

Multi-Bin Processing For MAS 90/200

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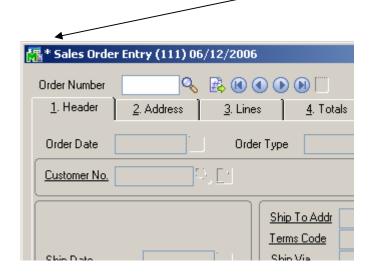
Installation Instructions and Cautions

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

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

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

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



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

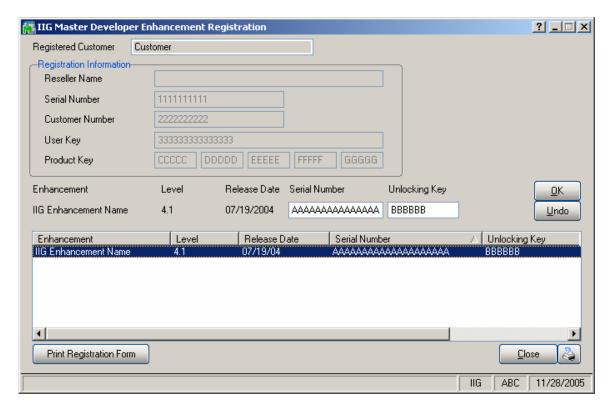
Follow all the instructions on this page before you run Customizer Update!

Registering IIG products

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

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

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



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

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

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

Introduction

The IIG's Multi-Bin Processing Enhancement allows users to work with multiple bins in warehouses for processing items.

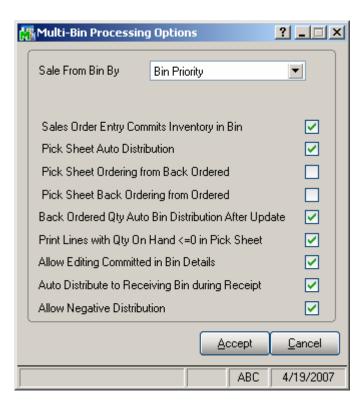
Multi-Bin Processing Options

Select Multi-Bin Processing Options from the Inventory Management Setup menu.

Run the **Multi-Bin Processing Options** program immediately after the Multi-Bin Processing enhancement is installed. The **Multi-Bin Processing Options** program must be run also when data is copied from a company to a one which is newly created.

This program should be run in order to create all the required files and to extend existing files as required for set-up of Multi-Bin Processing.

Running the program will avoid the creation of error conditions related to installation.



The **Sale From Bin By** option enables auto distribution in MAS 90. This means that MAS 90 will distribute items by bin location during Sales Order and Invoice Processing based on the options selected in this drop-down box.

Available options are the following:

None: Disables the feature.

Receiving Date: The program will process items by

receiving date.

Smallest Quantity On Hand: The program will distribute

items by the smallest available quantity.

Bin Priority: The program will distribute items by bin

priority.

Check the **Sales Order Entry Commits Inventory in Bin** box to enable distribution by bin during Sales Order. Entry will then be transferred into the invoice during Sales Order Invoicing.

Note: Do not change this option after entering any information on SO. It will produce a wrong calculation on committed quantity on bin locations.

Check the **Pick Sheet Auto Distribution** box to have items distributed automatically in the Picking Sheets instead of Sales Orders. Note that if this option is selected, a Pick Sheet should be printed before invoicing an order. Invoice cannot be entered if the item is not distributed.

The Pick Sheet Ordering from Back Ordered and Pick Sheet Back Ordering from Ordered check boxes are available only if the Pick Sheet Auto Distribution box is checked.

Check the **Pick Sheet Ordering from Back Ordered** box to allow auto distributing from back ordered quantity, if there is quantity available to distribute, and moving that distributed quantity to quantity ordered.

Check the **Pick Sheet Back Ordering from Ordered** box to allow moving to back ordered the quantity from ordered, if there is no quantity available to distribute.

Check the **Back Ordered Qty Auto Bin Distribution After Update** box to enable Auto Bin Distribution for the Back Orders creating during update.

Check the Print Lines with Quantity On Hand <= 0 in Pick Sheet box to include lines with Quantity On Hand less or equal to zero in the Pick Sheet Printing.

Check the Allow Editing Committed in Bin Details box to enable changing the Committed Quantity in the Bin Distribution Details screen of the Inventory

Maintenance program. The editing is allowed only for the users with Supervisor rights.

Check the **Auto Distribute to Receiving Bin during Receipt** box to enable automatic distribution of the quantities received to the special **Receiving Bin** specified for each **Warehouse**.

Select the **Allow Negative Distribution** option to enable distribution of negative quantities in Sales Order, Invoice Data Entry and wherever the Quantities are committed.

Setting Up a Default Bin

The SWBINI program should be run before starting to use the Multi-Bin Processing enhancement, for each Company.

If Multi-Bin Processing enhancement has not been used on the system before, the program will mark all the Warehouses as Using Bins, create Default Bin in each Warehouse, and put all the quantities available on hand into those Default Bins.

If Multi-Bin Processing has been used in lower versions of MAS (3.xx, 4.00), the program will mark all the Warehouses as Using Bins, leaving the existing Bins and quantities in them intact.

The SWBINI program should be run for each Company prior to making Multi-Bin-specific changes in that Company (warehouses, bins maintenance).

The program run at any time will not corrupt any data.

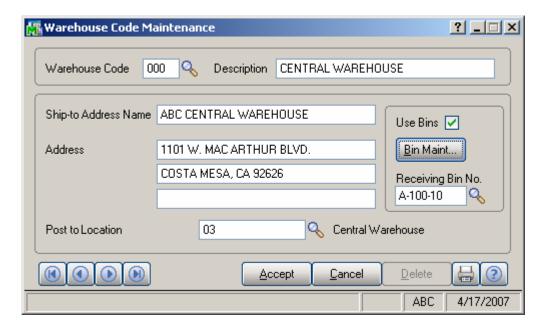
Before running SWBINI program please make sure:

- 1. Inventory Transaction journal is updated.
- 2. Inventory Physical Count Variance Register is updated.
- 3. Sales journal is updated.
- 4. Receipt journal on PO module is updated.
- 5. Return journal on PO module is updated.
- 6. Production Entry journal on BOM module is updated.
- 7. Disassembly journal on BOM module is updated.

Select the **Run** option from the **File** menu. Type in the following letters – SWBINI – and click **OK**.

Warehouse Code Maintenance

Select the Warehouse Code Maintenance program under the Inventory Management Setup menu.



Check the **Use Bins** box to start using the Bins for the selected Warehouse. The **Bin Maintenance** and the **Receiving Bin Number** options are available only for Warehouses using Bins.

No Bin Processing functionality is available for

When selecting the **Use Bins** option the following message box appears:



If **Yes** is selected, the program checks if there is Bin Location for the Warehouses then uses that one; otherwise it creates a Default bin.

