Check the **Delete Zero Quantity Lots When Deleting Matrix Code** box to have deleted the Lot Numbers, which do not have Quantity, corresponding to the Matrix Code being deleted for the item from the **Matrix Code Maintenance**. This option does not affect deletion of the System Matrix Codes.

Click the **Print** button to print the Mxp Options Listing



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

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



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

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

Note that at least one of these boxes should be checked, so that at least one quantity is displayed in each cell.

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

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

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

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

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

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

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

From the **Lot/Serial Distribution from P/O in ROG** 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. 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.

The screenshot shows the 'Matrix Options' dialog box with the 'Sales Order' tab selected. The dialog has a title bar with standard window controls and a tabbed interface with seven tabs: 1. Main, 2. Purchase Order, 3. Sales Order (selected), 4. Inventory, 5. Bill of Materials, 6. Work Order, and 7. RMA. The main area is divided into several sections:

- Matrix Distribution in:** A group box containing three checkboxes: 'Sales Order Entry' (checked), 'Price Quote' (unchecked), and 'Invoice Data Entry' (checked).
- Show Quantities:** A group box containing three checkboxes: 'On Hand' (checked), 'Available' (checked), and 'Distributed' (checked).
- Use Price Discount % along with Lot Pricing:** A checkbox that is checked.
- Grid column Width:** A numeric spinner set to 10.
- Enter quantities by:** A dropdown menu set to 'Columns'.
- Matrix Distribution Auto Popup in S/O Entry:** An unchecked checkbox.
- Sales Order Full Distribution Required:** An unchecked checkbox.
- Remove Lot Distribution From Invoice:** A dropdown menu with 'Yes' selected. A small popup menu is visible below it, showing 'Yes', 'No', and 'Prompt' options.

At the bottom right, there are 'Accept', 'Cancel', and a printer icon button. At the bottom center, there are three small boxes containing the text 'IIG', 'ABC', and '12/27/2005'.

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

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

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

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

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

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

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

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

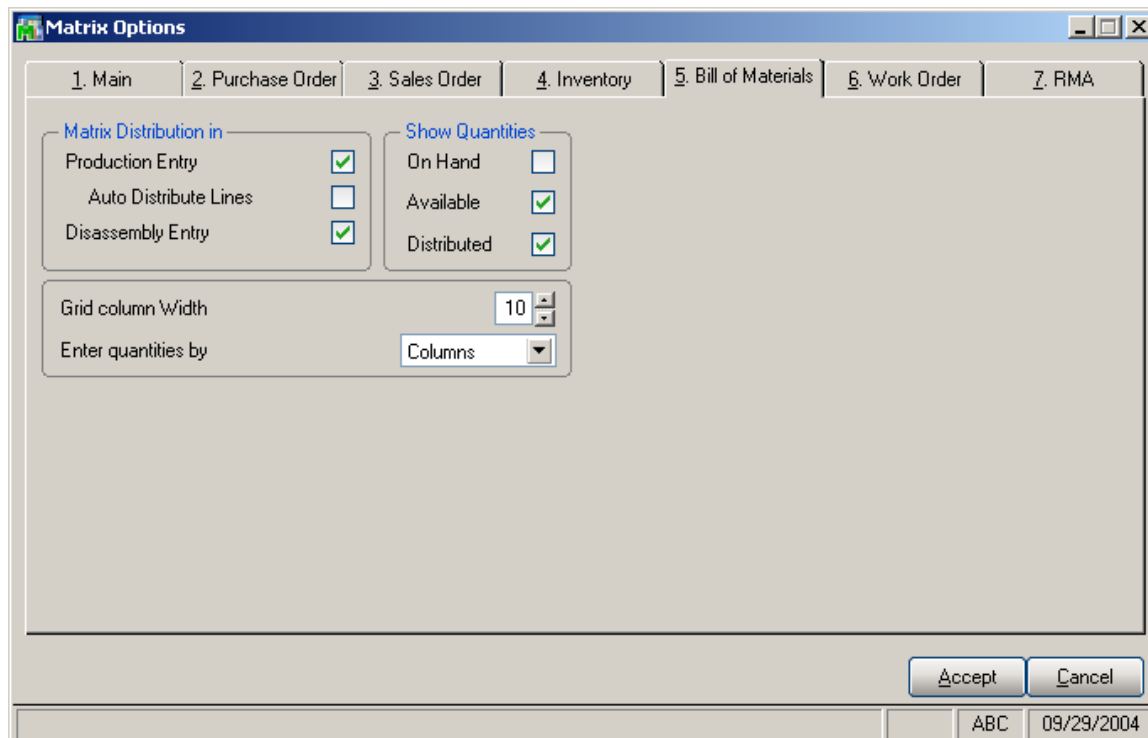
The screenshot shows the 'Matrix Options' dialog box with the 'Inventory' tab selected. The dialog has a title bar with a close button. Below the title bar are seven tabs: '1. Main', '2. Purchase Order', '3. Sales Order', '4. Inventory', '5. Bill of Materials', '6. Work Order', and '7. RMA'. The 'Inventory' tab is active. The main area contains two sections: 'Matrix Distribution in' and 'Show Quantities'. The 'Matrix Distribution in' section has a checkbox for 'Inventory Transaction Entry' which is checked. The 'Show Quantities' section has three checkboxes: 'On Hand' (unchecked), 'Available' (checked), and 'Distributed' (checked). Below these sections are two fields: 'Grid column Width' with a spinner box set to '10', and 'Enter quantities by' with a dropdown menu set to 'Columns'. At the bottom right are 'Accept' and 'Cancel' buttons. At the bottom left, there are fields for 'ABC' and '09/29/2004'.

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 **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 are unavailable.



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

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

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

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

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

The screenshot shows the 'Matrix Options' dialog box with the 'Work Order' tab selected. The dialog has a title bar with standard window controls. Below the title bar are seven tabs: 1. Main, 2. Purchase Order, 3. Sales Order, 4. Inventory, 5. Bill of Materials, 6. Work Order (selected), and 7. RMA. The main content area is divided into several sections:

- Matrix Distribution in:** A group box containing a checkbox for 'Transactions Entry' which is checked.
- Show Quantities:** A group box containing three checkboxes: 'On Hand' (unchecked), 'Available' (checked), and 'Distributed' (checked).
- Grid column Width:** A numeric spinner set to '10'.
- Enter quantities by:** A drop-down menu currently showing 'Columns'.
- Generation From S/O:** A group box containing a text field for 'Default Routing' with the value 'CONSTRUCTION' and a search icon, and a checked checkbox for 'Summarize by Item and Lot Numbers'.

At the bottom right of the dialog are 'Accept' and 'Cancel' buttons. At the bottom of the dialog, there are two small fields containing 'ABC' and '09/30/2004'.

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.

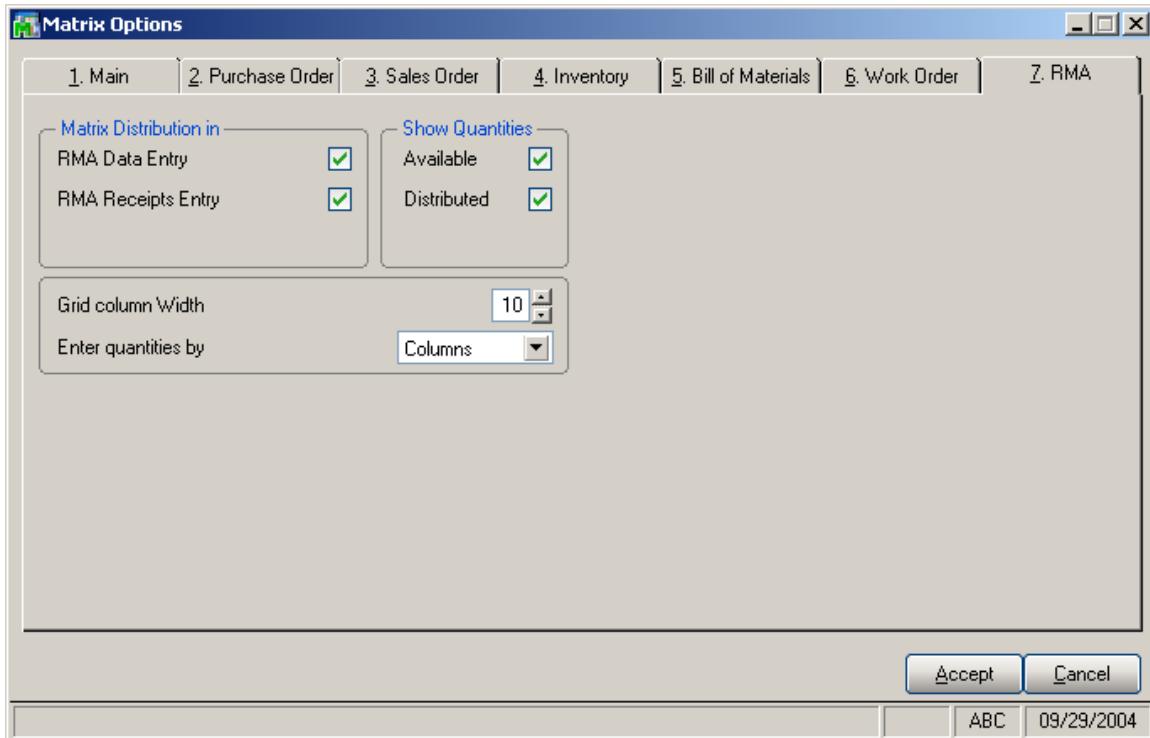
The **Show Quantities** section, **Grid column Width** field, and the **Enter quantities by** drop-down list are the same as on the **Purchase Order** tab. The settings apply to the programs of the **Work Order** module.

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

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

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

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

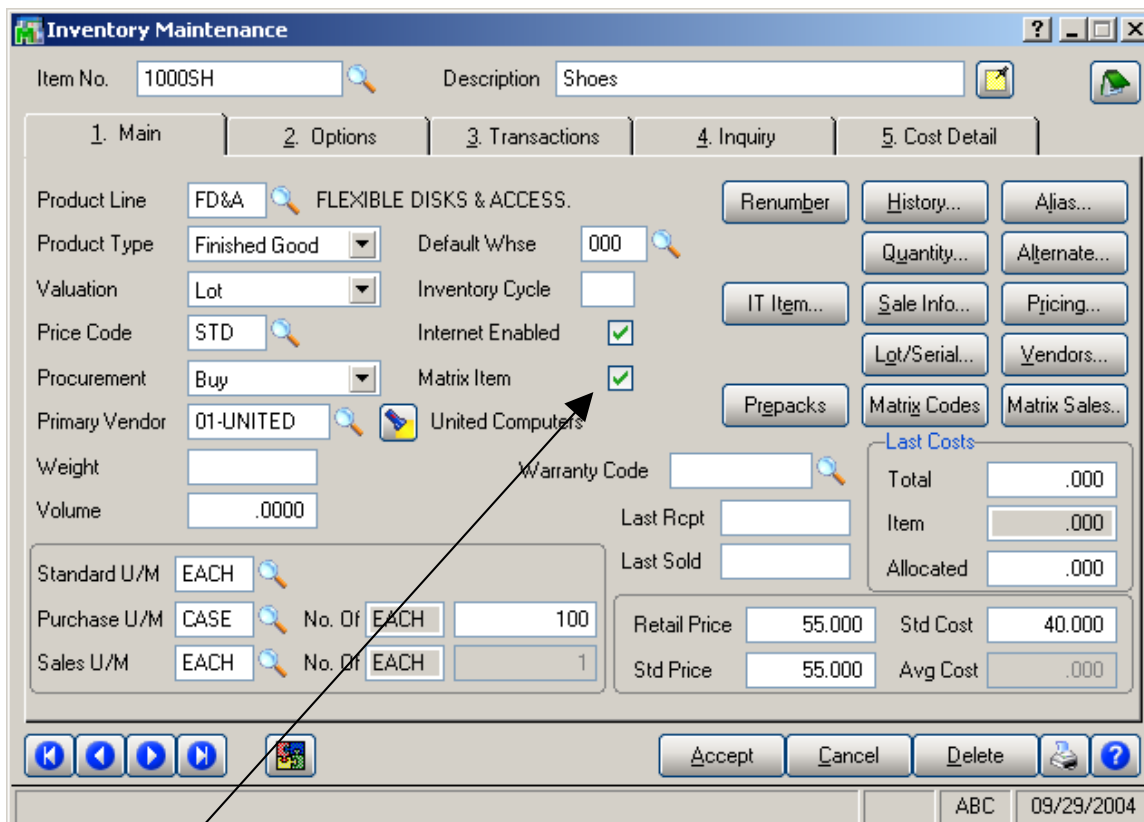


In the **Matrix Distribution in** section, check the boxes corresponding to the programs, where, for the Matrix Items, the Matrix Distribution screen should be displayed instead of the standard **Lot/Serial Distribution** screen.

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

Matrix Items

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



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

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

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

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

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

Matrix Code	Description	Color	Sort
7½		Pink	
8		Cyan	
9		Yellow	

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

Item No. 1000SH Shoes

Matrix Code Category Description Size

Matrix Code 00000

Description Sort

Color R: 255 G: 255 B: 255

Matrix Code	Description	Color	Sort
7½			
8			
9			

Close

IIG ABC 12/1/2005

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

Quantity on Hand & Reorder	
Item No.	1000SH
Warehouse Code	000
	CENTRAL WAREHOUSE
Bin Location	<input type="text"/>
Reorder Method	Economic Quantity
Economic Order Qty	0.00
Reorder Point	0.00
Minimum Order Qty	0.00
Maximum On Hand	0.00
Item Inventory Status	
Unit of Measure	EACH
Qty on Hand	3000.00
Qty on Purch Order	4000.00
Qty on Sales Order	63.00
Qty on Back Order	0.00
Qty Req for Work Order	0.00
Qty on Work Order	0.00
Total Qty Available	2937.00
Qty in Shipping	0.00
On Hand less in Shipping	3000.00

The **Matrix Distribution Detail** screen displays the **Quantities Available** and **On Hand** in the Grid constructed by Matrix Codes.

Matrix Detail

Item 1000SH Shoes

	7	7½	8	8½	9	9½
BLACK	0/0	200.00/200.00		0/0	200.00/200.00	
WHITE	400.00/400.00	200.00/197.00	200.00/194.00	100.00/100.00	200.00/200.00	0/0
BROWN	0/0	0/0	0/9.00-			
BLUE	100.00/100.00	0/6.00-	100.00/100.00	200.00/200.00	0/6.00-	
LTBLU		0/0	0/3.00-	100.00/100.00	0/0	
GREEN	100.00/100.00	0/0	200.00/195.00	0/0	0/9.00-	0/0
RED	0/0	0/3.00-	200.00/200.00	100.00/100.00	0/0	
GREY	200.00/200.00	0/8.00-	100.00/100.00	0/0	100.00/100.00	0/0

Show Quantities

On Hand Available

Grid column Width 12

Ok

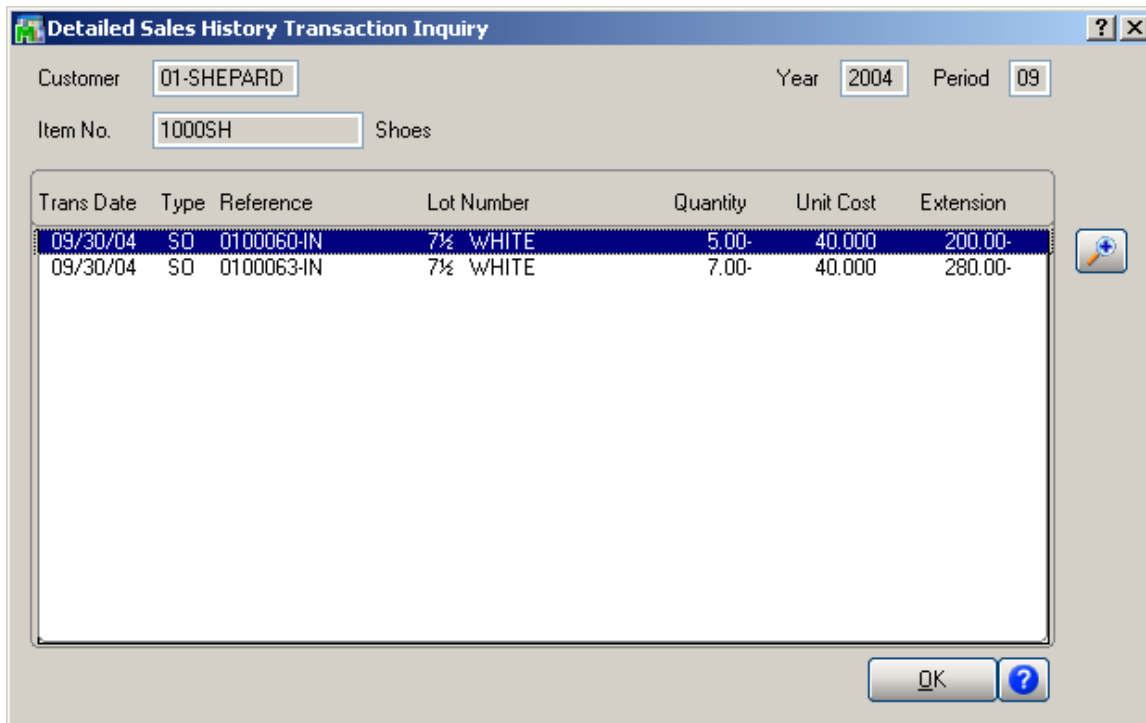
The same screen is available also from the **Inventory Inquiry** program. Select an item, then select a warehouse from the list, and click the **Zoom** button to display the **Quantity On Hand** screen. Click the **Matrix...** button on that screen to view the **Matrix Distribution Detail** screen.

