



Tips & Tricks #50 - The internal magic of creating Purchase Orders from OE Order's

Passport has recently added the ability to create a PO from within an OE order. This means that as you add lines to your OE order, if there is a back ordered or a drop shipped line item, you will have the option for the program to automatically take this line and add it to a Purchase Order creating the PO as necessary. (It will also update the Purchase Order if there are changes made to a PO'd line.) Since there is a lot going on behind the scenes here, it is worthwhile if you are going to use this feature to understand how it works and the accounting (distributions) that go with it.

Process

Since the OE ordering function drives the creation of a Purchase Order for some/all of the products being entered into the OE order, there are two situations where this feature might be used. They work in slightly different ways, so it is worthwhile explaining them somewhat separately. These are:

- a) creating a PO to order items where there is not enough stock to cover the requested order quantities. For this to work, these items will have to be backordered in the OE order. In this case the item(s) will be received later as stock using the PO receiving function and once received, they can be used to ship these backordered items to the customer. These items are received as receiving type "I" (inventory) or possibly type "J" (for job costing).

The backordering process simply defers the shipping of the missing items and, the PO in this case is just an easy way of creating a fulfillment of the inventory you need to complete the order. Except for the delay implicit in the backordering process, there is no real difference in the billing and inventory processes between what happens when you do have the stock and what happens when you don't and back-order it – you are always shipping in-stock items.

- b) creating a PO to order items that are not stocked in your company's warehouse but are in your catalog. These might be classified as a "special order" item. These items are added to a drop ship order where the ship-to address in the OE order will be used as the delivery-to address in the PO. Since the customer's ship-to is the delivery address, there is only one delivery address for the PO and the multi-drop option (multiple different delivery addresses) and multi-delivery option (a schedule of several dates to deliver portions of the order) are not accommodated. Note since this is a drop ship, the ordered inventory is received as receiving type "O" (other/non-inventory) and has the same status as ordering office supplies for the supplies cabinet except as discussed below the GL distributions are different. In other words, while we are creating and billing an order for these items, and creating a Purchase Order for these items, they never go into stock.

Costing

Here is the normal process that goes on with an order, specifically during the step that posts an invoice. For regular/normal invoices, in addition to billing the customer, the inventory side of the

programming costs-out/calculates the value of the out-bound inventory. This will be done using the average cost or the standard cost of the item based on the inventory valuation method setup for the inventory system. This value is determined *at the moment* that the inventory transaction for that item is being posted. For the average cost case, this means the cost used for an item that is being posted may have a different value if there has been a PO receiving on that item just before, versus that PO Receiving happening just after. (This will only affect the costs if the receiving cost is different from the average cost at the moment of posting). Similarly, in the case of standard cost as used in Manufacturing, the posting of the invoice will be affected by a cost rollup process where the standard costs are recalculated.

Costing - Back Orders

In a back-order cycle, the quantities that are being back-ordered will not appear on the invoice and therefore the printed to-ship quantity will be zero or at least less than the ordered quantity. So, the quantities billed will be what stock is available. The back-ordered quantities, are in effect, put on hold until the low inventory is replenished by the PO being created with this order. When the PO receiving is done, the back-ordered items may then be selected for a second billing and again the process becomes the same as above.

Bottom line, in both these cases (regular billing and back-order billing) there will be an inventory quantity to cover the amount being billed/posted. This means that the costs are known.

Costing - Dropship

In a dropship cycle, in addition to doing the customer billing, the cost of the items drop shipped is calculated not from cost of the inventory shipped, but from the anticipated cost of the items being ordered i.e., what will be the expected replacement costs that will only be confirmed later at receiving time. This case is distinguished from the above two cases - regular billing and back-order billing - where there will always be an inventory quantity with corresponding cost to cover the amount being posted.

Negative and Zero quantity issues

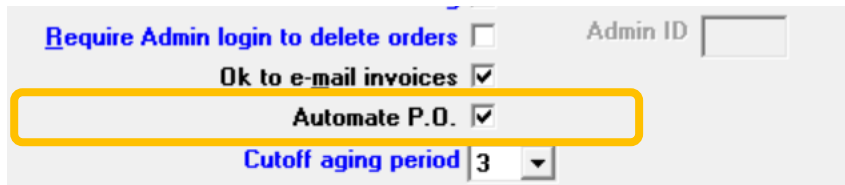
One additional side issue on costing: Costs can only be accurately computed when there is inventory quantity available. That is because you need quantity on hand to determine the *received* cost of that quantity.