If **No** is selected, then Bin creates by default.

Warehouses not Using Bins.

Note that if the **Use Bins** option is cleared for a **Warehouse**, the entire **Bin Information** (Bin Numbers, Item Quantities for Bins) will be cleared, and you will not be available to restore it.

Click the **Bin Maintenance** button to open the **Bin Code Maintenance** screen for the selected warehouse.

After setting up Bins for the Warehouse, you can select the Receiving Bin Number, if the Auto Distribute to Receiving Bin during Receipt box is checked in the Multi-Bin Processing Options.

If the **Auto Distribute to Receiving Bin during Receipt** box is checked, and there is Receiving Bin specified for the Warehouse, items will be automatically distributed to that Bin when receiving with the **Receipt Of Goods** program.

The **Bin** selected as **Receiving Bin**, cannot be deleted from the **Bin Maintenance**.



The **Priority Code** is used for auto-distribution by **Priority**.

The selected **Bin** can be set **on Hold**, preventing from either automatic or manual distribution to that bin, during **Sales**, **Receiving**, or **Both**.

None means the Bin can be used for distribution freely.

Bin on Hold for Sales means it is not available (in the lookups and for manual entry) and cannot be used

throughout the Sales Order module and in the I/M Sales Transactions.

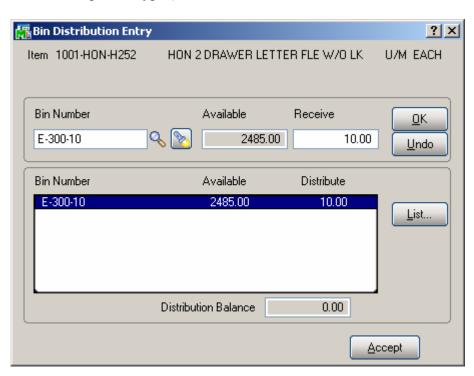
Bin on Hold for Receiving means it is not available (in the lookups and for manual entry) and cannot be used throughout the Purchase Order module and in the I/M Receipts Transactions.

Bin on Hold for Both means it is not available and cannot be used for either **Sales** or **Receiving**.

Bin Distribution Entry

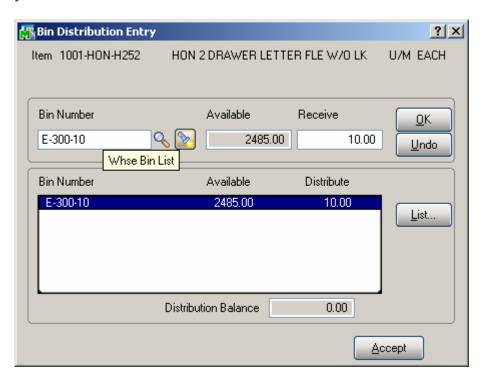
You should distribute items in the **Bin Distribution Entry** screen, for the **Warehouses Using Bins**, from the following MAS 90 programs:

- Inventory Transactions
- Sales Order Entry (optional depending on the MBN Setup setting)
- Sales Invoice Entry
- Shipping Entry
- Purchase Order Receipt of Goods Entry
- Purchase Order Return of Goods Entry
- Return Merchandise Authorization Entry
- Return Merchandise Receipt Entry
- Bill Of Materials Production Entry
- Bill Of Materials Disassembly Entry
- Work Order Transaction Entry (Material Issue and Completion types)



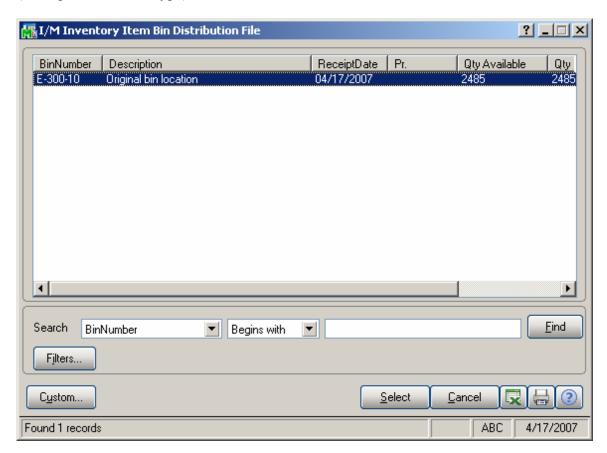
The **Bin Distribution** screen is not available in any program for the Warehouses not Using Bins.

For this screen opened from the Receipt of Goods, Transactions Entry (for Receipts and Transfers transaction types), Return Merchandise Receipt Entry, Bill of Materials Disassembly Entry, or Work Order Transaction Entry (for Completion type) screens, if not all items are distributed yet, the **Warehouse Bin List** button becomes visible. Click it to see the list of the bins that don't have distributed items yet.

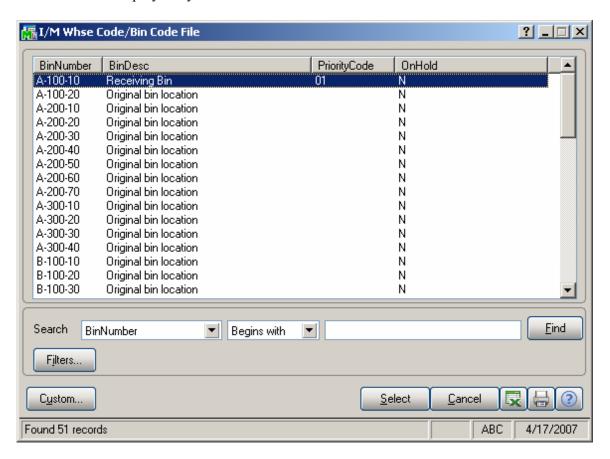


The **Bins on Hold for Receiving** are not displayed in either lookup.