The **Matrix Sales** button on the **Inventory Maintenance** screen displays the **Detailed Matrix Sales History** screen.

Select **Customer**, then Matrix Codes of both **Categories**.

Period	Qty Sold	Dollars Sold	Cost Sold	Qty Return	Prior Yr Qty Sold	Var %
01 JAN	0.00	0.00	0.00	0.00	0.00	.0
02 FEB	0.00	0.00	0.00	0.00	0.00	.0
03 MAR	0.00	0.00	0.00	0.00	0.00	.0
04 APR	0.00	0.00	0.00	0.00	0.00	.0
05 MAY	0.00	0.00	0.00	0.00	0.00	.0
06 JUN	0.00	0.00	0.00	0.00	0.00	.0
07 JUL	3.00	148.50	28.97	0.00	0.00	100.0
08 AUG	0.00	0.00	0.00	0.00	0.00	.0
09 SEP	12.00	640.20	480.00	0.00	0.00	100.0
10 OCT	0.00	0.00	0.00	0.00	0.00	.0
11 NOV	0.00	0.00	0.00	0.00	0.00	.0
12 DEC	0.00	0.00	0.00	0.00	0.00	.0
Totals	15.00	788.70	508.97	0.00	0.00	

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



The **Period End Processing** has been modified to not clear the **Lot Number** records of **Matrix Items**, independent of the quantities of those Lot Numbers.

Note: It is strongly recommended to not use the Merge feature from the Inventory Management Utilities for Matrix Items.

Customer Matrix Sales History

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

The screenshot shows the 'Customer Maintenance' window with the following details:

- Customer No.:** 01-SHEPARD
- Name:** Shepard Motorworks
- Address:** 2215 English Ave
- ZIP Code:** 53151
- City:** Milwaukee, **State:** WI
- Telephone:** (414) 445-6544, **Ext:** 2100
- Ship Code:** UPS BLUE
- Primary Contact:** ALAN SHEPA (Alan Shepard)
- Terms Code:** 02 (2% Ten Days, Net 30 Days)
- Salesperson:** 0200 (Shelly Westland)
- Open Item Customer:** **Temporary Customer:**
- Sort:** SHEPARD **Internet Enabled:**
- Credit Limit:** .00

Click the **Matrix** button to open the **Detailed Matrix Sales History** screen.

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

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

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

Detailed Matrix Sales History

Customer: 01-SHEPARD Shepard Motorworks Year: 2004

Item No.: 1000SH Shoes Ship To:

Size: 7½ Color: WHITE

Period	Qty Sold	Dollars Sold	Cost Sold	Qty Return	Prior Yr Qty Sold	Var %
01 JAN	0.00	0.00	0.00	0.00	0.00	.0
02 FEB	0.00	0.00	0.00	0.00	0.00	.0
03 MAR	0.00	0.00	0.00	0.00	0.00	.0
04 APR	0.00	0.00	0.00	0.00	0.00	.0
05 MAY	0.00	0.00	0.00	0.00	0.00	.0
06 JUN	0.00	0.00	0.00	0.00	0.00	.0
07 JUL	3.00	148.50	28.97	0.00	0.00	100.0
08 AUG	0.00	0.00	0.00	0.00	0.00	.0
09 SEP	12.00	640.20	480.00	0.00	0.00	100.0
10 OCT	0.00	0.00	0.00	0.00	0.00	.0
11 NOV	0.00	0.00	0.00	0.00	0.00	.0
12 DEC	0.00	0.00	0.00	0.00	0.00	.0

Totals: Qty Sold: 15.00 Dollars Sold: 788.70 Cost Sold: 508.97 Qty Return: 0.00 Prior Yr Qty Sold: 0.00

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

Detailed Sales History Transaction Inquiry

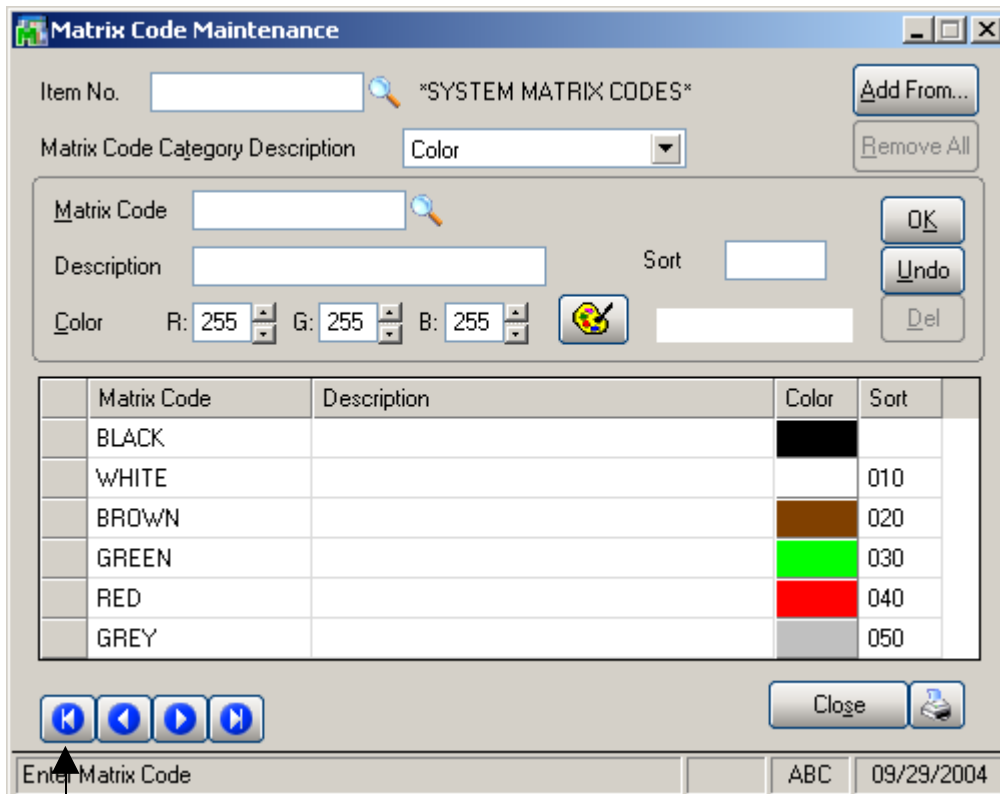
Customer: 01-SHEPARD Shepard Motorworks Year: 2004 Period: 09

Item No.: 1000SH Shoes

Trans Date	Type	Reference	Lot Number	Quantity	Unit Cost	Extension
09/30/04	SO	0100060-IN	7½ WHITE	5.00-	40.000	200.00-
09/30/04	SO	0100063-IN	7½ WHITE	7.00-	40.000	280.00-

Matrix Codes

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

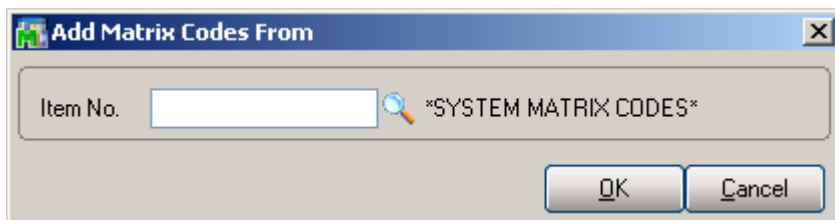


First – displays system Codes

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

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

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



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

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

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

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

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

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

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

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

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

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

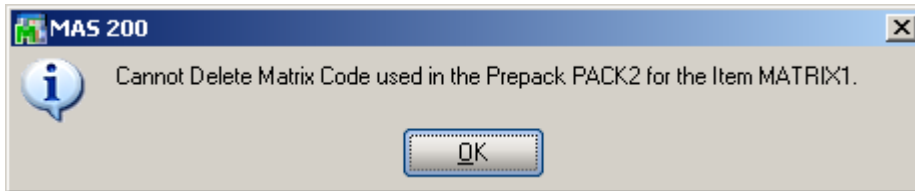
Click **OK** to accept the changes for the selected Code.

Click **Undo** to cancel changes.

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

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

When trying to delete a Code used in a Prepack, a message displays the Prepack Code, and the Item Number (if working with the system Matrix Codes):



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

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

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

Alt+G to go to the grid.

Alt+T to set focus to the Category field.

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

Alt+C to set focus to the Color field.

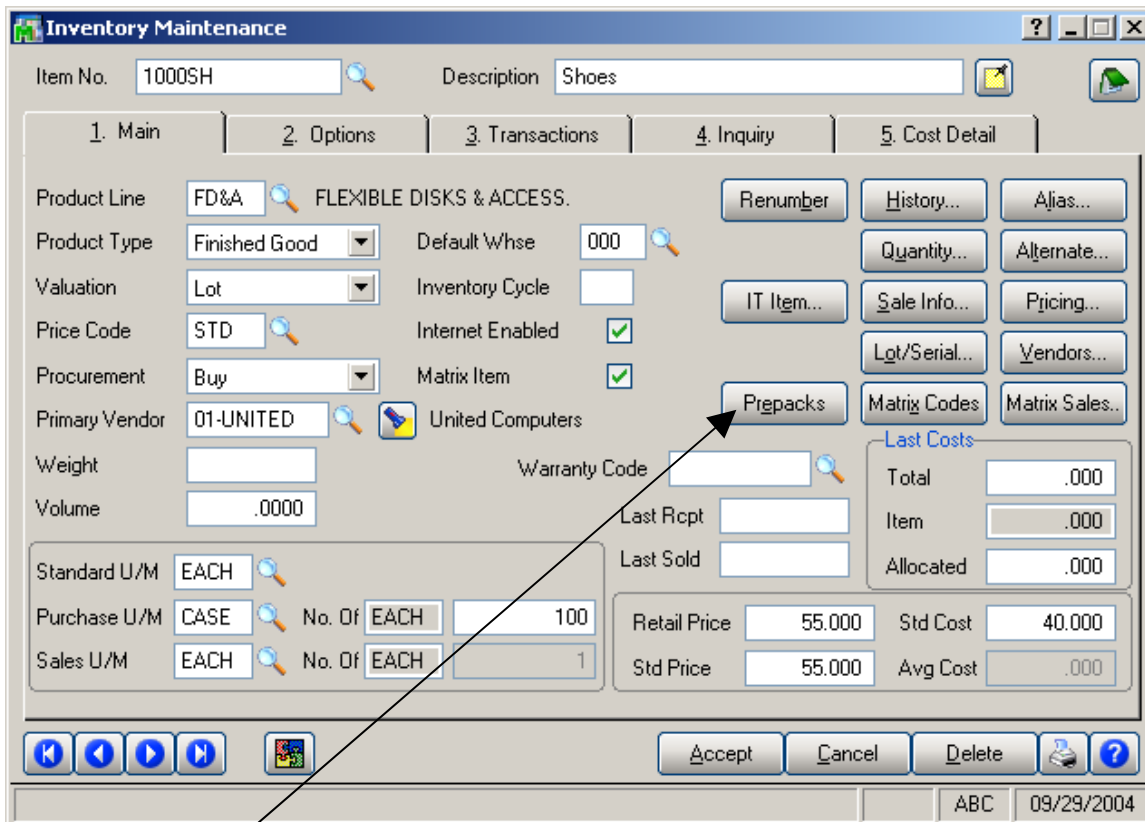
You can navigate from Code to Code in the grid using the Arrow keys. PageUp selects the first, and PageDown the last Code in the grid.

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

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

Prepacks

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



Click the **Prepacks** button.

Item No. 1000SH Shoes

Customer No.

Prepack Code

Description

Enter quantities by Columns

	7	7½	8	8½	9	9½
BLACK	0	0	0	0	0	0
BLUE	0	0	0	0	0	0
BROWN	0	0	0	0	0	0
GREEN	0	0	0	0	0	0
GREY	0	0	0	0	0	0
LTBLU	0	0	0	0	0	0
RED	0	0	0	0	0	0
WHITE	0	0	0	0	0	0

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:

	7	7½	8	8½	9	9½
BLACK	0	0	0	0	0	0
BLUE	0	2	0	0	2	0
BROWN	0	0	3	0	0	0
GREEN	0	0	5	0	3	0
GREY	0	3	0	0	2	0
LTBLU	0	2	1	0	0	0
RED	0	0	0	0	0	0
WHITE	0	1	2	0	4	0

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

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

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

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

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

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

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

Alt+G to go to the grid.

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

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

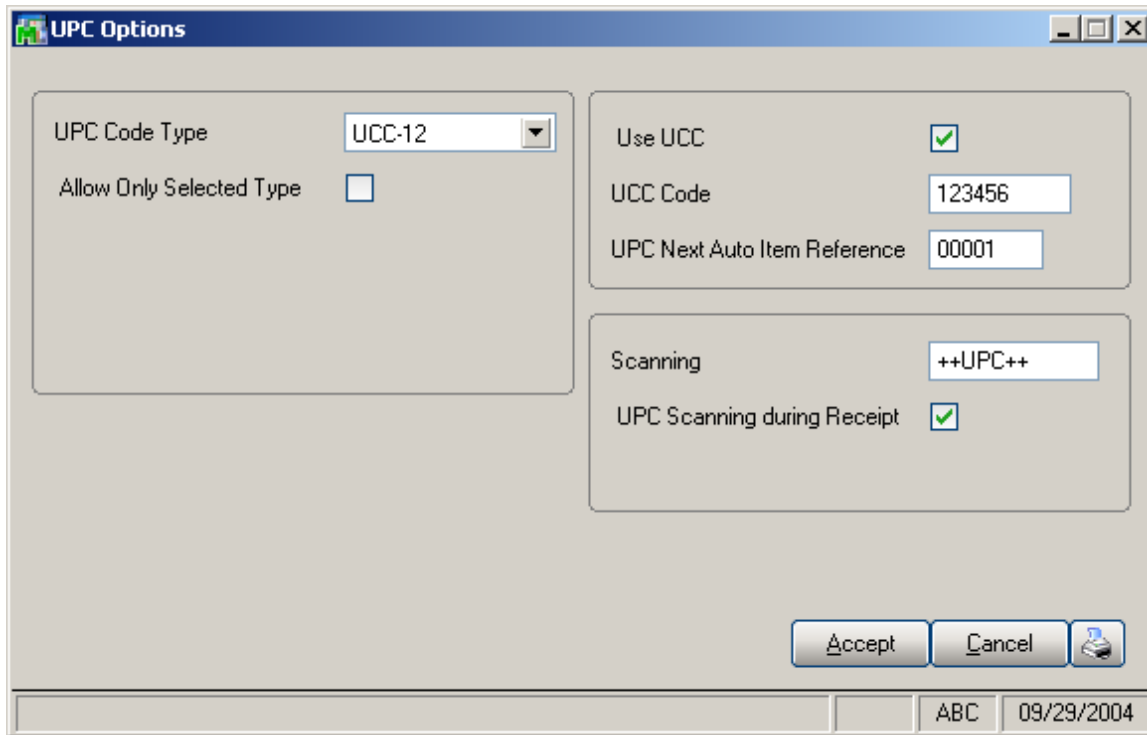
You can navigate between cells in the grid using the Arrow keys. PageUp selects the first, and PageDown the last cell in the current column; Home selects the first, and End the last cell in the current row.

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

UPC Options

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

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



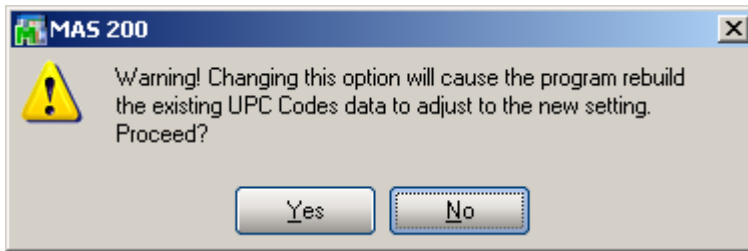
The **UPC Code Type** determines the default length to be used for the code – 12, 13 or 14 digits. The available options are UCC-12, EAN/UCC-13, EAN/UCC-14.

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

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

Changing the **Allow Only Selected Type** option after using the UPC Codes in the system, can lead to problems after

rebuilding the data connected to the already entered and used UPC Codes.