Zero or negative inventory can occur “naturally” if, for example the shipping department has received goods and put them on the shelf, but the resulting paperwork has not yet been processed by the accounting department. If a rush order were to come in, the decision might be to go ahead and ship the items despite the computer saying insufficient quantity. When this happens and the quantity on hand is zero or negative we don’t know the “real” cost and this means that to bill an invoice a) we have to use a “best guess” (the last average cost or standard cost) and b) when the Receiving paperwork is being processed on these items afterward, these guesses have to be corrected and if the correction is plus or minus because of the replacement price has changed from what was on the PO, this correction has to be posted as a cost-correction. This “best guess” scenario also applies to dropships where the actual cost will not be known (for sure) until after the vendor has shipped the items *and the invoice for these items has been received from the vendor*. (Note: in this case of the dropships, care should be taken to avoid these cost change scenarios because it gets messy. This is one of those cases where a “price changes are not allowed without prior authorization” message should go on the PO. Also, this is likely one of the cases where should changes to the prices be requested, a Change PO transaction should be used to replace the original PO.)

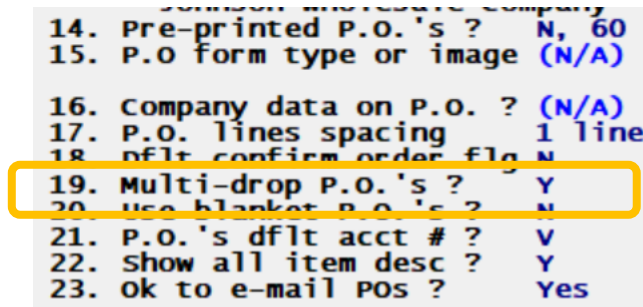
Setup and Process

Getting the OE and PO application to work together is one of those “ducks in a row” situations. The criteria are:

- In OE the “automate P.O. switch must be turned on – in the first tab of OE Control – bottom of screen:



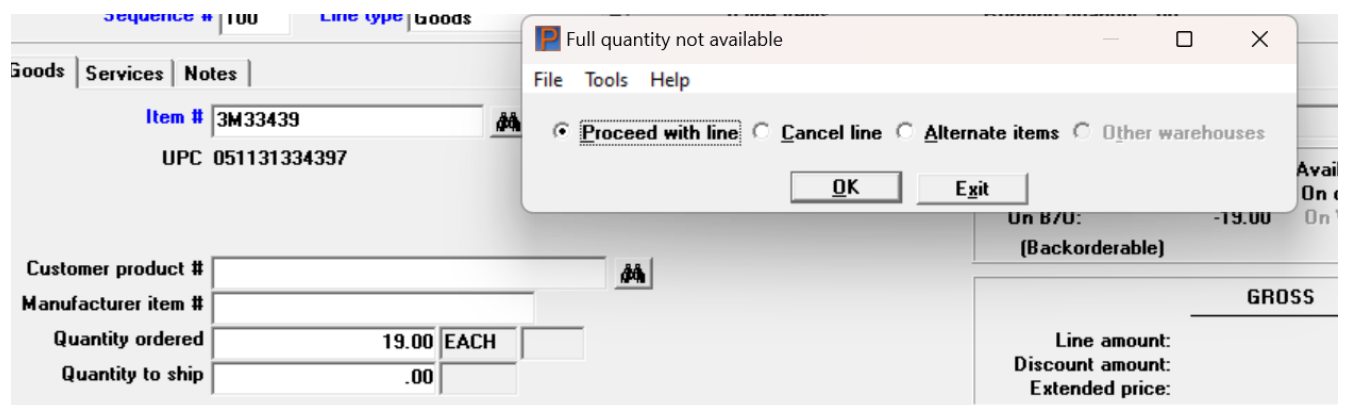
- In PO the “Multi-drop P.O.’s switch must be turned on – in the PO Control RH side