Here is the list displayed by the **Lookup** button of the Bin Distribution Entry from the Transaction Entry screen (Receipts transaction type):



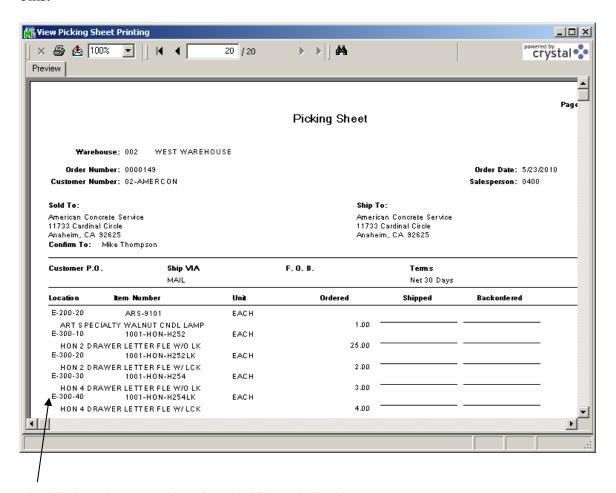
Here is the list displayed by the Warehouse Bin List button:



Printings

Picking Sheet Printing

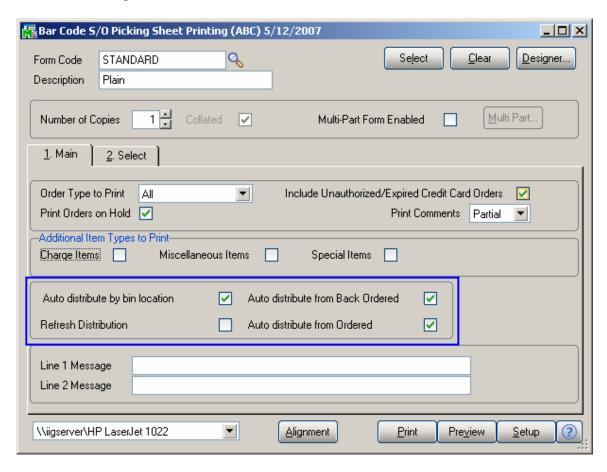
The **Picking Sheet Printing** program has been modified to display specified bins for items, for the warehouses using bins.

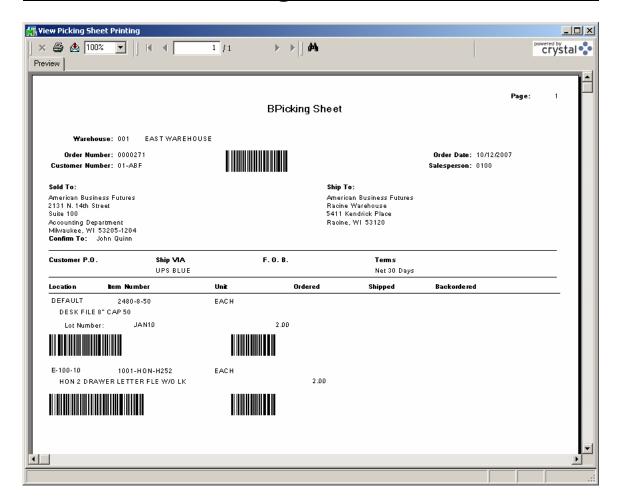


The bin locations are also printed while updating the **Inventory Management Transaction Journal** and **Purchase Order Daily Receipt Registers/Update**.

Bar Code S/O Picking Sheet Printing

The **Bar Code S/O Picking Sheet Printing** program has been modified to display specified bins for items, for the warehouses using bins.

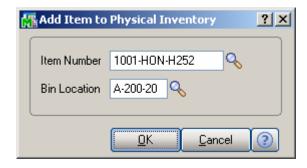




Physical Count Entry

Select the Physical Count Entry program from the Inventory Management Physical menu. Add Item ? _ 🗆 × Rhysical Count Entry CENTRAL WAREHOUSE Warehouse Code <u>2</u>. Lines 1. Header Bin Location Item Number Description ▼ A<u>d</u>d Item Add Lot/Serial U/M Count EACH 0.00 Bin Location Item Number Description Lot/Serial U/M Count <u>A</u>ccept

Click the **Add Item** to display the **Add Item to Physical Inventory** screen.



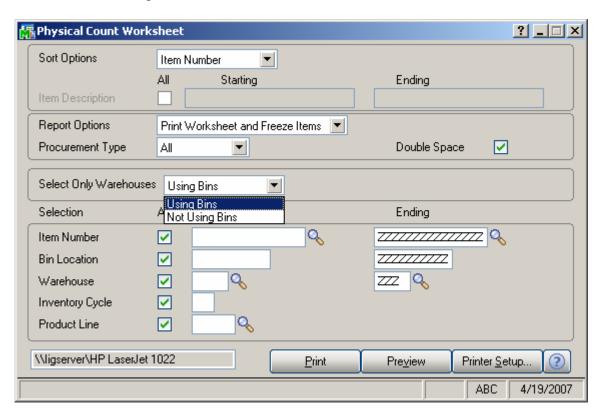
Select **Item Number** and **Bin Location** (for Warehouses Using Bins) from the Lookup lists and click **OK** to add the selected item to physical Inventory.

4/19/2007

Physical Count Worksheet

The **Select Only Warehouses** field has been added on the **Physical Count Worksheet** screen.

The Worksheet can be processed only for **Warehouses Using Bins**, or only for **Warehouses Not Using Bins**, each time, but not both together.



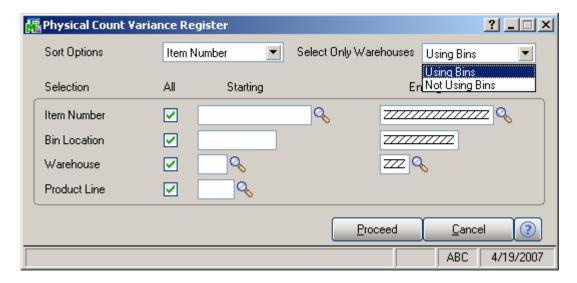
The program will process only Warehouses corresponding to this selection, from the selections made by other criteria.

When **Starting** (or **Ending** if **Starting** is not selected) **Warehouse** is selected, the **Select Only Warehouses** is set according to the type of the selected **Warehouse** (Using Bins or Not), which can be changed after that.

Physical Count Variance Register

The Select Only Warehouses field has been added on the Physical Count Variance Register Selection screen.

The Variance Register can process only for Warehouses Using Bins, or only for Warehouses Not Using Bins, each time, but not both together.

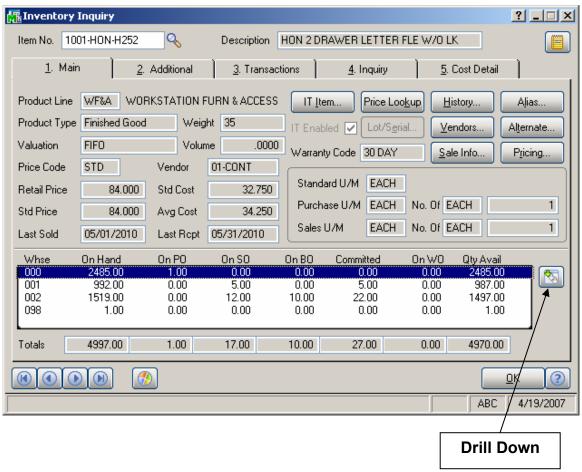


The program will process only Warehouses corresponding to this selection, from the selections made by other criteria.