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

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

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

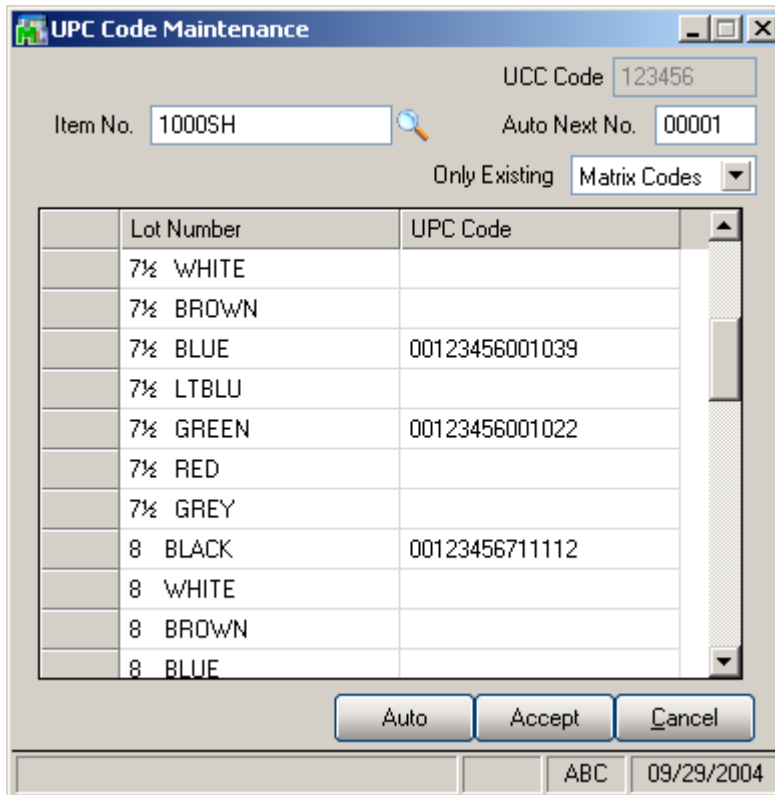
The sum of the **UCC Code** and **Item Reference** lengths is equal to the length of the **UPC Code Type** selected (12, 13, or 14).

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

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

UPC Codes

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



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

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

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

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

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

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

Lot Pricing for Matrix Items

MXP Lot Price/Cost Maintenance

The **MXP Lot Price/Cost Maintenance** program has been added under the **Inventory Management Setup** menu to allow defining individual price/cost for each existing Matrix lot.

Matrix Lot Pricing/Costing Maintenance

Item No. Matrix Item 2

Unit Price Unit Cost

Lot No.

Pricing

Method Discount %

Costing

Method Discount %

Lot Number	Pricing Method	Price	Costing Meth...	Cost
------------	----------------	-------	-----------------	------

IIG ABC 12/27/2005

The following Pricing/Costing methods are available:

- Price Discount %
- Price Override
- Cost Discount %

Cost Override

Select an Item and specify **Pricing/Costing** methods for the Lot Numbers.

Lot Number	Pricing Method	Price	Costing Meth..	Cost
S GRN	Unit Price	20.000	Discount %	10.000
S RED	Discount %	10.000	Unit Cost	10.000
XL VIO	Discount %	20.000	Discount %	20.000

If the Price/Cost is not defined for matrix lot, it is equal to zero or the Discount% is equal to 100, standard price from the Inventory Maintenance will be used.

If **Price/Cost Override** is selected, the entered (fixed) Price/Cost will be used.

If **Price/Cost Discount %** is specified, the Price/Cost will be increased or reduced correspondingly by the given rate.

If the **Price/Cost Discount %** is a negative number the Price/Cost will be increased and if the Price/Cost Discount % is a positive number the **Price/Cost** will be reduced.

Click the **Remove All** button to remove all prices/costs specified for matrix lots of the selected item.
 Click **Del** if you want to delete the price/cost for particular Lot number.

Average Price Calculation

In the Sales Order Entry the **Average Price for Matrix Distribution** is calculated based on the Pricing information entered in the **MXP Lot Price/Cost Maintenance**.

Lot/Serial No.- Matrix Distribution Entry

Item M2 Matrix Item 2 U/M EACH

	L	M	S	XL
BLU				0
GRN			2.00	
RED		0	2.00	
VIO				3.00

Lot Number: XL VIO Available: 95.00 Distribute: 3.00 [OK] [Undo]

Lot Number	Available	Distribute
S GRN	297.00	2.00
S RED	198.00	2.00
XL VIO	98.00	3.00

Distribution Balance: 7.00- Qty Distributed: 7.00

Grid column Width: 10

Enter quantities by: Columns

Show Quantities:

- On Hand:
- Available:
- Distributed:

[Accept]

The average price is calculated by the following method:

$$\frac{\text{Sum of the Distributed Qty* Unit Price}}{\text{Quantity Ordered}}$$

In our example it is calculated as:

$$\frac{2 * 20 + 2 * (34.95 - 34.95 * 10\%) + 3 * (34.95 - 34.95 * 20\%)}{7} = 26.684$$

Taking into account the Discount % set in the Item Price Lookup, the Price will be $26.684 - 3\% = 25.883$ and it will be used as line Price.

Price will be recalculated on each distribution change.

Matrix Lots individual prices will be taken into account during recalculation by the **Recalc Price** button.

Item Price Lookup
? X

Item No. M2 Matrix Item 2

Price Level	1	Price Code-Price Level: STD -Standard	Sale Starting Date	05/15/2003	
Pricing Method	Price Discount %		Sale Ending Date	05/31/2003	
Std Cost	15.750	Std Price	34.950	Sale Price	33.203

Order Qty 7.00 U/M EACH Unit Price 25.883 Extension 181.18

Step	From Qty	To Qty	% Discount	Unit Price
1	1	4	.000	34.950
2	5	9	3.000	33.902
3	10	24	7.000	32.504
4	25	999,999	10.000	31.455
5				

Accept
Cancel
?

The Price calculation for Matrix Items in SO Invoice Data Entry is the same as in the Sales Order entry.

The Cost calculation logic for Matrix/Lot items in the Purchase Order Entry and Receipt of Goods Entry is exactly the same as Price Calculation logic in SO and SO Invoice.

For IM transactions the average price/cost calculation logic is applied to all types of transactions except of Issues.

Matrix Distribution

Purchase Order Entry

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

In the **Lines** tab, select a Matrix Item. If the **Purchase Order Entry** box is checked in the **Matrix Distribution in** section of the **Purchase Order** tab on the **Matrix Options** screen, the following **Matrix Distribution Entry** screen is displayed. For other Lot/Serial items, and also for Matrix Items if that box is not checked in the options, the standard **Lot/Serial No. Distribution** screen has been added.

Item 1000SH Shoes U/M CASE

	7	7½	8	8½	9	9½
BLACK						
WHITE						
BROWN						
BLUE						
LTBLU						
GREEN						
RED						
GREY						

Lot Number: 7 BLACK Available: 0.00 Distribute: 0.00

Grid column Width: 10

Enter quantities by: Columns

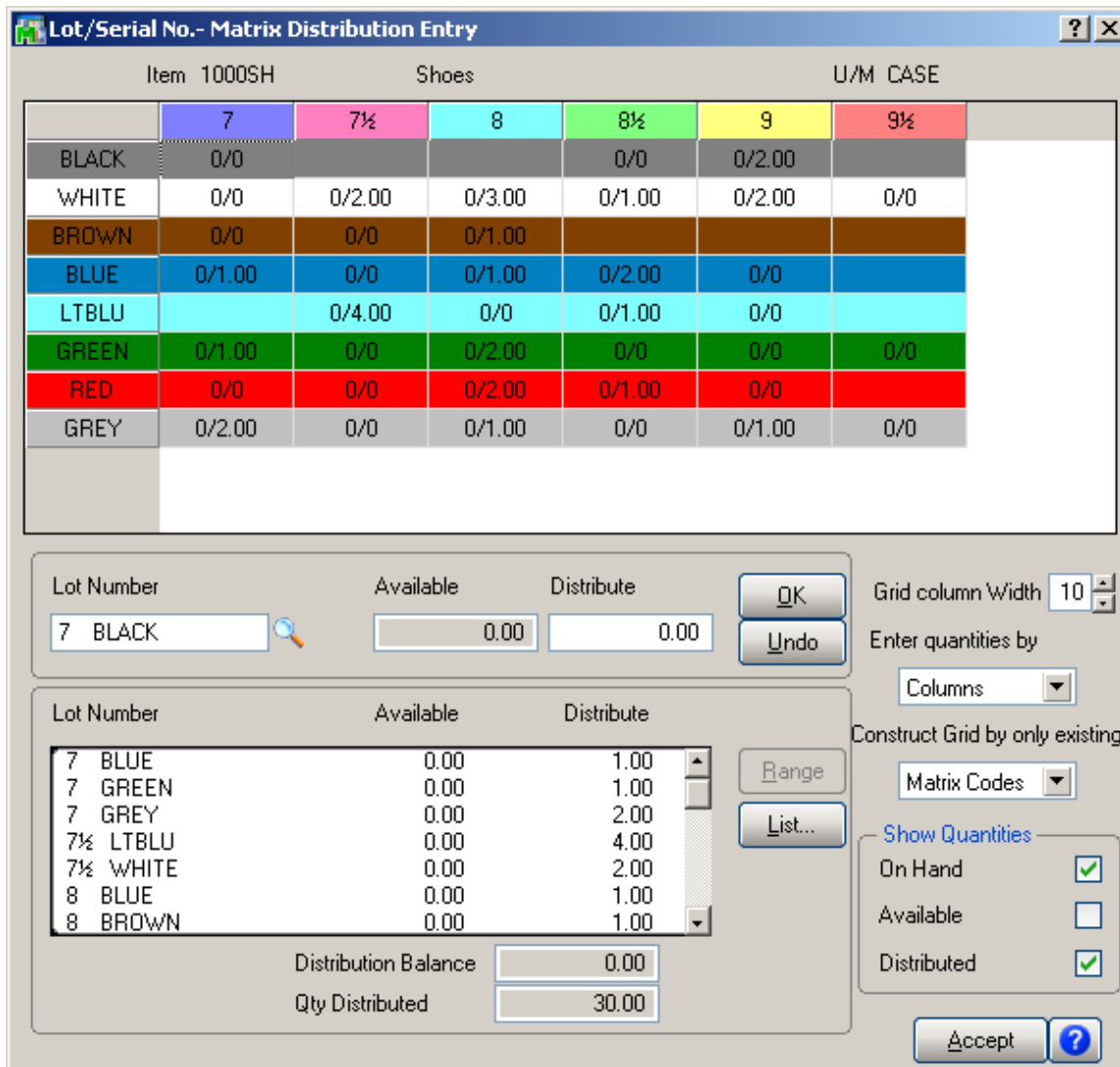
Construct Grid by only existing: Matrix Codes

Show Quantities: On Hand Available Distributed

Distribution Balance: 0.00 Qty Distributed: 0.00

Buttons: OK, Undo, Range, List..., Accept, ?

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



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

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

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

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

You can navigate between cells in the grid using the Arrow keys. PageUp selects the first, and PageDown the last cell

in the current column; Home selects the first, and End the last cell in the current row.

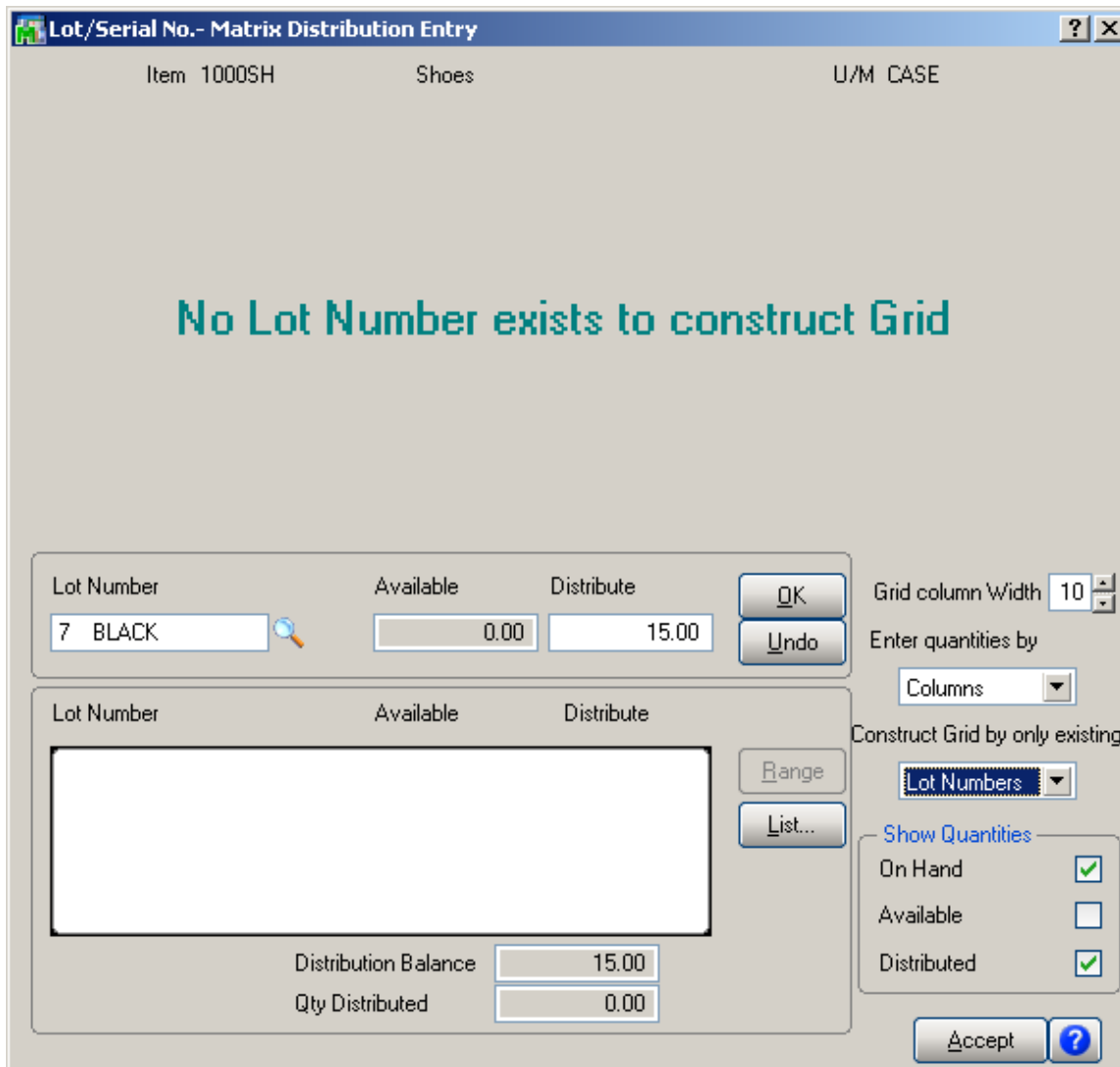
In addition to the fields of the standard screen (in the lower part), there are options for the grid. The values are defaulted to the settings on the **Purchase Order** tab of the **Matrix Options** program, but can be changed for the current receipt.

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

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

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

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



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

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

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

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

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

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

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

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

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

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

Purchase Order Entry

Order Number: 0010020 Quick Print... Defaults... Vendor... User ID: 003

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

Item Number: Description: Tax Class: UT: LC: OK

Req'd Date: G/L Acct: Undo

Whse: U/M: Ordered: 0.00 Received: 0.00 Back Ordered: 0.00 Unit Cost: .000 Extension: .00 Addtl...

Line	Item Number	Description	TC	LC	UT	Req Date	G/L Account	Whse	U/M	Ordered	Received	Back Order	Unit Cost	Extension
1	1000SH	Shoes	TX	Y	N	09/29/2004	15-00-03	000	CASE	30.00	0.00	0.00	4,000.000	120,000.00

Ins Del Quick Line: Total Amount: 120,000.00 Matrix Items Qty List

Accept Cancel Delete ?

Enter Item Number, / + Miscellaneous or Comment code or * + Special code ABC 09/29/2004

The **Matrix Items Distributed Quantities List** screen will be displayed.

Matrix Items Distributed Quantities List

Item Number	Size	Color	Qty Ordered	Qty Received	Qty Open
1000SH	7	BLUE	100.00	0.00	100.00
1000SH	7	GREEN	100.00	0.00	100.00
1000SH	7	GREY	200.00	0.00	200.00
1000SH	7½	LTBLU	400.00	0.00	400.00
1000SH	7½	WHITE	200.00	0.00	200.00
1000SH	8	BLUE	100.00	0.00	100.00
1000SH	8	BROWN	100.00	0.00	100.00
1000SH	8	GREEN	200.00	0.00	200.00
1000SH	8	GREY	100.00	0.00	100.00
1000SH	8	RED	200.00	0.00	200.00
1000SH	8	WHITE	300.00	0.00	300.00
1000SH	8½	BLUE	200.00	0.00	200.00
1000SH	8½	LTBLU	100.00	0.00	100.00
1000SH	8½	RED	100.00	0.00	100.00
1000SH	8½	WHITE	100.00	0.00	100.00
1000SH	9	BLACK	200.00	0.00	200.00
1000SH	9	GREY	100.00	0.00	100.00
1000SH	9	WHITE	200.00	0.00	200.00

OK

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.