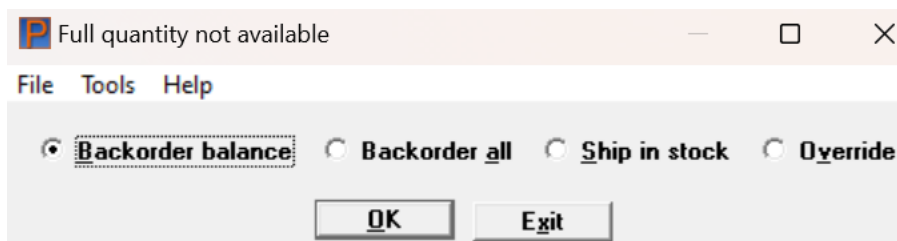
Since having a PO generated is still optional even when the above are turned on, the following steps will show how to ensure that the PO is generated:

- **Entering an Order in OE – Back-order situation**

In OE during line-item entry and having entered a quantity that is greater than available in inventory the following will appear:



Having clicked the Proceed button you will get:



The first two options will produce a back-order. The last two “ship in stock” - will change the ship quantity to the available quantity (leaving the ordered quantity intact) and “override” - will proceed to set the quantity to ship to the ordered quantity as entered despite the lack of availability (and will probably produce a negative inventory unless inventory for that item is received prior to shipping).

(Re: the two choices in back ordering - it may be politic/practical to back order the complete quantity ordered, informing the client of a delay, rather than shipping just what you have. This would mean that basically, the generated PO is for this customer and might keep things better organized for you. Back ordering the whole quantity would also allow you to satisfy another customer who is requesting a smaller amount later on. On the other hand, the first customer might appreciate some of the items immediately with the promise of the rest later. Determining which of the two you need is of course a practical matter.)

The result of backordering all:

Customer product #	<input type="text"/>			
Manufacturer item #	<input type="text"/>			
Quantity ordered	19.00	EACH		
Quantity to ship	.00			
	Backordered 19.00 *BO*			
Unit price	17.58	EACH	Price-2	
Discount percent	.00			
Ship date	"ASAP"			
Average cost	14.01	EACH		
Vendor	<input type="text"/>			

The key step below is entering the Vendor for the PO. *The system uses the presence of a Vendor ID to determine whether or not to produce/update a Purchase Order automatically.* Note that if there are multiple OE line items that are being placed into a purchase order, so long as the vendor number given for a new line is the same as the last line item using the automated PO function, the same PO will be updated i.e., the new line item in OE will be added to the existing PO. If, however, a different vendor is used, the first use of the new vendor will create a new PO. In other words, you will get as many PO's from one order as the number of different vendors you use.

Quantity to ship	.00		
Backordered 19.00 *BO*			
Unit price	17.56	EACH	
Discount percent	.00		
Ship date	"ASAP"	<input type="button" value=""/>	
Unit cost	14.01	EACH	
Vendor	3M	<input type="button" value=""/>	
3M Co.			
Neg. cost	14.20	PO #	25552 -100
Est. cost	.00		

Note the number of the generated PO is shown along with the line number for the item in the PO.

The optional Negotiated and Estimated costs along with an optional comment window (not shown) are explained in more detail in the OE User Manual . Search for "Purchase Order Automation".

- **Entering an Order in OE – Dropship situation**

In OE during line-item entry, if you enter the F1 key at the quantity ordered field, the program clears the quantity ordered field and will mark this line as a drop ship. At this point any quantity entered will go into both the ordered and to-ship quantities. Since there are no decisions re back-ordering, or shipping in stock etc., you can enter the fields (Unit price, Ship date etc.) down to the Vendor ID only as needed.

Manufacturer item #			
Quantity ordered	100.00	EACH	*DS*
Quantity to ship	100.00	EACH	
Unit price	6.10	EACH	
Discount percent	.00		
Ship date	"ASAP"	<input type="button" value=""/>	
Unit cost	4.23	EACH	
Vendor	SOS	<input type="button" value=""/>	
Seymour Of Sycamore Inc			
Neg. cost	.00	PO #	25551 -100
Est. cost	4.50		

As with the back-order situation, the entry of the Vendor ID triggers the generation of the PO and similarly using multiple vendors on different lines of the OE order will generate multiple PO's.

Note also in this case that the Customer's Ship-to address will be automatically stored into the Deliver-to fields of the PO, so the vendor delivers to the customer.

The third and last component of this discussion is about the distribution of costs and how they are generated and where they go.