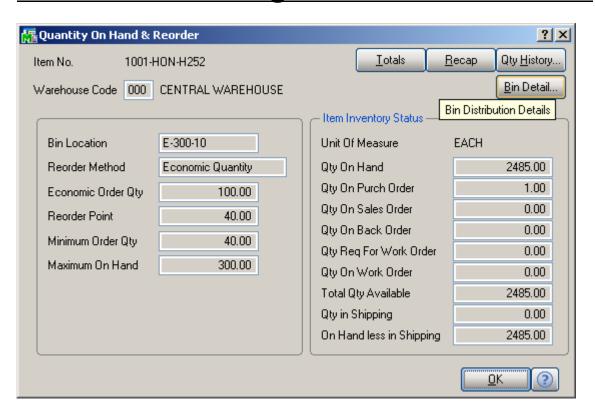
When **Starting** (or **Ending** if **Starting** not selected) **Warehouse** is selected, the **Select Only Warehouses** is set according to the type of the selected **Warehouse** (Using Bins or Not), which can be changed after that.

Inventory Inquiry

The bin distribution can be viewed from the **Inventory Inquiry** program under **Inventory Management Main** menu.



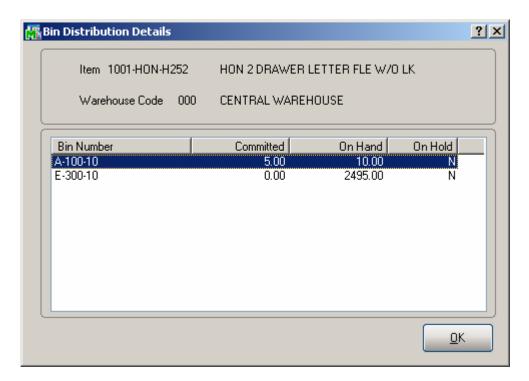
Select a warehouse line and click the **Drill Down** button to display the **Quantity On Hand & Reorder** screen.



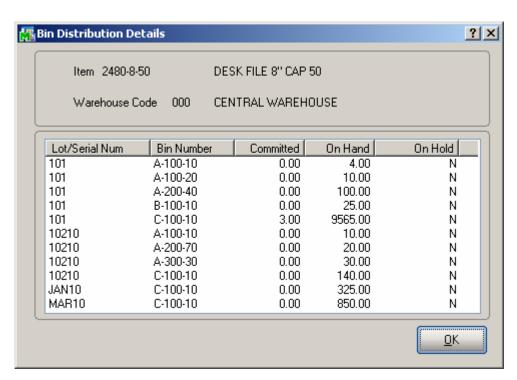
In this screen, click the Bin Detail button.

The **Bin Distribution Details** screen will look slightly different for Lot/Serial and non-Lot/Serial items.

For non-Lot/Serial items the screen will look as follows:



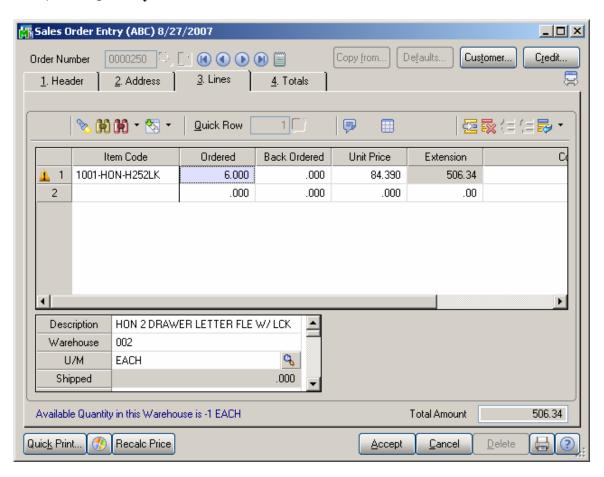
For Lot/Serial items, the information will be displayed by lots/serials:



Sales Order Entry

Sometimes if a Warehouse uses Bins, there is some quantity of an item physically present in a Bin, while the Warehouse lookup displays negative quantities. In such case it is useful to be able to view the availability of the item by Bins.

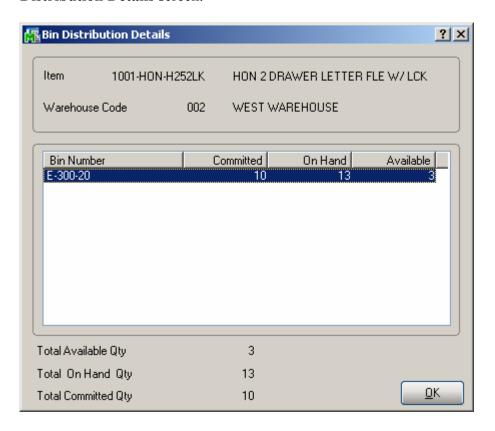
In the Lines tab of the Sales Order Entry screen, select Item, enter Quantity Ordered.



If the **Quantity Ordered** exceeds the available one in the selected warehouse the **Entry Exceeds Available Quantity** screen is displayed.

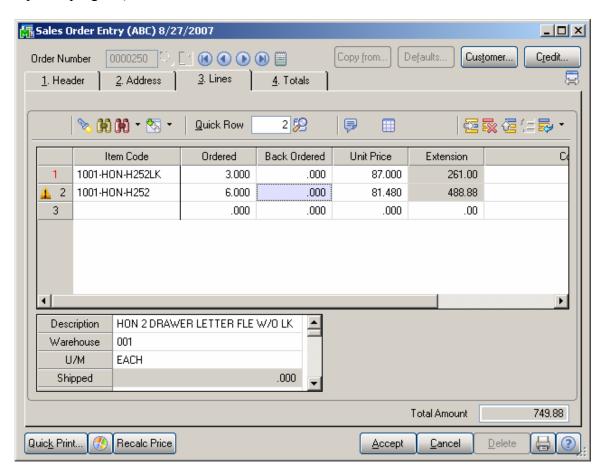


Click the **Bin Availability** button to display the **Bin Distribution Details** screen.



You can see that the real quantity On Hand in the first Bin is sufficient for your order. Click **OK** to accept the line in the Sales Order. The item is distributed automatically (if

corresponding options are set in the Multi-Bin Processing Options program).



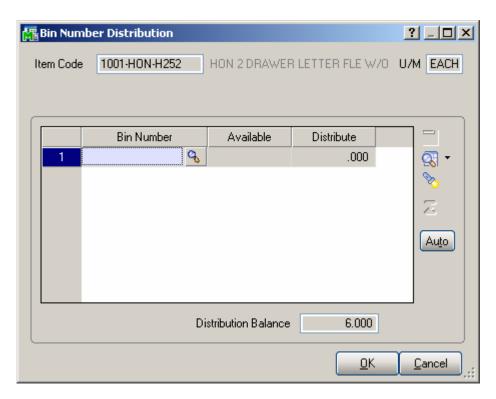
If the sales order has a line with negative distribution balance, it cannot be accepted. The following message is displayed:



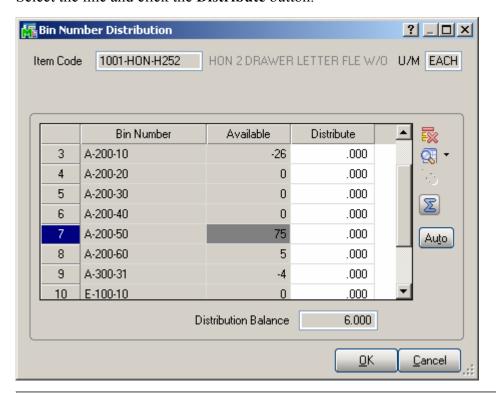
In this case you should either modify the line with negative distribution balance or delete the entire sales order.