Item	7 1/2	8	9
BLACK	5.80/0/0	0/0/8.00	0/0/0
WHITE	0.15-/0/0	0.06-/0/0	0/0/0
BROWN	0/0/0	0.09-/0/0	0/0/0
BLUE	0.06-/0/0	0.01/0/2.00	0.06-/0/0
LTBLU	0.05-/0/4.00	0.02-/0/0	0/0/0
GREEN	0.03/0/0	2.91/0/4.00	0.09-/0/0
RED	0.03-/0/0	0/0/0	0/0/0
GREY	0.08-/0/0	0/0/0	0/0/0

Lot Number: 8 BLACK Available: 0.00 Receive: 0.00

Lot Number	Available	Distribute
5.80/0/0	0.00	0.00
7 WHITE	0.00	0.00
7 1/2 BLACK	5.80	0.00
7 1/2 BLUE	0.16	0.00
7 1/2 BROWN	0.00	0.00
7 1/2 GREEN	0.03	0.00
7 1/2 GREY	0.23	0.00

Scanning UPC Distribution Balance: 0.00
 UPC Code: | Qty Distributed: 0.00

Grid column Width: 5
 Enter quantities by: Rows
 Construct Grid by only existing: Matrix Codes
 Show Quantities: On Hand Available Distributed On PO

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

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

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

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

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

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

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

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

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

If the distribution of the Order is changed in the Receipt, (the **Distribution Balance** can be zero even if the distribution is changed), when accepting the distribution, the **P/O and ROG Distribution Balance** screen is

displayed with the list of **Lot Numbers**, and the Quantities **Available to Reduce** from them. Enter the Quantities **Reduced** and click **Accept**. The **Total** field displays the total of reduced quantities, and the **Balance** field displays the balance between reduced and changed quantities.

The screenshot shows a dialog box titled "P/O and ROG Distribution balance". At the top, it displays "Item 1000SH", "Shoes", and "U/M CASE". Below this is a table with the following data:

Lot/Serial Num.	Avail to Reduce	Reduced
7½ LTBLU	4.00	0.00
8 BROWN	1.00	0.00
8 WHITE	1.00	0.00

Below the table, there are two input fields: "Balance" with the value "6.00" and "Total" with the value "0.00". An "Accept" button is located at the bottom right of the dialog.

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

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

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

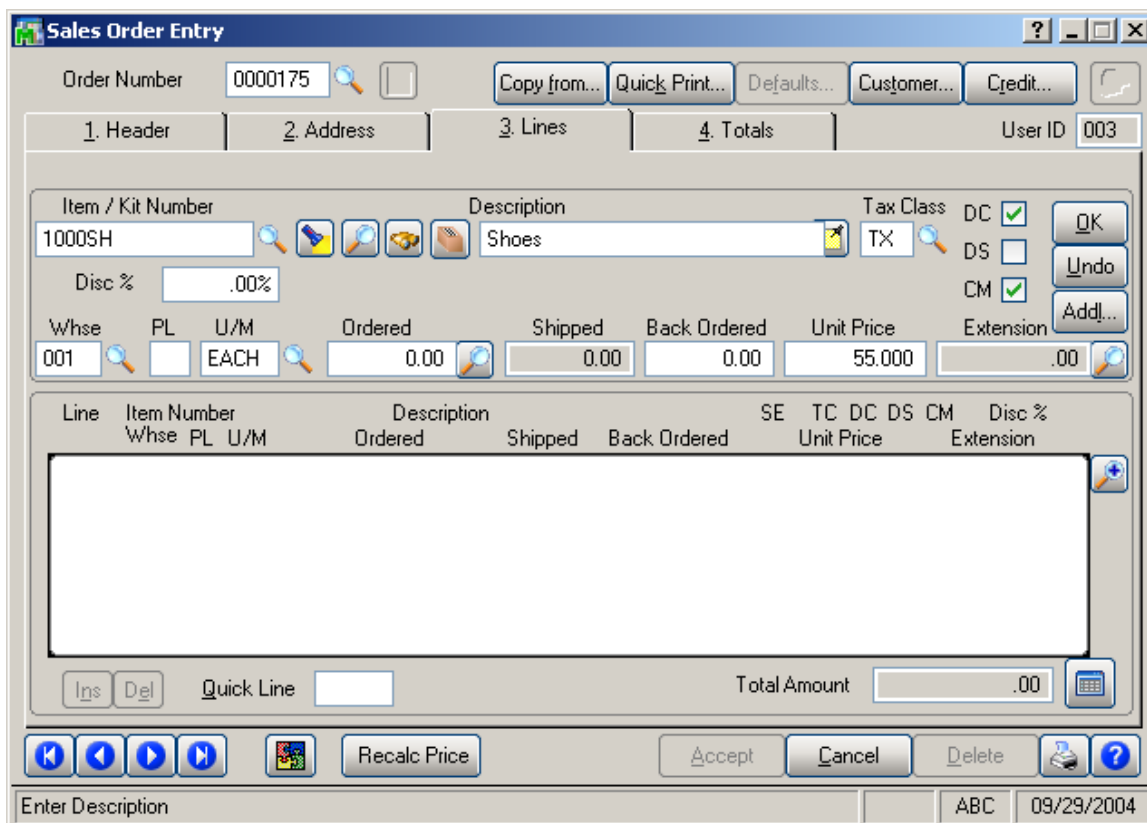
Sales Order Entry

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

The **Matrix Distribution** is allowed only for **Standard** and **Back Orders**.

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

In the **Lines** tab, the **Prepack** button is added to the Lookups for the **Item Number** field. This button works only if a **Matrix Item** is selected, and if the selected already existing line is not distributed yet.



Click the **Prepack** button to select a Prepack from the list.

The list displays only the Prepacks for the selected item of the Customer of the Sales Order and Own Prepacks of the item.

The following screen is displayed:

The screenshot shows a dialog box titled "Selected Prepack Info". It contains the following fields and values:

Customer No.	<input type="text"/>			
Item No.	1000SH	Shoes	U/M	EACH
Prepack Code	MAIN	Main prepack	Whse	000
Pack Quantity	<input type="text"/>			

An "OK" button is located at the bottom right of the dialog.

The **Customer Number** is blank if the Prepack is item's own Prepack.

Enter the **Pack Quantity** and click **OK**. Zero quantity cannot be entered. If the screen is closed without entering quantity, the item is canceled.

The **Quantity Ordered** for the line is calculated as the product of the specified **Pack Quantity** and the total quantity of the item distributed in the Prepack.

If the Order type is Back Order, the **Backordered** is set equal to the **Quantity Distributed**.

If a Prepack was selected, the item is already distributed. Otherwise, the quantity should be distributed in the **Matrix Distribution** screen, which is similar to the screen in the **Receipt of Goods** program.

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

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

	7	7½	8	8½	9	9½
BLACK	0/0	200.00/0		0/0	200.00/0	
WHITE	400.00/0	197.00/3.00	194.00/6.00	100.00/0	188.00/12.00	0/0
BROWN	0/0	0/0	9.00-/9.00			
BLUE	100.00/0	6.00-/6.00	100.00/0	200.00/0	6.00-/6.00	
LTBLU		6.00-/6.00	3.00-/3.00	100.00/0	0/0	
GREEN	100.00/0	0/0	200.00/0	0/0	9.00-/9.00	0/0
RED	0/0	0/0	200.00/0	100.00/0	0/0	
GREY	200.00/0	8.00-/8.00	100.00/0	0/0	94.00/6.00	0/0

Lot Number: 8 RED Available: 200.00 Distribute: 16.00

Lot Number	Available	Distribute
7½ BLUE	0.00	6.00
7½ GREY	0.00	8.00
7½ LTBLU	0.00	6.00
7½ WHITE	200.00	3.00
8 BROWN	0.00	9.00
8 LTBLU	0.00	3.00
8 WHITE	200.00	6.00

Distribution Balance: 16.00 Qty Distributed: 74.00

Grid column Width: 10

Enter quantities by: Columns

Show Quantities: On Hand Available Distributed

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

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

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

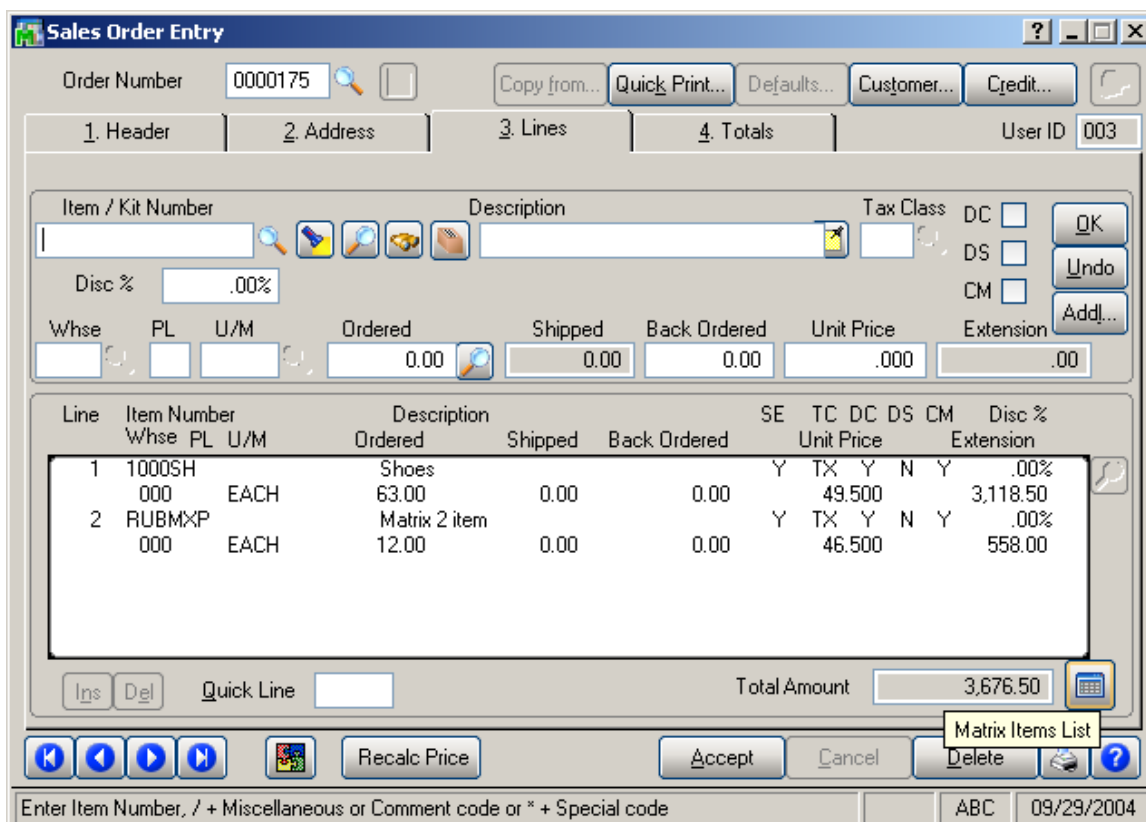
Note that if the **Distributed Qty** is not selected to be displayed, and only one of the **On Hand** and **Available** quantities are selected, the values of the selected meaning

will be considered as entered if you move around the Grid with the Enter key or double-clicking.

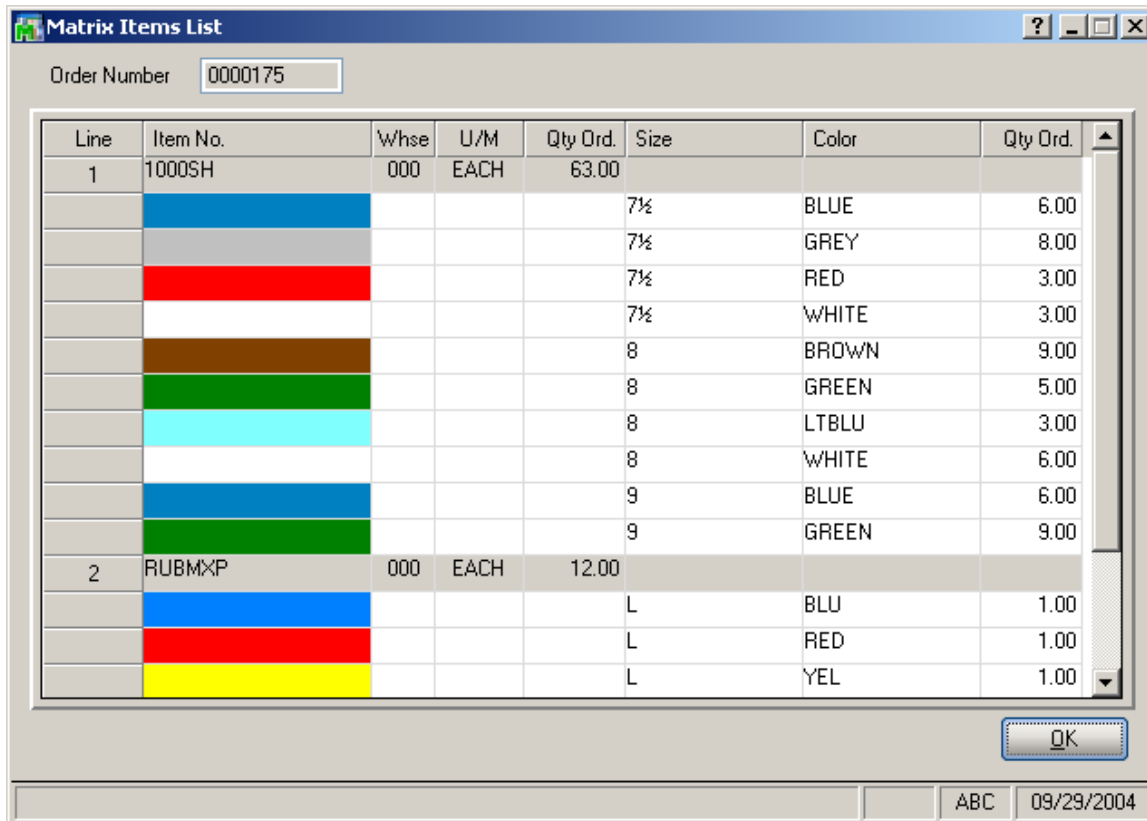
If the **Matrix Distribution Auto Popup in S/O Entry** box is checked on the **Sales Order** tab of the **Matrix Options** screen, the **Quantity Distributed** field displays the sum of the quantities of all the distributed Lots. In this case, the **Quantity Ordered** of the Order is set equal to the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

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

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



The **Matrix Items List** screen will be displayed:



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

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

S/O Invoice Data Entry

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

If the Invoice is based on a Sales Order, the Quantity Shipped cannot exceed the Ordered Quantity. The distribution cannot be accepted with negative Balance. The Invoice cannot be accepted with not fully distributed lines. If Invoice is created for a Sales Order, with either **Invoice Data Entry** or **Auto Generate Invoice Selection** program, the distribution of the order is transferred to the invoice.

If the entire quantity is not shipped, and the distribution of the Order is changed in the Invoice, (the **Distribution Balance** can be zero even if the distribution is changed), the **S/O and S/O Invoice Distribution Balance** screen is displayed with the list of **Lot Numbers**, and the Quantities **Available to Reduce** from them. Enter the Quantities **Reduced** and click **Accept**. The **Total** field displays the total of reduced quantities, and the **Balance** field displays the balance between reduced and changed quantities. The

screen is similar to the **P/O and ROG Distribution Balance** screen.

Click the **Matrix Items List** button on the **Lines** tab of the **Invoice Data Entry** screen, to see the list of all Matrix Items of the invoice with the Lot Numbers having distributed quantities.

Shipping Data Entry

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

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

Inventory Transaction Entry

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

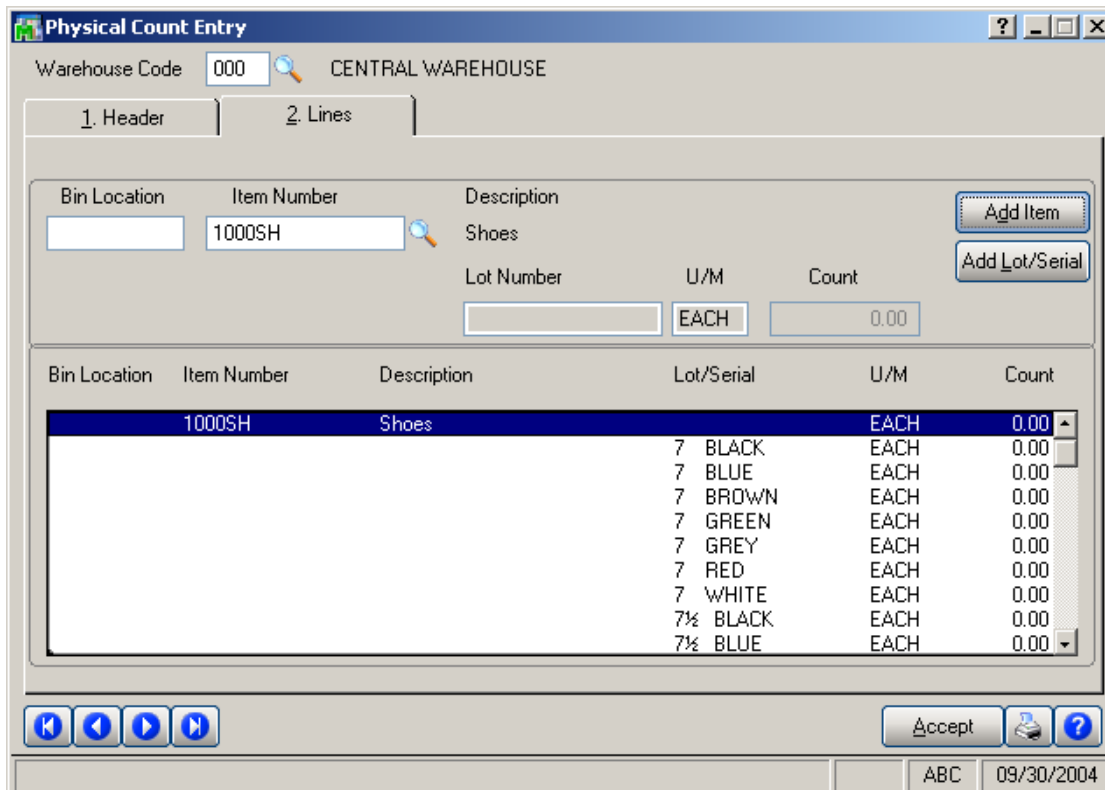
The **Matrix Distribution** screen is displayed when clicking in the Ordered field, if the quantity is zero.

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

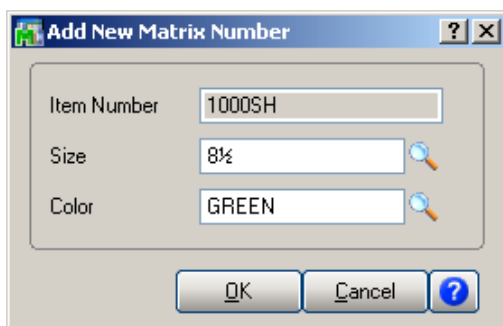
If the **Distribution Balance** is positive, it is displayed in the **Distribute** field when a **Lot Number** is selected either in the Grid or from the Lookup list. Distribution of the Quantity exceeding the Available is also allowed.

Physical Count Entry

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



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



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

RMA Data and RMA Receipts Entry

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

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

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

Production Entry

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

The screenshot shows the 'Production Entry' window with the following details:

- Entry Number: 0000002
- Production Date: 09/30/2004
- Bill Number: 1000SH
- Revision: 000
- Option Code: (empty)
- Quantity: 4.00
- U/M: EACH
- Description: Shoes
- Bill Type: Standard
- Parent Warehouse: 000 CENTRAL WAREHOUSE
- Component Warehouse: 000 CENTRAL WAREHOUSE
- Explode Sub-Assemblies:
- Matrix button:
- Auto Distribute Lines:

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

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

Lot/Serial No.- Matrix Distribution Entry

Item 1000SH Shoes U/M EACH

	7	7½	8	8½	9	9½
BLACK	0	0	1.00	1.00	0	
WHITE	0	2.00	0	0	0	0
BROWN	0	0	0			
BLUE	0	0	0	0	0	
LTBLU		0	0	0	0	
GREEN	0	0	0	0	0	0
RED	0	0	0	0	0	
GREY	0	0	0	0	0	0

Lot Number: 7½ BLACK Available: 200.00 Distribute: 0.00

Grid column Width: 10

Enter quantities by: Columns

Lot Number	Available	Distribute
7½ WHITE	197.00	2.00
8 BLACK	0.00	1.00
8½ BLACK	0.00	1.00

Distribution Balance: 0.00

Show Quantities:
 On Hand
 Available
 Distributed

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

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

Disassembly Entry

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

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

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

Work Order Transaction Entry

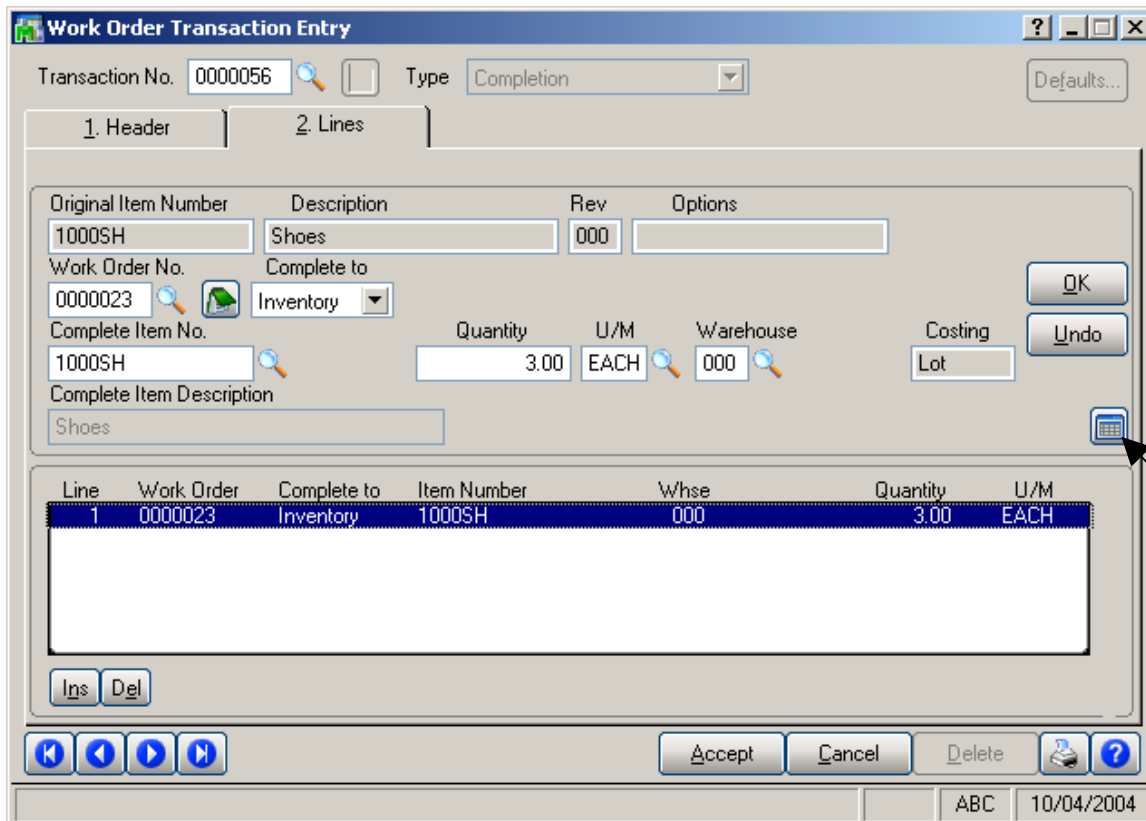
Select the **Work Order Transaction Entry** program under the **Work Order Main** menu.

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

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

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

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



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

Work Order generation from Sales Orders

Auto Generate Work Orders from Sales Orders

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

Select range of the **Sales Order Numbers**, for which you want to generate Work Orders.
Work Orders are generated only for not Assigned Orders.

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

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

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

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

Generated Work Orders

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

Sales Order Entry

Order Number: 0000175

Copy from... Quick Print... Defaults... Customer... Credit...

1. Header | 2. Address | 3. Lines | 4. Totals | User ID: 003

Item / Kit Number: 1000SH | Description: Shoes | Tax Class: TX

Disc %: .00%

Whse: 000 | PL: | U/M: EACH | Ordered: 58.00 | Shipped: 0.00 | Back Ordered: 0.00 | Unit Price: 49.500 | Extension: 2,871.00

DC: | DS: | CM:

Buttons: OK, Undo, Add...

Line	Item Number	Description	SE	TC	DC	DS	CM	Disc %
Whse	PL	U/M	Ordered	Shipped	Back Ordered	Unit Price	Extension	
1	1000SH	Shoes	Y	TX	Y	N	Y	.00%
	000	EACH	58.00	0.00	0.00	49.500	2,871.00	
2	RUBMXP	Matrix 2 item	Y	TX	Y	N	Y	.00%
	000	EACH	12.00	0.00	0.00	46.500	558.00	

Buttons: Ins, Del, Quick Line

Total Amount: 3,429.00

Buttons: Recalc Price, Accept, Cancel, Delete

Footer: ABC 09/30/2004

Here is the Matrix Distribution of the first item:

Lot/Serial No.- Matrix Distribution Entry
? X

Item 1000SH Shoes U/M EACH

	7	7½	8	8½	9	9½
BLACK	0/0	200.00/0		0/0	200.00/0	
WHITE	400.00/0	197.00/3.00	194.00/6.00	100.00/0	200.00/0	0/0
BROWN	0/0	0/0	9.00-/9.00			
BLUE	100.00/0	6.00-/6.00	100.00/0	200.00/0	6.00-/6.00	
LTBLU		0/0	3.00-/3.00	100.00/0	0/0	
GREEN	100.00/0	0/0	195.00/5.00	0/0	9.00-/9.00	0/0
RED	0/0	3.00-/3.00	200.00/0	100.00/0	0/0	
GREY	200.00/0	8.00-/8.00	100.00/0	0/0	100.00/0	0/0

Lot Number	Available	Distribute		OK
7 BLACK	0.00	0.00		Undo

Lot Number	Available	Distribute		
7½ BLUE	0.00	6.00		Range
7½ GREY	0.00	8.00		List...
7½ RED	0.00	3.00		
7½ WHITE	200.00	3.00		
8 BROWN	0.00	9.00		
8 GREEN	200.00	5.00		
8 LTBLU	0.00	3.00		

Distribution Balance	0.00
Qty Distributed	58.00

Grid column Width 10

Enter quantities by Columns

Show Quantities

On Hand

Available

Distributed

Accept

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

The screenshot shows the 'Work Order Entry' window with the following data:

- Work Order Number: 0000053
- Order Date: 09/30/2004
- Status: Firm Planned
- Copy From: [Empty]
- Make For: Sales Order
- For S/O No.: 0000175
- Customer: 01-SHEPARD Shepard Motorwo
- Item/Bill No.: 1000SH
- Description: Shoes
- Revision: 000
- Option Code: [Empty]
- Qty Ordered: 58.00
- U/M: EACH
- Parent Whse: 000 CENTRAL WAREHOUSE
- Yield %: 100.000
- Component Whse: 000 CENTRAL WAREHOUSE
- Qty Planned: 58.00
- Issue Method: Manual
- Routing No.: CONSTRUCTION
- Print Labels:

Item/Bill Lots

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

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

Item/Bill Number: 1000SH

Size	Color	Quantity
7½	BLUE	6
7½	GREY	8
7½	RED	3
7½	WHITE	3
8	BROWN	9
8	GREEN	5
8	LTBLU	3
8	WHITE	6
9	BLUE	6
9	GREEN	9

Close

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

Work Order Number: 0000025

Order Date: 09/30/2004 Status: Firm Planned Copy From: []

Make For: Sales Order For S/O No.: 0000175 Customer: 01-SHEPARD Shepard Motorwo

Item/Bill No.: 1000SH Description: Shoes

Revision: 000 Description: LOT# 7½ GREY.

Option Code: []

Qty Ordered: 8.00 U/M: EACH Parent Whse: 000 CENTRAL WAREHOUSE

Yield %: 100.000 Component Whse: 000 CENTRAL WAREHOUSE

Qty Planned: 8.00 Issue Method: Manual

Routing No.: CONSTRUCTION Print Labels:

Buttons: Accept, Cancel, Delete, [?]

Footer: ABC 09/30/2004

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

Work Order Entry

Work Order Number 0000025

1. Header 2. Additional 3. Operations 4. Materials 5. Scheduling

Order Date 09/30/2004 Status Firm Planned Copy From

Make For Sales Order For S/O No. 0000175 Customer 01-SHEPARD Shepard Motorwo

Item/Bill No. 1000SH Description Shoes

Revision 000 LOT# 7½ GREY.

Option Code

Qty Ordered 8.00 U/M EACH Parent Whse 000 CENTRAL WAREHOUSE

Yield % 100.000 Component Whse 000 CENTRAL WAREHOUSE

Qty Planned 8.00 Issue Method Manual

Routing No. CONSTRUCTION Print Labels

Accept Cancel Delete

ABC 09/30/2004

Sales Order Assignment

The **Assigned Order** check box and **Assign** button have been added on the **Header** tab of the **Sales Order Entry** screen.

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

Once Work Orders are generated for a Sales Order, the **Assigned Order** box is automatically checked on that Sales Order.

You can clear the box to generate new work orders for the same sales order (if the generated ones got deleted by mistake, for example).

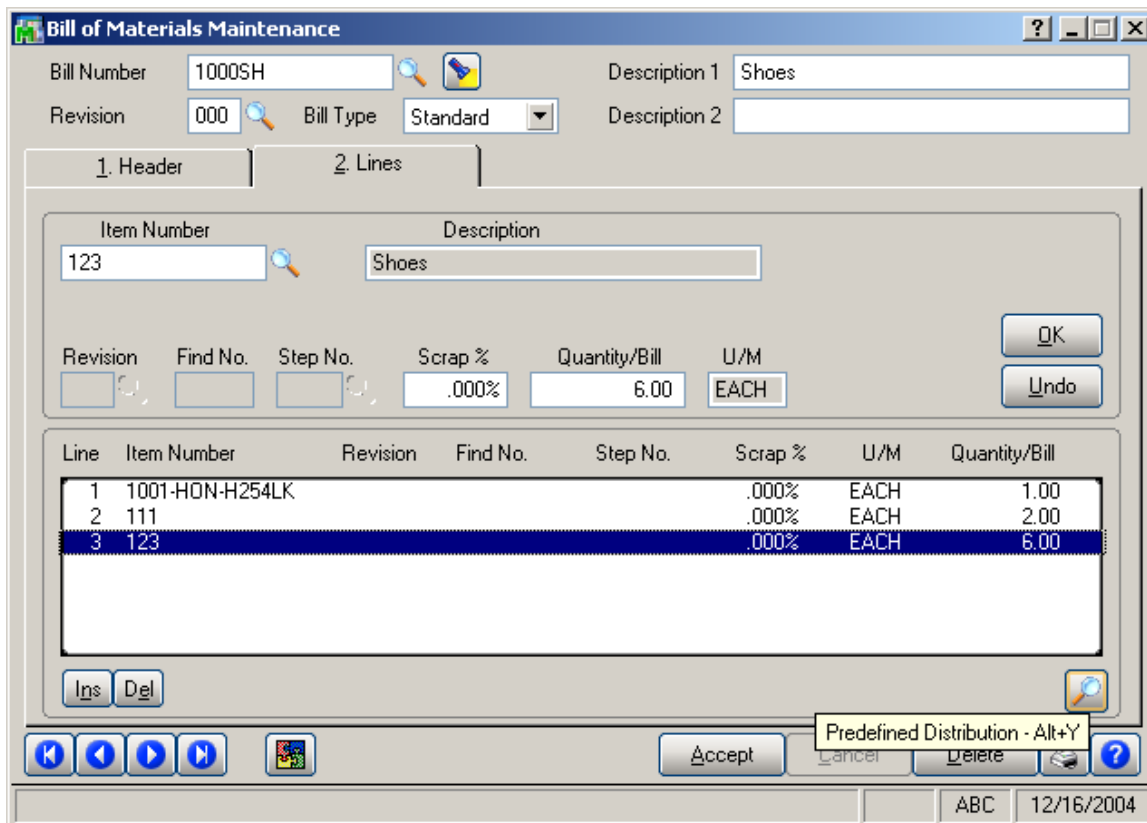
You can check the **Assigned Order** box for a Sales Order, to exclude it from automatic Work Order generation.

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

Predefined Distribution in Bills

Bill of Materials Maintenance

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



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

The screenshot shows a software window titled "Predefined Distribution Maintenance". At the top, there are two rows of input fields: "Bill Number" containing "1000SH" and "Shoes", and "Item Number" containing "123" and "Shoes". Below these are three more input fields: "Bill Lot No.", "Component Lot No.", and "Quantity" (containing "0.00"). Search icons (magnifying glass) are positioned next to the "Bill Lot No." and "Component Lot No." fields. To the right of the "Quantity" field are "OK" and "Undo" buttons. A large empty table with two columns, "Component Lot No." and "Quantity", occupies the middle section. At the bottom, there are "Del", "Balance" (6.00), "Quantity" (6.00), and "Close" buttons.