The same is true in the **Invoice Data Entry** and also in all entries where bin distribution is available.

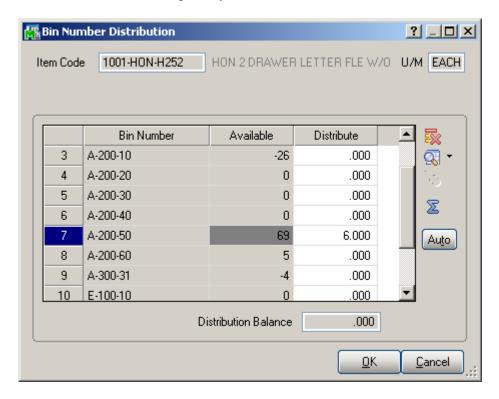
Enter the **Bin Number** to be distributed, or use the **Lookup button** to select from the list.



Select the line and click the **Distribute** button.



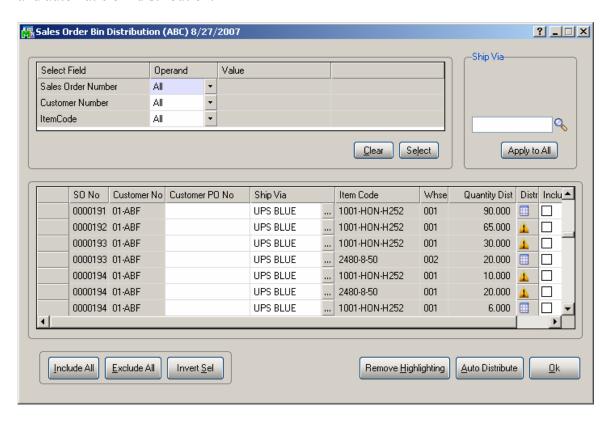
Here is how the entered quantity is distributed.



The **Distribution Balance** is reduced from the **Available** quantity of the selected **Bin Number** and set in the **Distribute** column. If the **Available** quantity of the selected line is negative or zero, that line will be ignored. If the **Available** quantity is less than **Distribution Balance**, the **Available** quantity will be zeroed and the **Distribution** Balance will be reduced correspondingly (the remaining quantity can be distributed farther to other **Bins**).

Sales Order Bin Distribution

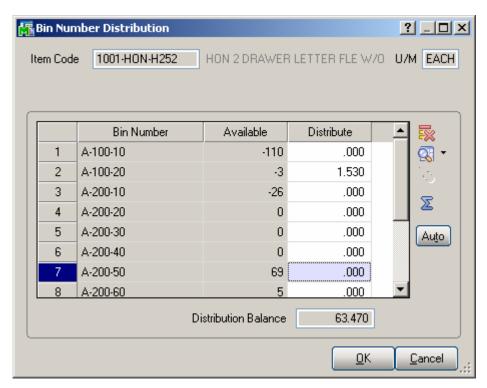
The **Sales Order Bin Distribution** program has been added under the **Sales Order Main** menu to allow manual and automatic bin distribution.



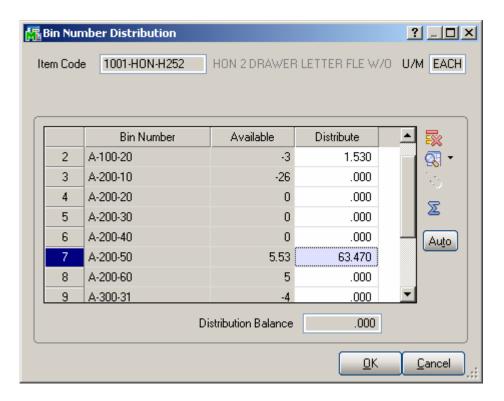
Select the range of Sales Orders, Customer Numbers, and Item Numbers to be displayed. Click the **Select** button. A grid will be populated with selected sales order lines.

The **Distr** column shows the button if the bin distribution has not been done for the line, and otherwise. For **Manual Bin Distribution**, choose a line and click the **Distr** button.

The **Bin Distribution Entry** screen will be displayed. Select the **Bin Number.**

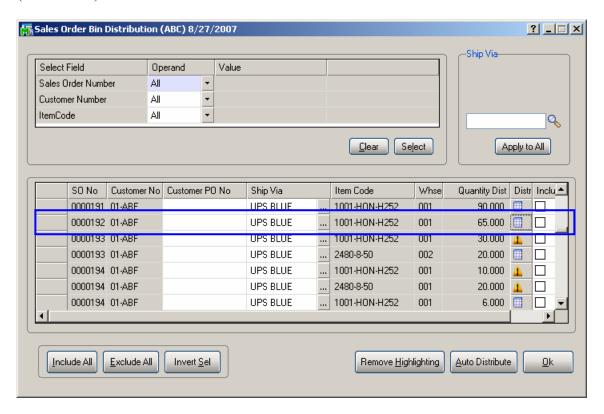


Select the line and click the Distribute button. The logic is the same as it is described for the **Bin Number Distribution** screen in the **Sales Order Entry.**

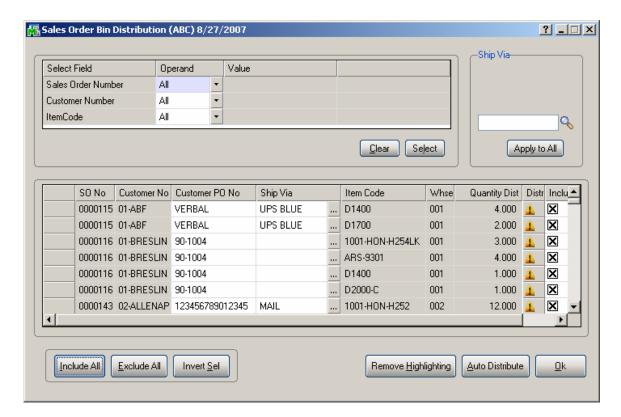


Click OK.

In the Sales Order Bin Distribution screen, the Distr column for the selected line will be changed to (Distributed).