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

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

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

Predefined Distribution Maintenance [?] [X]

Bill Number: 1000SH Shoes

Item Number: 123 Shoes

Bill Lot No. Component Lot No. Quantity

8 BLACK [magnifying glass] [pencil] [Component Lot No.] [magnifying glass] 0.00 [OK] [Undo]

Component Lot No.	Quantity
8 BLACK	4.00
8 GREY	2.00

[Del] Balance: 0.00 Quantity: 6.00 [Close]

Predefined Distribution Maintenance [?] [X]

Bill Number: 1000SH Shoes

Item Number: 123 Shoes

Bill Lot No. Component Lot No. Quantity

7½ BLACK [magnifying glass] [pencil] [Component Lot No.] [magnifying glass] 0.00 [OK] [Undo]

Component Lot No.	Quantity
7½ BLACK	2.00
7½ GREY	2.00
8 BLACK	2.00

[Del] Balance: 0.00 Quantity: 6.00 [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: 1000SH Shoes

Item Number: 123 Shoes

Bill Lot No. Component Lot No. Quantity: 0.00

Existing Records - Alt+R

Component Lot No.	Quantity
-------------------	----------

Del Balance: 6.00 Quantity: 6.00 Close

Matrix Lot List

LotSerialNumber

- 7 BLACK
- 8 BLACK

Search: <default> Find

Filters... Custom... Select Cancel

Found 2 records ABC 12/16/2004

Work Order and Auto Issue

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

Work Order Options

1. Main | 2. Additional | 3. User-Defined | 4. Integrate | 5. Forms

Print Work Order Travelers Upon Release	<input type="checkbox"/>	Automatically Increment Steps By	010
Print Material Listing on Work Order Traveler	<input checked="" type="checkbox"/>	Retain Work Order Transaction Detail	<input checked="" type="checkbox"/>
Material Print Format	Material First	Print WOs on Back Order Fill Report	<input type="checkbox"/>
Print Picking Sheets	None	Future Days to Print Work Orders	
Sort Items by Bin Location	<input type="checkbox"/>	Allow Memo Inquiry from Data Entry	Yes
Page Break by Step Number	<input type="checkbox"/>	Addition of Work Centers and Op Codes	None
Print Picking Sheets Upon Work Order Release	<input type="checkbox"/>	Work Order Issue Method	Automatic
Auto Issue Material Transactions	Yes	Auto Generate Labor Transactions	<input type="checkbox"/>
Auto Issue Material Shortage Report Format	None	Auto Generate Outside Processing	<input type="checkbox"/>

Accept Cancel [Printer Icon] [Help Icon]

ABC 12/16/2004

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

Work Order Entry

Work Order Number 0000117

Order Date 12/16/2004 Status Firm Planned Copy From

Make For Inventory

Item/Bill No. 1000SH Description Shoes

Revision 000

Option Code

Qty Ordered 5.00 U/M EACH Parent Whse 000 CENTRAL WAREHOUSE

Yield % 100.000 Component Whse 000 CENTRAL WAREHOUSE

Qty Planned 0.00 Issue Method Automatic

Routing No. Print Labels

Accept Cancel Delete

ABC 12/16/2004

Matrix Lot	Quantity
7 1/2 BLACK	3.00
8 BLACK	2.00

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

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

Work Order Transaction Entry [?] [] [X]

Transaction No. [] Type Defaults...

1. Header | 2. Lines

Work Order No. Item/Bill Number Description [OK]

Revision Options Make For Step Sched. Rel. [Undo]

Line	Work Order	Item/Bill Number	Rev	Options	Make For	Sched. Release
1	0000117	1000SH Shoes	000		INVENTORY	12/16/04

[Ins] [Del]

[K] [←] [→] [] [Accept] [Cancel] [Delete] [] [?]

ABC 12/16/2004

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

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

The screenshot shows the 'Work Order Transaction Entry' window. The 'Transaction No.' is 0000108 and the 'Type' is 'Material Issue'. The 'Lines' tab is active, showing a table with three lines. Line 3 is selected and highlighted in blue. The 'Avg Cost' field is 40.000 and the 'Issue Qty' is 30.00. The 'Item Description' is 'Shoes' and the 'U/M' is 'EACH'. The 'Subst.' column in the table is empty, and the 'Avg Cost' field has the text '*AUTO-GENERATED*' next to it.

Line	Work Order	Step	Subst. Matl.	Item Number	Whse	U/M	Issue Quantity	Dist.
1	0000117	0000	N	1001-HON-H254LK	000	EACH	5.00	
2	0000117	0000	N	111	000	EACH	10.00	N
3	0000117	0000	N	123	000	EACH	30.00	N

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

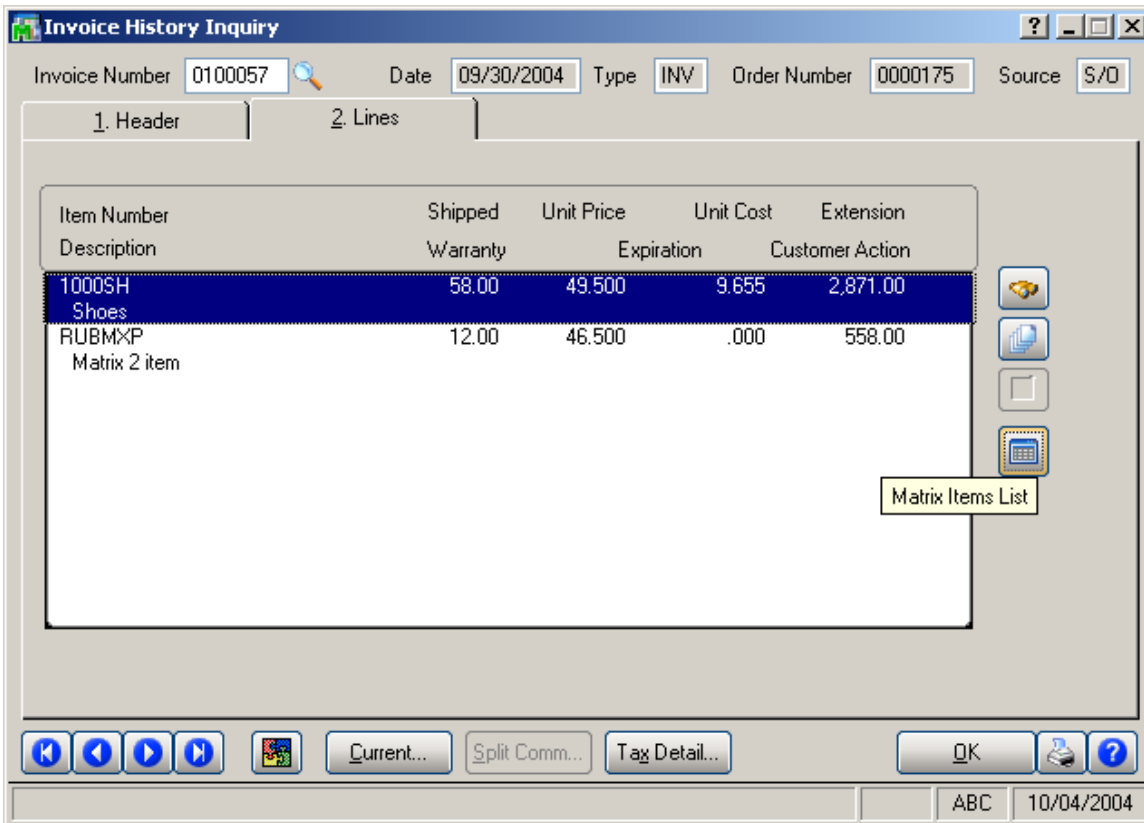
The components distribution cannot be done or will be done partially because of one of the following reasons:

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

Inquiries

Invoice History Inquiry

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



Sales Order Inquiry

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

Order Number: 0000178

User ID: 003

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

Item / Kit Number: 1000SH

Product Line: FD&A

Type: Finished Good

Sal: Lot / Serial Distribution, Alt-Y

COGS Account: 450-01-01

Promised: 09/30/2004

PR Code: STD

Costing Method: Lot Number

Warranty:

Line	Item Number	Whse	PL	U/M	Description	Ordered	Shipped	Back Ordered	SE	TC	DC	DS	CM	Disc %
									Unit Price					Extension
1	1000SH			EACH	Shoes	140.00	0.00	0.00	Y	TX	Y	N	Y	.00%
	000									49.500				6,930.00

Total Amount: 6,930.00

ABC 10/04/2004

Purchase Order History

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.

The screenshot shows the 'Purchase Order Inquiry' window with the 'Lines' tab selected. The 'Order Number' is 0010023 and the 'User ID' is 003. The 'Item Number' is 1000SH, with 'Part Type' set to 'Finished Go' and 'Prod Line' set to 'FD&A'. A tooltip for the 'Lot / Serial Distribution, Alt-Y' button is visible. The 'Matrix Distribution Grid' table is as follows:

Line	Item Number	Description	TC	UT	Req Date	G/L Account	Whse	U/M	Ordered	Received	Back Order	Unit Cost	Extension
1	1000SH	Shoes	TX	N	09/30/2004	15-00-03			11.00	0.00	0.00	4,000.000	44,000.00
	000	CASE											

The 'Total Amount' is displayed as 44,000.00. The interface includes navigation buttons (back, forward, search) and an 'OK' button. The status bar at the bottom shows 'ABC' and the date '10/04/2004'.

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.

Selection	All	Starting	Ending
Item Number	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Size	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Color	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Product Line	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Vendor Number	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Item Description	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Year	<input type="checkbox"/>	2004	2004

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

Matrix Stock Status Report

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

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

Selection	All	Starting	Ending
Item Number	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Size	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Color	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Product Line	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
Vendor Number	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Item Description	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
Whse/Bin Loc	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

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

Only existing Lot Numbers will be printed in the report. Lot Numbers with no quantity available can be set to be printed by checking the **Print Lot Numbers with Zero Qty** box.

Here is an example of the printout:

Matrix Stock Status Report

ABC Distribution

MATRIX STOCK STATUS REPORT

SOA

ITEM NUMBER	DESCRIPTION/ VENDOR NUMBER	PROD LN	PROD TYP	UNIT	WHSE	SIZE	COLOR	QUANTITY	
								ON HAND	AVAILABLE
1000SH	Shoes								
01-UNITED	FD&A		FINISHED GOOD	EACH	000				
						7	BLUE	100.00	100.00
						7	GREEN	100.00	100.00
						7	GREY	200.00	200.00
						7	WHITE	400.00	400.00
						7½	BLACK	200.00	200.00
						7½	BLUE	6.00-	16.00-
						7½	GREY	8.00-	23.00-
						7½	LTBLU	0.00	10.00-
						7½	RED	3.00-	3.00-
						7½	WHITE	185.00	180.00
						8	BLUE	100.00	100.00
						8	BROWN	9.00-	24.00-
						8	GREEN	195.00	170.00
						8	GREY	100.00	100.00
						8	LTBLU	3.00-	8.00-
						8	RED	200.00	200.00
						8	WHITE	194.00	184.00
						8½	BLUE	200.00	200.00
						8½	LTBLU	100.00	100.00
						8½	RED	100.00	100.00
						8½	WHITE	100.00	100.00
						9	BLACK	200.00	200.00
						9	BLUE	6.00-	16.00-
						9	GREEN	9.00-	24.00-
						9	GREY	100.00	90.00
						9	WHITE	200.00	180.00
WHSE 000 TOTAL:								2930.00	2780.00
ITEM 1000SH TOTAL:								2930.00	2780.00

Page:1

Matrix Stock Status Report (grid)

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

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

The printout is arranged in grid form:

MATRIX STOCK STATUS REPORT (GRID)

ITEM NUMBER	DESCRIPTION/ VENDOR NUMBER	PROD LN	PROD TYP	UNIT	WHSE
1000SH	Shoes				
01-UNITED	FD&A		FINISHED GOOD	EACH	000
	7	7½	8	8½	9
BLACK			200.00		200.00
WHITE	400.00	180.00	184.00	100.00	180.00
BROWN			24.00-		
BLUE	100.00	16.00-	100.00	200.00	16.00-
LTBLU		10.00-	8.00-	100.00	
GREEN	100.00		170.00		24.00-
RED		3.00-	200.00	100.00	
GREY	200.00	23.00-	100.00		90.00
				001	
	7	7½	8	8½	9
BLACK					
WHITE					
BROWN					
BLUE					

Page:1

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

Matrix Committed Report

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

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

Here is an example of the printout:

Matrix Committed Report

ABC Distribution and Service Corp.

SORTED BY ITEM NUMBER

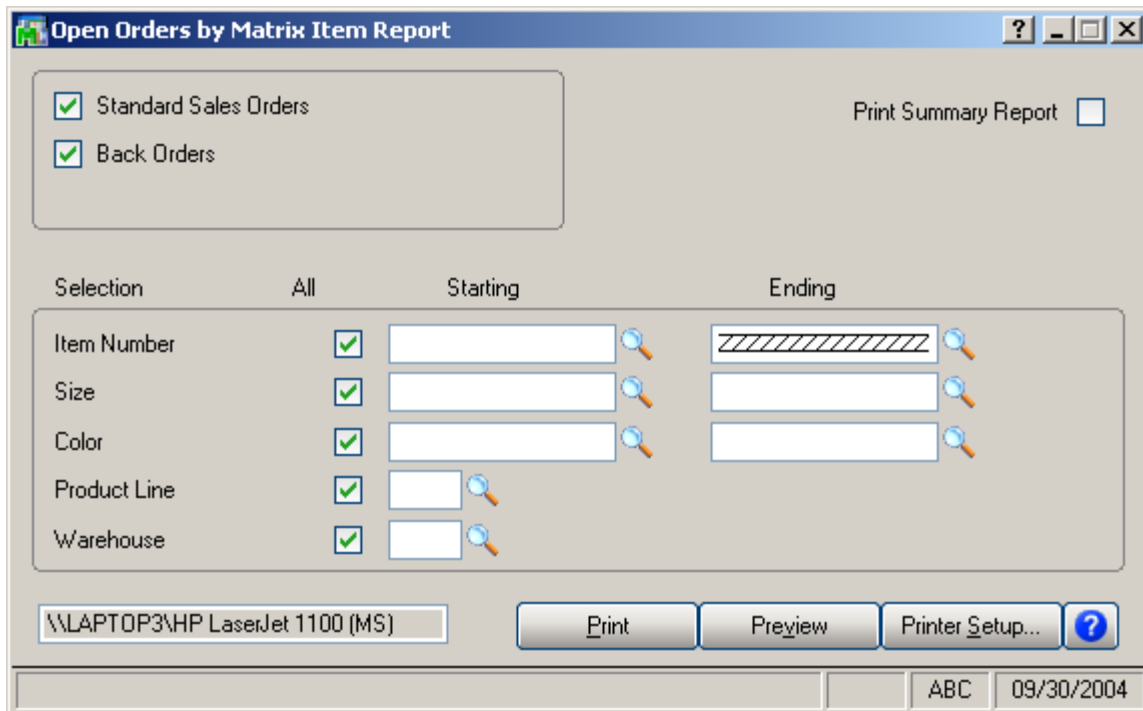
ROD TYP	UNIT	WHSE	SIZE	COLOR	QUANTITY				AVG COST	
					ON HAND	ON P.O.	ON S.O.	ON B.O.		AVAIL.
FINISHED GOOD	EACH	000	7	BLUE	100.00	0.00	0.00	0.00	100.00	40.600
			7	GREEN	100.00	0.00	0.00	0.00	100.00	
			7	GREY	200.00	0.00	0.00	0.00	200.00	
			7	WHITE	400.00	0.00	0.00	0.00	400.00	
			7½	BLACK	200.00	0.00	0.00	0.00	200.00	
			7½	BLUE	6.00	0.00	10.00	0.00	16.00	
			7½	GREY	8.00	0.00	15.00	0.00	23.00	
			7½	LTBLU	0.00	0.00	10.00	0.00	10.00	
			7½	RED	3.00	0.00	0.00	0.00	3.00	
			7½	WHITE	185.00	0.00	5.00	0.00	180.00	
			8	BLUE	100.00	0.00	0.00	0.00	100.00	
			8	BROWN	9.00	0.00	15.00	0.00	24.00	
			8	GREEN	195.00	0.00	25.00	0.00	170.00	
			8	GREY	100.00	0.00	0.00	0.00	100.00	
			8	LTBLU	3.00	0.00	5.00	0.00	8.00	
			8	RED	200.00	0.00	0.00	0.00	200.00	
			8	WHITE	194.00	0.00	10.00	0.00	184.00	
			8½	BLUE	200.00	0.00	0.00	0.00	200.00	
			8½	LTBLU	100.00	0.00	0.00	0.00	100.00	
			8½	RED	100.00	0.00	0.00	0.00	100.00	
8½	WHITE	100.00	0.00	0.00	0.00	100.00				
9	BLACK	200.00	0.00	0.00	0.00	200.00				
9	BLUE	6.00	0.00	10.00	0.00	16.00				
9	GREEN	9.00	0.00	15.00	0.00	24.00				
9	GREY	100.00	0.00	10.00	0.00	90.00				
9	WHITE	200.00	0.00	20.00	0.00	180.00				
WHSE 000 TOTAL:					2930.00	0.00	150.00	0.00	2780.00	
ITEM 1000SH TOTAL:					2930.00	0.00	150.00	0.00	2780.00	

Page: 1

Open Orders by Matrix Item Report

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

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



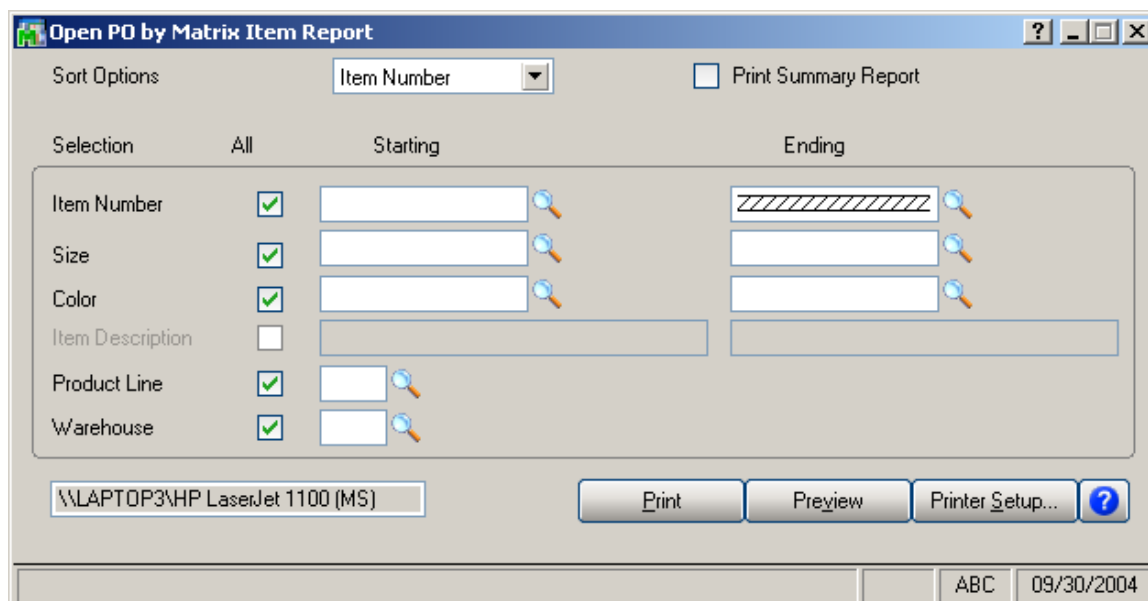
The information to be printed can be also selected by Matrix Categories (usually Size and Color).

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

Open PO by Matrix Item Report

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

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



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

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

Here is an example of printout:

Open P. O. by Matrix Item Report

ABC Di

OPEN P. O. BY MATRIX ITEM REPORT

ORDER TYPES: STD

ITEM NUMBER/ P.O. NO.	TYPE	DATE		VENDOR NO	NAME	STAT	WHS	QUANTITY	
		ORDER	REQD					ORDERED	RECEIVED
1000SH		Shoes			PROD LN: FD&A				
0010020	STD	09/29/04	09/29	01-STEV	Stevens Supply	U/M: EACH			
0010023	STD	09/30/04	09/30	01-STEV	Stevens Supply	BACK 000		3000.00	3000.00
7		RED				NEW 000		1100.00	0.00
7		WHITE							
7½		WHITE							
8		BLACK							
8		BROWN							
8½		GREEN							
8½		GREY							
ITEM 1000SH TOTAL:								4100.00	3000.00
RUBMXP		Matrix 2 item			PROD LN: C&A	U/M: EACH			
0010022	STD	09/29/04	09/29	01-CONT	Container Corporation O	CHNG 000			
L		BLU						30.00	0.00
L		RED							
L		YEL							
M		BLU							
M		RED							
M		YEL							
S		BLU							

Page:1

Sales Order and Invoice Printing

A special form has been added to the **Sales Order** and **Invoice Printings** to print distributed quantities by colors and sizes.

Select the **Sales Order Printing** (or **Invoice Printing**) program under the **Sales Order Main** menu.

Enter an **Order Form Code** and select the **S/O Sales Order - Matrix** form template.

Sales Order Printing

Order Type to Print: All Orders

Line 1 Message: CALL NOW TO ORDER FOR OUR SPECIAL

Line 2 Message: MEMORIAL WEEK SALE

Order Form Code: 1 S/O Sales Order - Matrix

Copies: 1

Collated:

Multi Part Enable:

Selection: All Starting Ending

Order Number:

Printer: \\LAPTOP3\HP LaserJet 1100 (MS)

Buttons: Print, Preview, Printer Setup...

Status: ABC 10/01/2004

The distributed quantities are printed by colors, with the size above each quantity.

Here is an example:

ITEM NUMBER	DESCRIPTION	ORDERED	SHIPPED	BCK ORDER	PRICE
1000SH	Shoes	140.00	0.00	0.00	49.500
	Color BLUE			10.00	
	Size 7½ 10				
	Color BROWN			15.00	
	Size 8 15				
	Color GREEN			40.00	
	Size 8 25 9 15				
	Color GREY			25.00	
	Size 7½ 15 9 10				
	Color LTBLU			15.00	
	Size 7½ 10 8 5				
	Color WHITE			35.00	
	Size 7½ 5 8 10 9 20				

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.

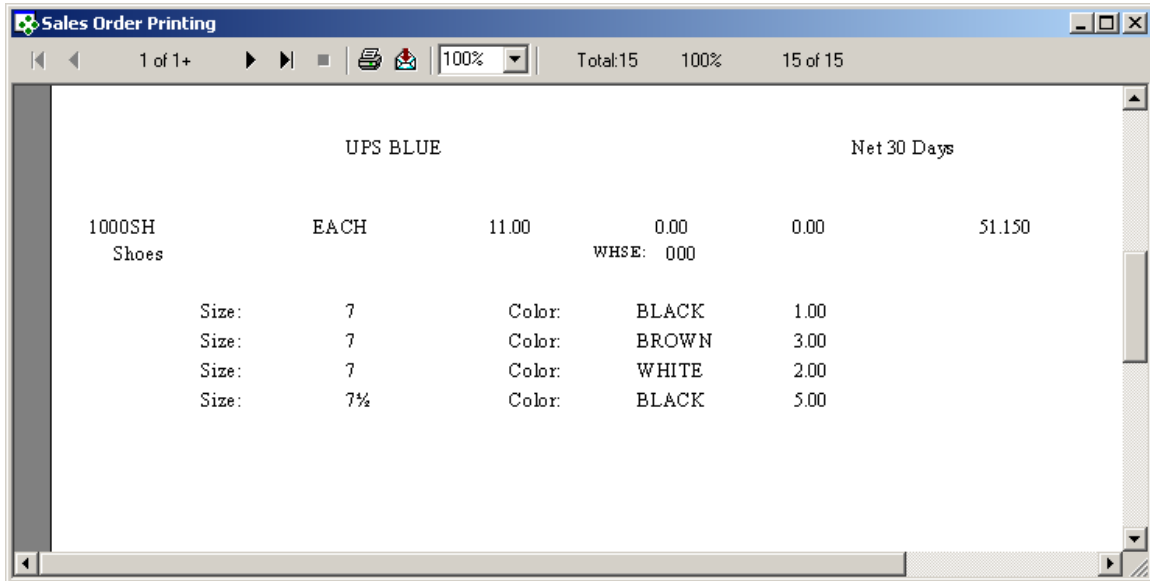
INVENTORY VALUATION REPORT

ITEM NUMBER	DESCRIPTION/ PROD LN	PROD TYP	VAL	WHSE	U/M	LOT/SERIAL NO	RECEIPT NUMBER	RECEIPT DATE	QUANTIT ON HAND	
1001-HON-H254LK	HON 4 DRAWER LETTER FLE W/LCK WF&A	FINISHED GOOD	FIF	000	EACH		RC-721	05/01/03	42.00	
WAREHOUSE 000 TOTAL:									52.00	
				001			TRANSFR	04/22/03	9.00	
				002			TRANSFR	05/07/03	1.00	
ITEM 1001-HON-H254LK TOTAL:									62.00	
111	Shoes	FD&A	FINISHED GOOD	LOT	000	EACH				
						Size : 7 1/2	Color: GREEN	PHY CNT	10/01/04	120.00
						Size : 8	Color: BLUE	PHY CNT	10/01/04	100.00
						Size : 8	Color: LTBLU	PHY CNT	10/01/04	100.00
						Size : 9	Color: GREEN	PHY CNT	10/01/04	100.00
						Size : 9	Color: WHITE	PHY CNT	10/01/04	100.00
WAREHOUSE 000 TOTAL:									520.00	
2480-8-50	DESK FILE 8" CAP 50	FD&A	FINISHED GOOD	LOT	000	EACH				
						101	G001008	05/31/03	9,704.00	
						10210	G001007	05/31/03	200.00	
						JAN10	RC-0111	01/25/03	325.00	
						MAR10	RC-0225	03/25/03	850.00	

Other Printings

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:



UPS BLUE		Net 30 Days			
1000SH	EACH	11.00	0.00	0.00	51.150
Shoes			WHSE: 000		
Size:	7	Color:	BLACK	1.00	
Size:	7	Color:	BROWN	3.00	
Size:	7	Color:	WHITE	2.00	
Size:	7½	Color:	BLACK	5.00	

The following character-based printings have been modified to print Lot Number for Matrix Items as a pair of Matrix Codes:

- **Open Sales Order Report**
- **Open Orders by Item Report**

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

Matrix Codes Sorting in Printings

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

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

Here is an example:

The screenshot shows the 'Matrix Code Maintenance' window. At the top, there are input fields for 'Item No.' (MXP) and 'Shoes', and a dropdown for 'Matrix Code Category Description' (Size). Below these are fields for 'Matrix Code', 'Description', and 'Sort'. There are also color selection controls (R: 255, G: 255, B: 255) and a 'Color' icon. A table at the bottom displays the matrix codes sorted by size. The table has columns for Matrix Code, Description, Color, and Sort. The data rows are: S (SMALL, Color blank, Sort 1), M (MEDIUM, Color blank, Sort 2), L (LARGE, Color blank, Sort 3), and XL (EXTRA LARGE, Color blank, Sort 4). The window also features navigation buttons (Home, Back, Forward, End) and a 'Close' button. At the bottom, there are status fields for 'Enter Matrix Code', 'IIG', 'ABC', and '12/1/2005'.

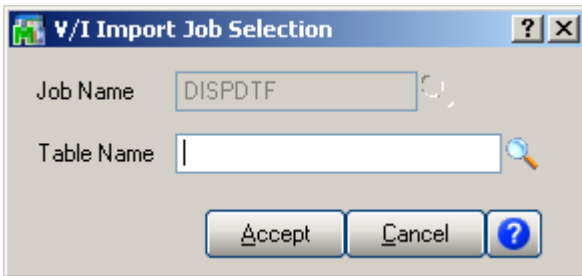
Matrix Code	Description	Color	Sort
S	SMALL		1
M	MEDIUM		2
L	LARGE		3
XL	EXTRA LARGE		4

Visual Integrator

It is possible to define and maintain import/export jobs for importing/exporting data of IM_MX and IM_MC data files through the **Visual Integrator**.

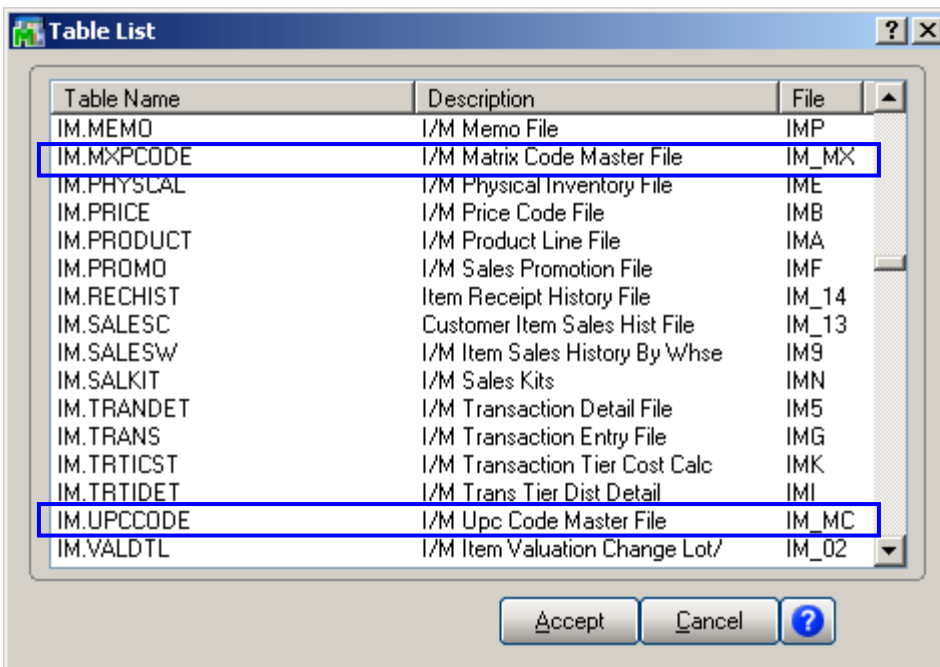
Select the **Import Job Maintenance** from the **Visual Integrator Main** menu.

In the **V/I Import Job Selection**, enter the **Job Name**.



Click the **Lookup** button to open the **Table List**.

The following IM data files have been added:



Here is the full description list of these data files:

- I/M Matrix Code Master File
- I/M Upc Code Master File

When selecting a Table Name, the **Import Job Maintenance** screen will be displayed. In the **File Name** field selected table name of the data file (in this case, I/M Matrix Code Master File) is displayed. It can be changed to extended data file.

Import Job Maintenance

Job Name: DISPDTF Compiled File Name: VIWI02

1. Configuration 2. Data 3. Select 4. Records 5. Validation

Description: [Empty]

File Name: IM.MXPCODE I/M Matrix Code Master File

File Type: Delimited Delimiter: . ASCII Value

Import File: [Empty]

Password: [Empty] Chain To: [Empty]

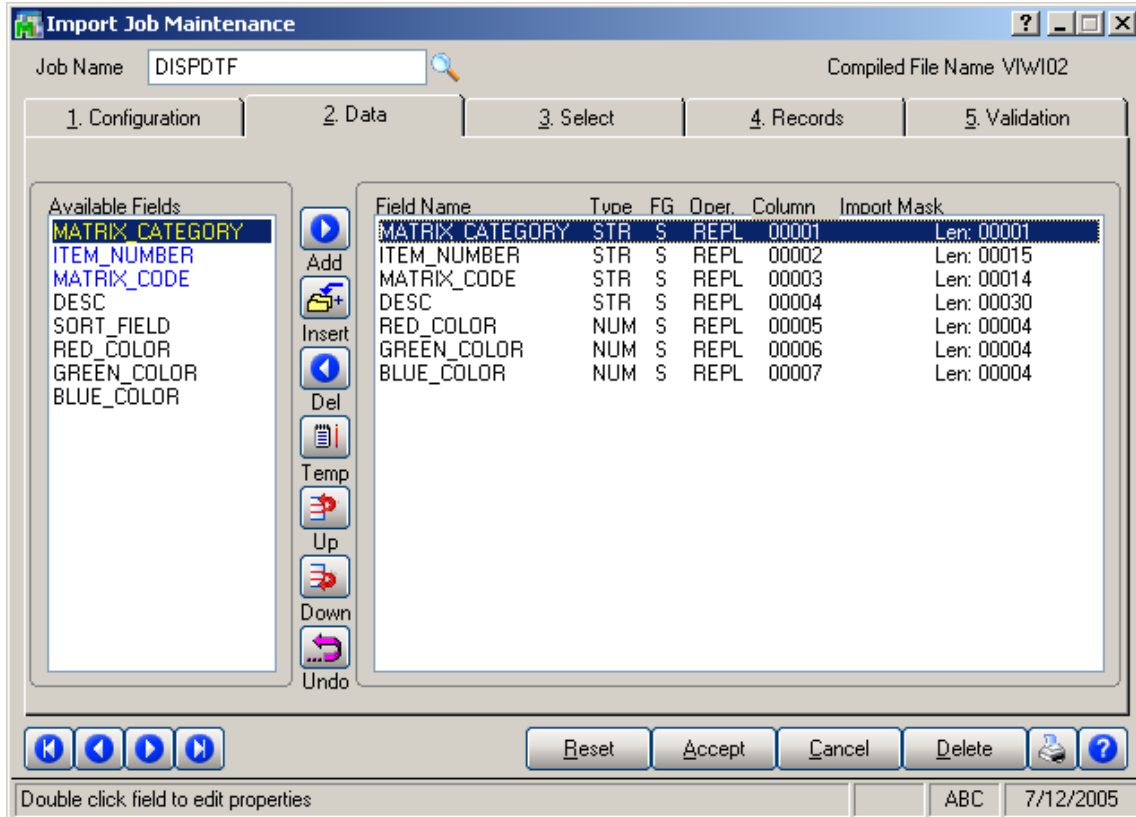
Insert All Required Fields During Setup
 Insert All Fields During Setup

Menu... Compile Cycle... Perform... Job Info...