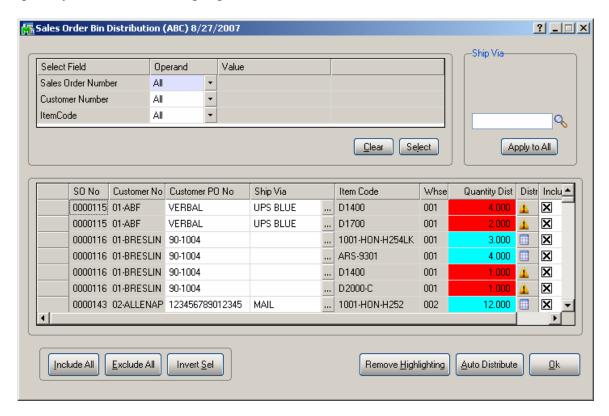
For **Automatic Distribution**, check the **Incl.** box for the lines to be distributed.



Click **Incl All** button for including all lines in the auto distribution. Click **Excl All** button for excluding all lines from distribution. Click **Invert Sel** button for inverting selection.

Click the Auto Distribute button.

After **Auto Distribution**, successfully distributed lines are highlighted with cyan, lines for which there is no enough quantity to distribute are highlighted with red.



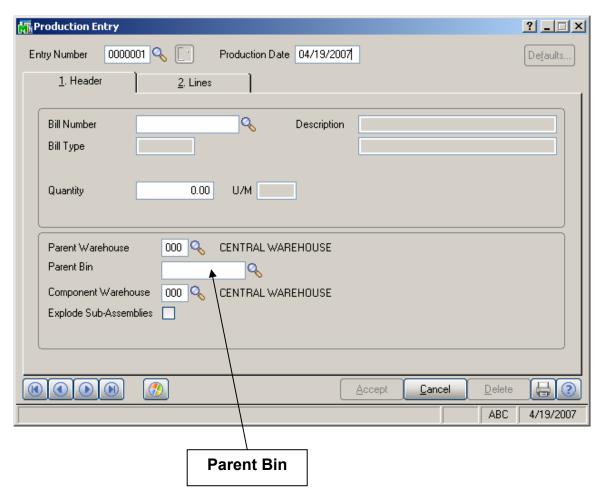
Click the **Remove Highlighting** button to remove all colors from the grid.

The Customer PO and Ship Via fields can be edited manually for any line in the grid. You can also select the Ship Via from the lookup. Changing Customer PO and Ship Via for any line of the order changes the setting for the entire order.

Alternatively, you can select the **Ship Via** setting in the field at the right top corner of the screen, and click the **Apply to All** button, to change the Ship Via of all the displayed lines to the selected one.

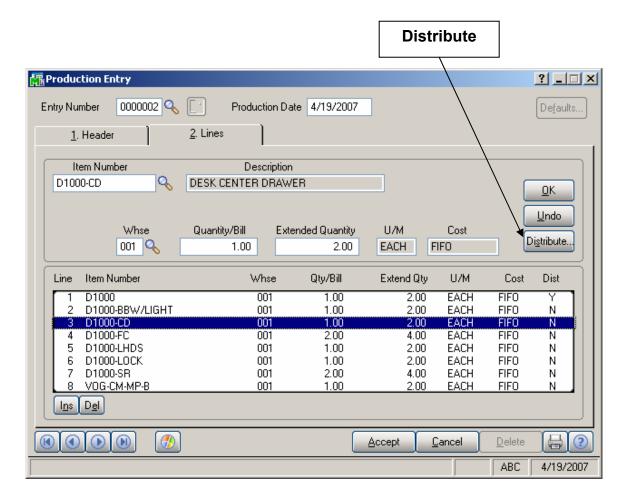
Production Entry

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

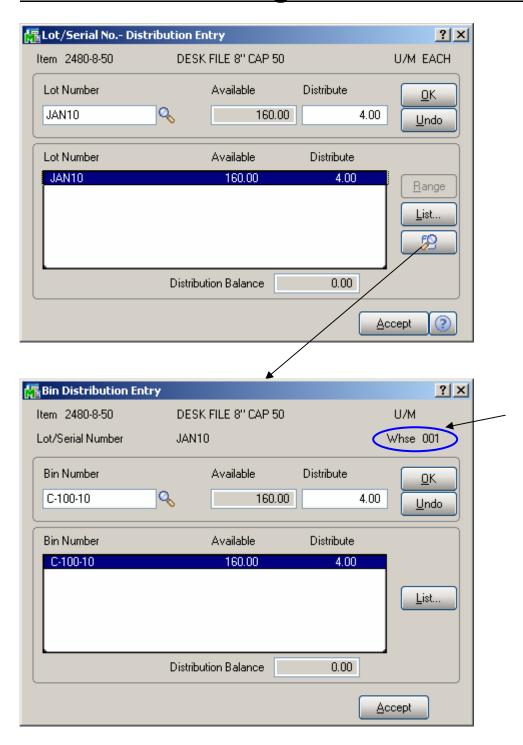


In the **Parent Bin** field, enter the Bin in the Parent Warehouse to distribute the finished production to.

In the **Lines** tab, selecting a line that is not distributed yet displays the **Bin Distribution Entry** screen. The distribution can also be viewed by clicking the **Distribute** button.



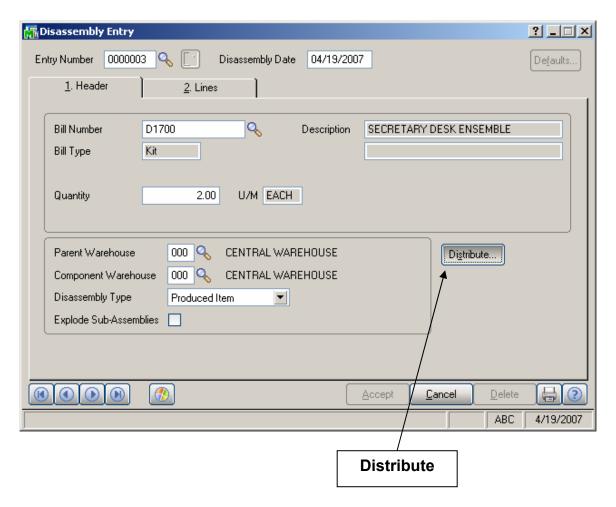
If the selected line item is a Lot/Serial item, the Lot/Serial No.- Distribution Entry screen is displayed first. After distributing the quantity to a lot/serial, the Bin Distribution Entry screen is displayed. The Bin Distribution Entry screen can be opened manually for the selected Lot Number. Click the Bin Distribution button.



Selected Warehouse and Lot/Serial Number are displayed in the Bin Distribution screen, as well as the Item Number.

Disassembly Entry

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



Click the **Distribute** button to distribute the entered quantity from bins.

In the **Lines** tab, the **Bin Distribution Entry** screen works similar to everywhere else. The **Warehouse Bin List** button displays a list of bins that don't have distributed quantity yet.

Return Merchandise Authorization

The Bin Distribution Entry screen in the Return Merchandise Authorization Entry and Return Merchandise Receipt Entry programs works similar to everywhere else.

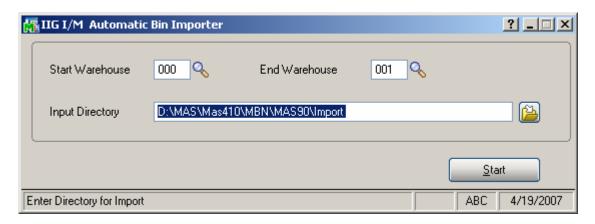
Bin distribution is only available in the **Return Merchandise Authorization** module, if the **Sales Order Entry Commits Inventory in Bin** box is checked in the **Multi-Bin Processing Options**.

When a **Credit Memo** is generated from RMA Receipt Entry, the Bin Distribution of the Receipt is transferred to the Credit Memo.

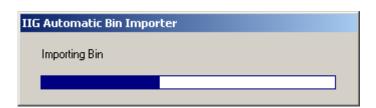
When a **Sales Order** is generated from RMA Receipt Entry, the Bin Distribution is done automatically or not, based on the **Multi-Bin Processing Options**.

IIG Automatic Bin Importer

The **IIG Automatic Bin Importer** program has been added under the **Setup** menu of the **Inventory Management** module.

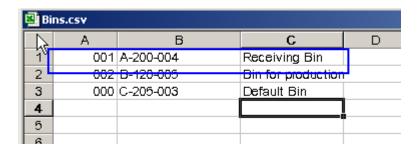


Enter the **Start Warehouse**, and **End Warehouse**. Specify the **Input Directory** for the imported file and Click **Start**.



The imported file must have the following format:

- 1. file extension must be .csv;
- 2. each record must consists of
 - Warehouse number (up to 3 characters)
 - Bin number (up to 10 characters)
 - Bin description (up to 30 characters)



In case the import is completed successfully, the imported file extension is changed to .old.

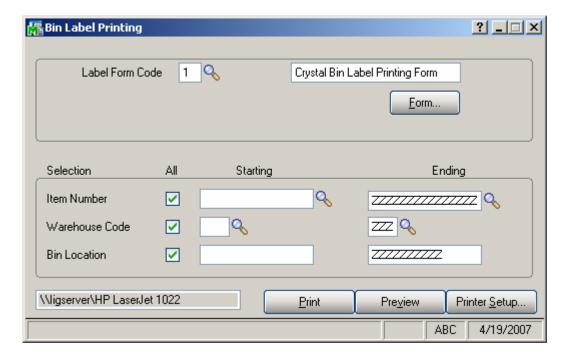
If the **Use Bin** isn't checked in the **Warehouse Code Maintenance** for the selected Warehouse, bins will be skipped while importing.

Here is the example of imported bin:



Bin Label Printing

The Bin Label Printing program added under the Reports Menu of the Inventory Management module enables printing Bin Labels.

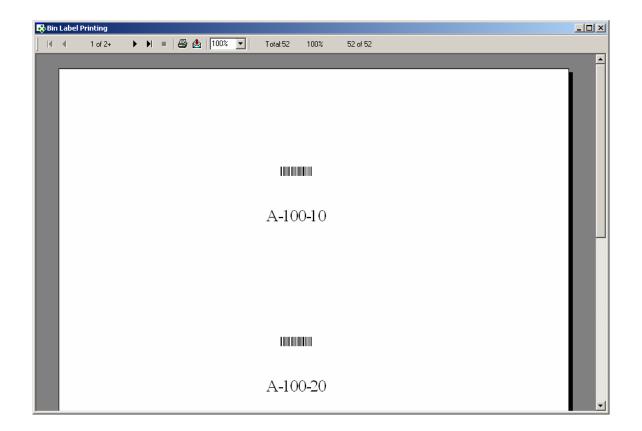


The **Bin Label** can be filtered based on the following **Selection** criteria: Item Number, Warehouse Code and Bin Location.

If the **All** box is checked for the **Item Number Selection** criterion, the program will print all Bin Locations of the Warehouses.

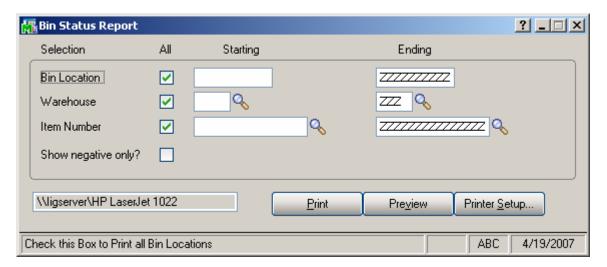
If the **All** box is unchecked for the **Item Number Selection** criterion, the program will print all Bin Locations of the Items.

Here is an example of printout.



Bin Status Report

The **Bin Status Report** program added under the **Reports** Menu of the **Inventory Management** module enables printing **Bin Status Report.**



The **Bin Status Report** can be filtered based on the following **Selection** criteria: Item Number, Warehouse Code and Bin Location.

If the **All** box is checked for the **Item Number Selection** criterion, the program will print all Bin Locations of the Warehouses.

If the **All** box is unchecked for the **Item Number Selection** criterion, the program will print all Bin Locations of the Items.

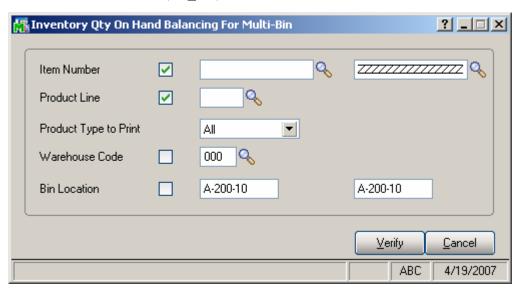


If the **Show negative only?** check box is selected, then the Items having only negative Quantity On Hand will be printed.



Inventory Qty On Hand Balancing For Multi-Bin

The **Inventory Bin Balancing Utility** program has been added to the **Setup** menu of the **Inventory Management** module to balance the Inventory Quantities on Hand in the I/M Warehouse Details (*IM2*), the I/M Cost Details (*IM3*), and the I/M Bin Details (*IM BN*) files.



In this screen you can specify data ranges by **Item Number**, **Product Line**, **Warehouse Code**, and **Bin Location** for balancing. You can also select the **Product Type to Print** from the corresponding drop-down box (you can select *All*, *Finished Goods*, *Raw Materials*, or *Discontinued*).

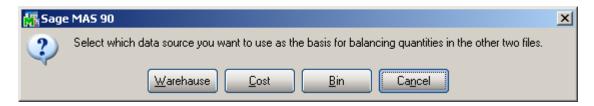
Click the **Verify** button.

If there are no differences in quantities in these three files, you will get the following message:



In case of differences in quantities, select which file you will use as a basis to correct the other two files. Your options are:

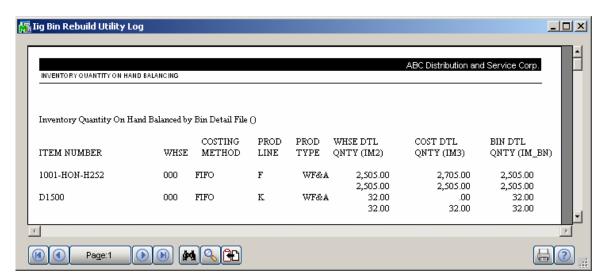
- Warehouse This will balance the quantities in the I/M Cost Detail File (IM3) and the I/M Bin Detail (IM_BN) file based on the quantities in the I/M Warehouse Detail file (IM2).
- Cost This will use the I/M Cost Detail (IM3) file to balance the quantities in the other two files.
- **Bin** This will use the I/M Bin Detail (IM_BN) file to balance the quantities in the other two files.



After the program adjusts the quantities, the **IIG Bin Rebuild Utility** log will print.



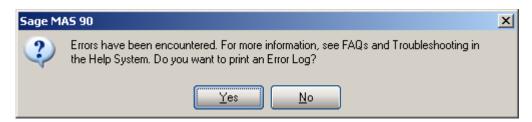
Here is the result of printout (**IIG Bin Rebuild Utility Log**):

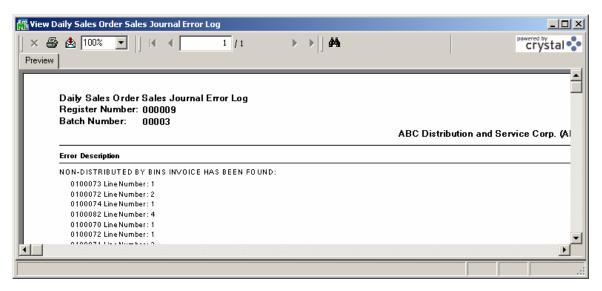


Note: This utility updates the quantities in the detail files, and does not update the G/L. Differences in the quantities of Lot/Serial numbers will be ignored, and this utility will not have any effect on I/M transactions (IM5). This utility will not work for Lot/Serial Items.

Daily Sales Reports/Updates

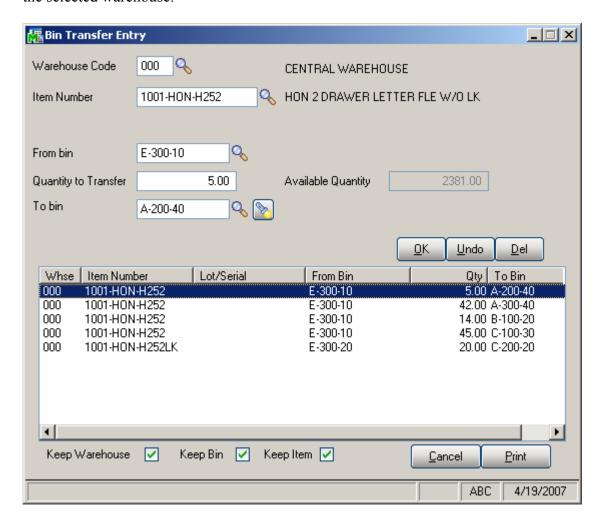
If there are Invoices with lines (from Warehouse(s) with Bins) not distributed or distributed partially then the **Daily Sales Reports/Updates** is interrupted and error log is printed while updating the Sales Journal.





Bin Transfer Entry

The **Bin Transfer Entry** program has been added under the **Inventory Management Main** menu to allow transferring Item quantities from one bin to another within the selected warehouse.



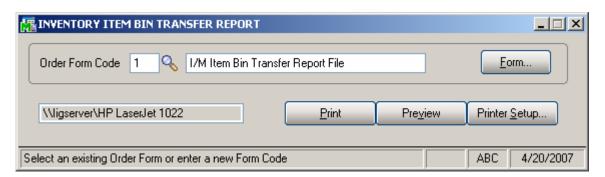
Select Warehouse Code and Item Number in the corresponding fields.

In the **From bin** field specify the warehouse from which the quantity is going to be transferred and in the **To bin** field specify the warehouse where the quantity is going to be populated.

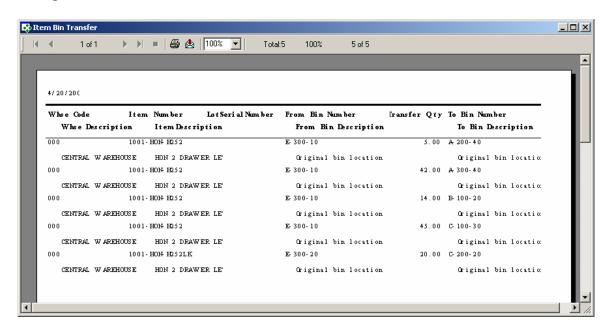
Specify the **Quantity to Transfer** in the corresponding field.

If the Keep Warehouse, Keep Bin, Keep Item check boxes are selected, the Warehouse, Item Number and From bin fields' values will stay after clicking OK.

Click the **Print** button to print/preview the **Item Bin Transfer** report.



After closing the printout, a confirmation box appears asking whether to transfer or not.

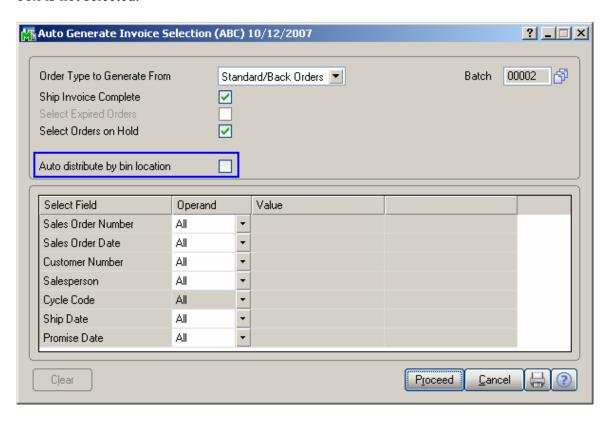




After clicking Yes, the Items will be transferred.

Auto Generate Invoice Selection

The **Auto distribute by bin location** check box has been added to the **Auto Generate Invoice Selection** screen. This check box will be disabled if the **Ship Invoice Complete** box is not selected.



If the **Auto distribute by bin location** check box is selected, all the ordered quantities will be shipped during generation. Otherwise, if that box is not selected, only the quantities will be shipped which have been distributed in Sales Order. If the quantities have not been distributed, the ship quantities will be 0 for each line.