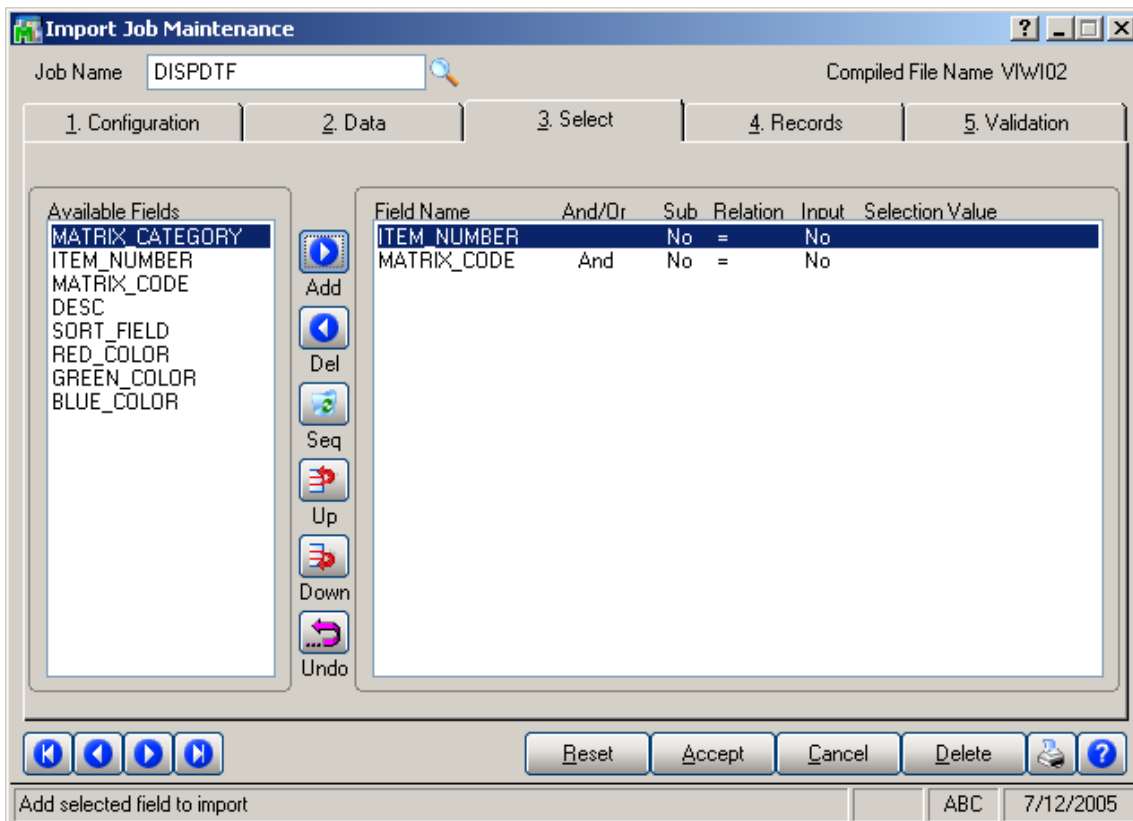
Reset Accept Cancel Delete ?

ABC 7/12/2005

In the **Data** tab, select data fields of the I/M data file to be assigned to the data fields to be imported. You have also to specify the operations that should be performed with the imported data.



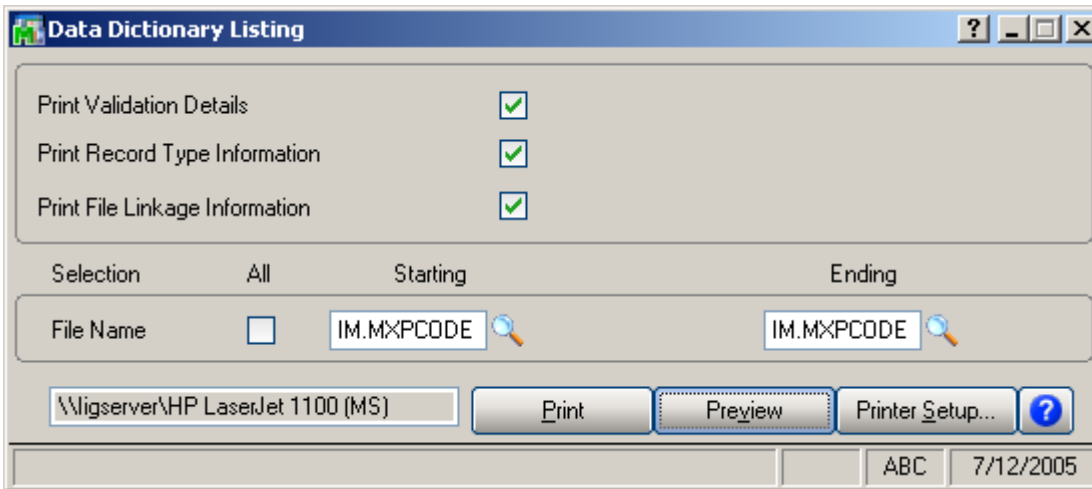
In the **Select** tab, specify selection ranges for data fields to determine which records to import or ignore.



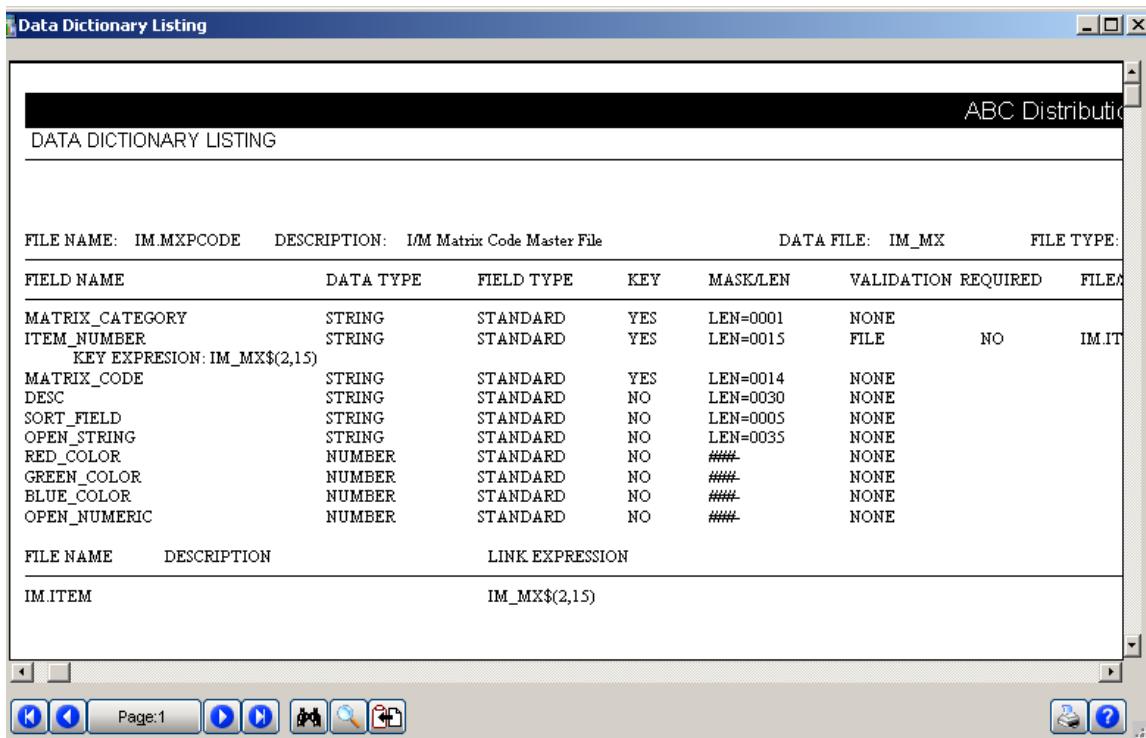
After accepting the job, it will be prepared for use, and then executed with assigned data fields of specified I/M data file.

The jobs can be created from the **Export Job Maintenance** for exporting these I/M data files.

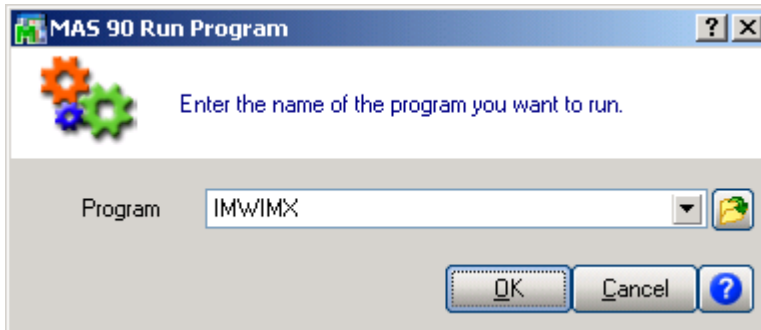
In the **Data Dictionary Listing**, select data files and data items contained within I/M module.



Here is the result of printout:



After importing from the **Visual Integrator**, run the **Matrix Item Check Utility (IMWIMX)** from File>Run to set Matrix flags for Items.



Appendix

Printing Matrix Codes separately

Printing parts of Matrix Items' Lot Numbers corresponding to Matrix Codes depends on the Matrix Codes positions and lengths in Lot Numbers, in the system.

After setting up Categories Positions and Lengths in the **Matrix Options**, you can start creating separate Matrix Codes reports. A sample report is included in the Matrix Processing enhancement package (MXPReportSample.rpt).

Here is how to include separate Matrix Code parts in a report, for a specific configuration below.

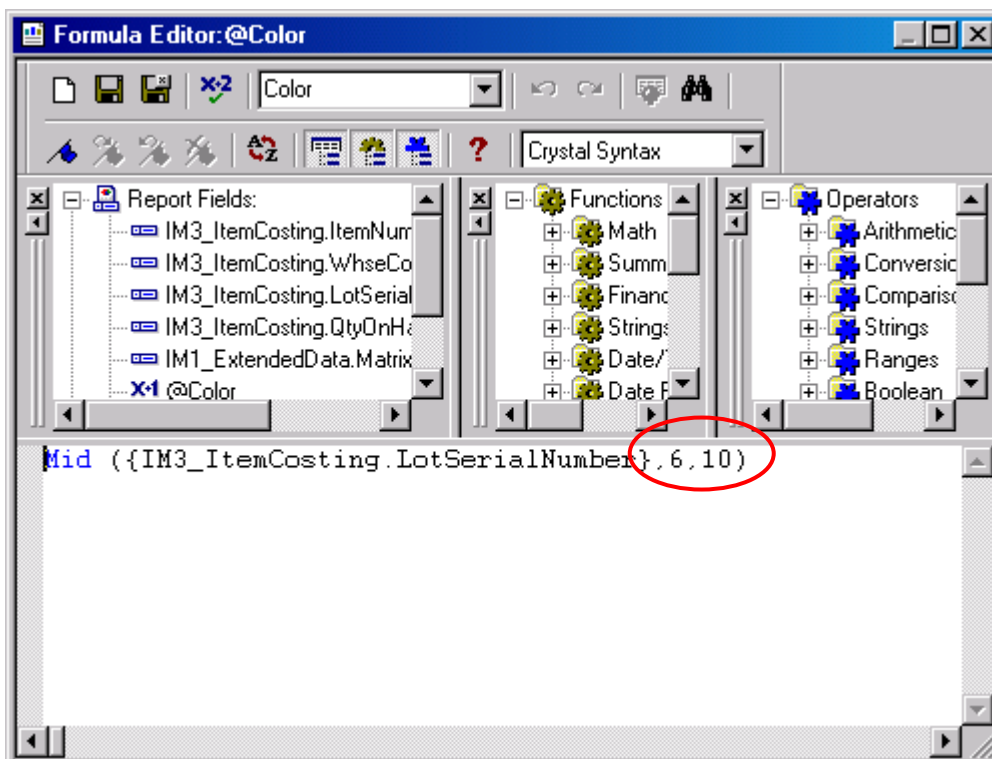
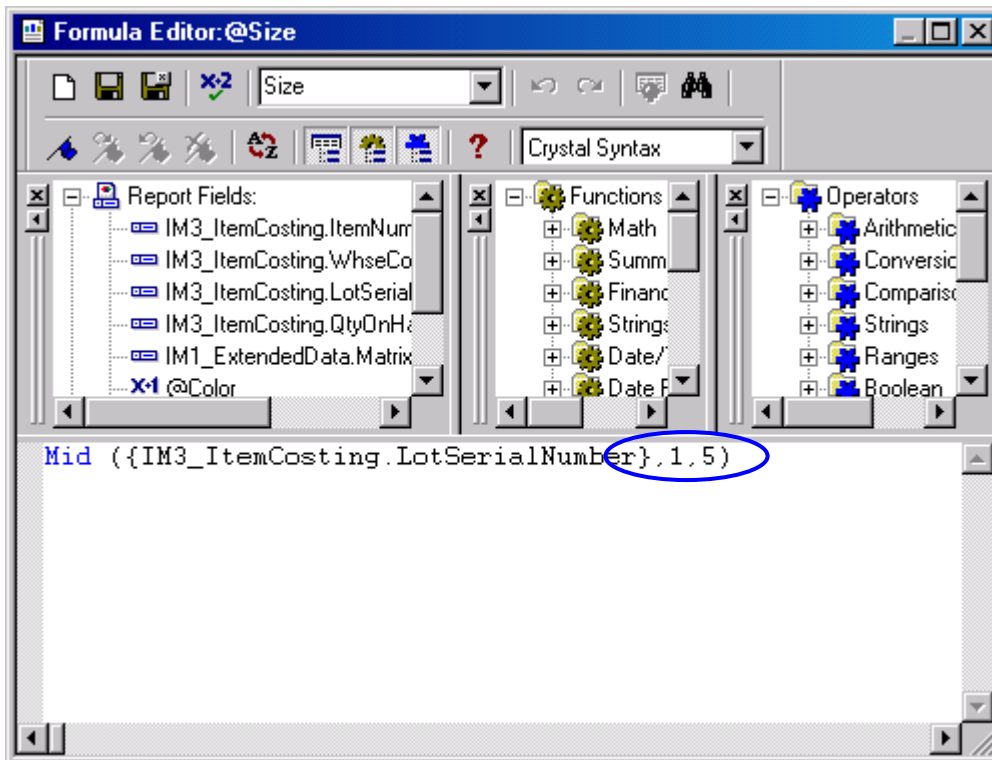
The screenshot shows the 'Matrix Options' dialog box with the following configuration:

- 1. Main** | 2. Purchase Order | 3. Sales Order | 4. Inventory | 5. Bill of Materials | 6. Work Order | 7. RMA
- Lot Number Preview: SSSSSSSSSSSSSSSSSSS
- Category 1**
 - Description: Size
 - Starting Position: 1
 - Length: 5
 - Type: String
- Category 2**
 - Description: Color
 - Starting Position: 6
 - Length: 10
 - Type: String
- Color**
 - Grid cell Text color: None
 - Grid cell Background color: Category2
- Delete Zero Quantity Lots When Deleting Matrix Code:

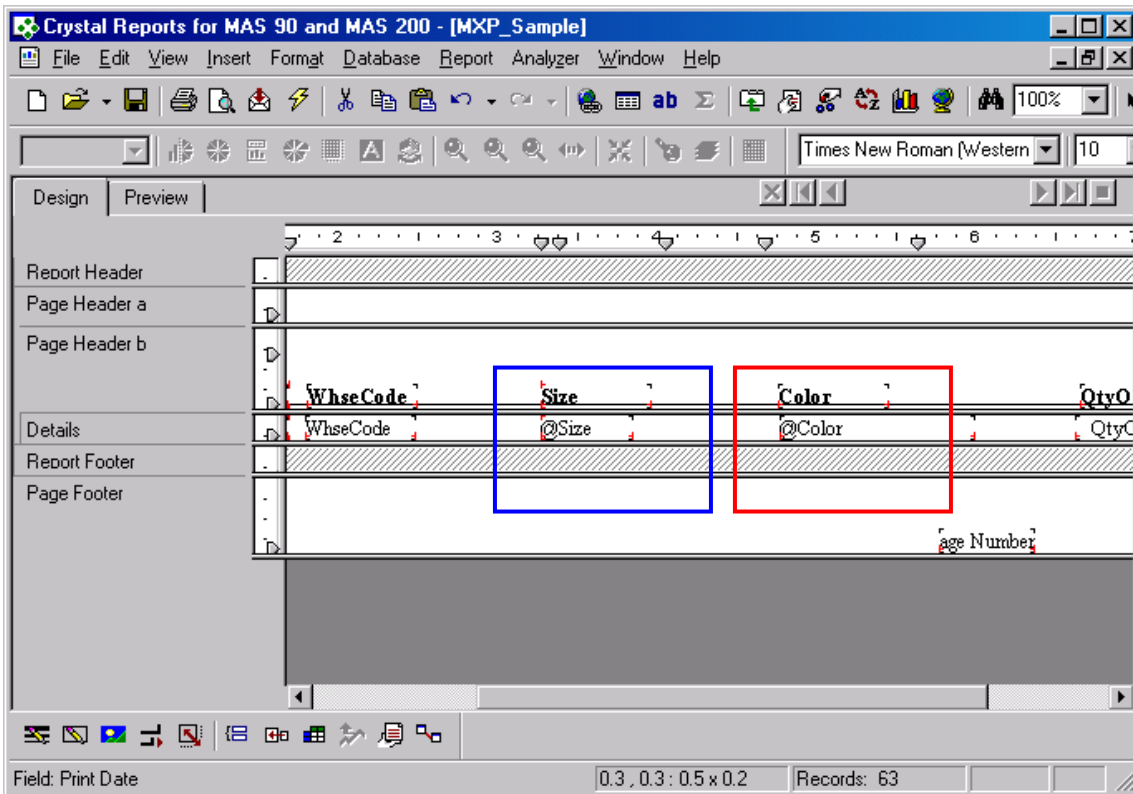
Buttons: Accept, Cancel

Footer: Enter a Description for the First Lot Category | ABC | 12/08/04

In the Crystal Reports, define new formulas for Color and Size, and specify the positions of each Category's Matrix Code inside Lot Number.



Place the newly defined formulas in the report.



Here is the output:

