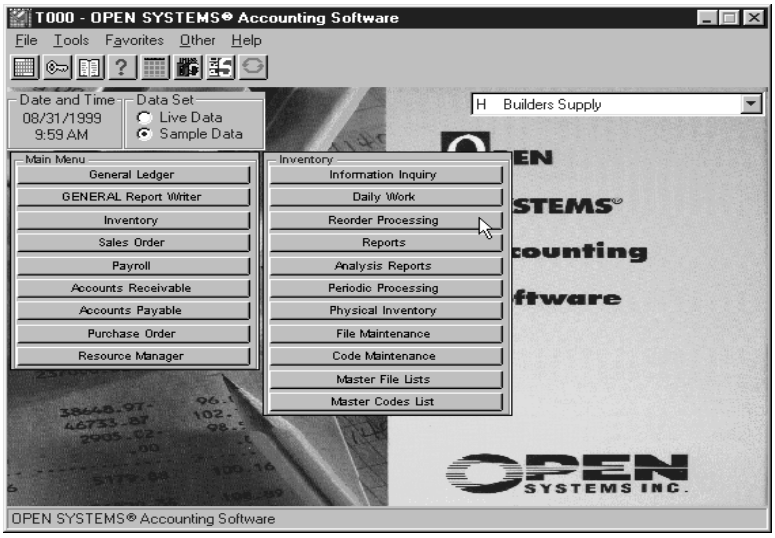
Physical Inventory 4

Reorder Processing

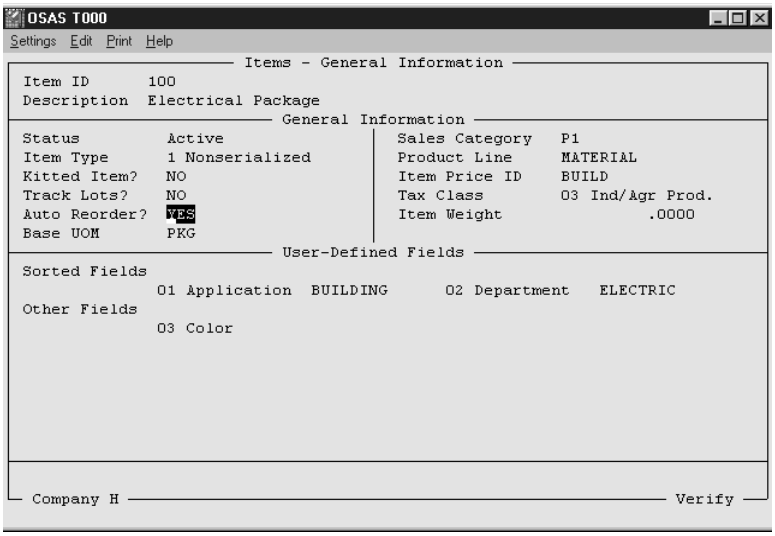
Use the functions on the Reorder Processing menu to calculate reorder amounts, generate purchase requisitions, and produce a report that you can use to analyze the reorder quantities.

Inventory Main Menu Screen



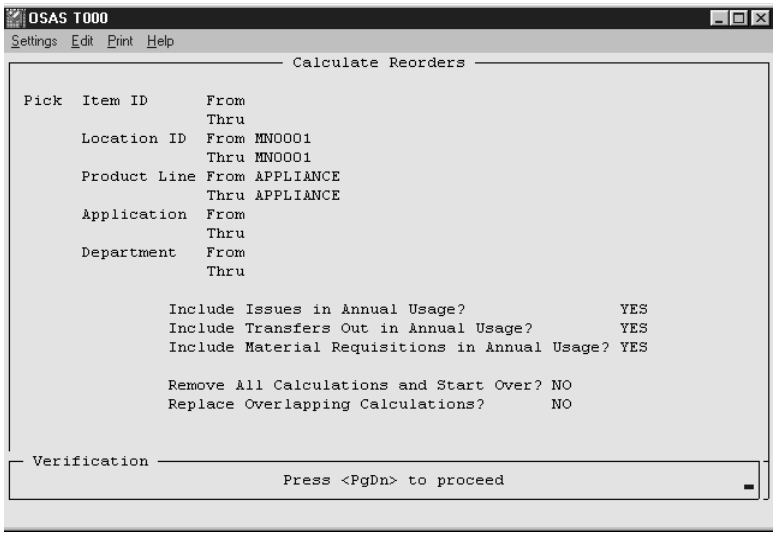
The reorder process is designed to review summary history for sales, issues, or transfers for a selected group of items and estimate usage in the future. From this usage and current quantities it determines a suggested reorder quantity. It determines an order point by applying a weighting factor to sales history activity to determine an estimated usage for the next month. Based on the forecasted usage and the lead-time, the order point is calculated. Safety stock is calculated from the order point. If an item is below the order point, a reorder quantity will be suggested.

Item General Information Screen



CALCULATE REORDERS

Calculate Reorders Screen



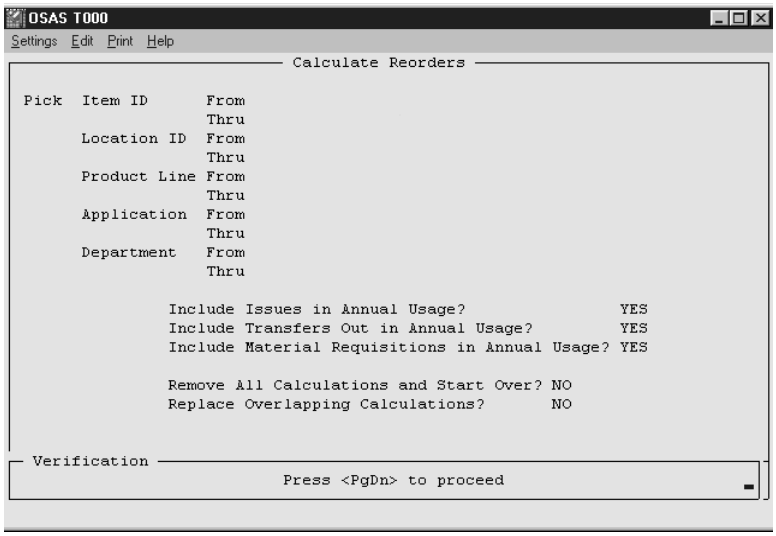
Use the Calculate Reorders function to calculate the quantity of an item to reorder based on one of three methods:

1. Economic Order Quantity (EOQ) uses the actual annual usage, unit cost, carrying cost (as a percentage) and order cost.

2. Forecast uses the forecast type assigned to the Item Location and sales history.

3. Min/Max uses the **Minimum Order Qty** and the **Maximum Qty** set up on the Location Information screen in Item Locations.

Calculate Reorders Screen



Use the Calculate Reorders function to determine the reorder quantity for the items you specify based on the EOQ (Economic Order Quantity), Min/Max, and Forecast Methods.

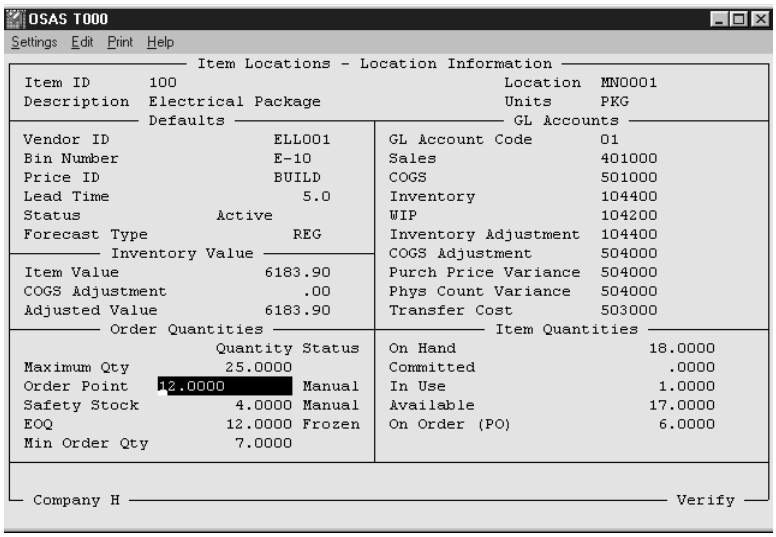
If the **Status** fields **Order Point**, **Safety Stock**, and **EOQ** are not set to Frozen, the system calculates values for these fields and changes their status to Calc during the Calculate Reorders function. (These fields are located in the Order Quantities section of the Location information screen in Item Locations.)

The following definitions are used by the system when calculating these field values and the reorder quantity:

Annual Use The total of up to 12 months of history. If 12 months are not available, this Quantity will be short.

Forecast Use Estimated usage in one month based on weighting factors applied in the forecast. (Weighting factors are set up in Forecast Types on the Codes Maintenance menu.) This usage is used to calculate order point safety Stock.

Item Location Information Screen



Order point Estimated usage during lead-time PLUS safety stock. Usage during lead-time is calculated by pro-rating forecasted usage time lead days/30.3333. The quantity is then multiplied by 1.5. Two order points are shown. The order point on the Min/Max line is the minimum order quantity you set up in the Order Quantities section of the Location Information screen.

An order is generated ONLY if stock falls below the order point. The system will calculate Order Point unless the user set the Order Point Status to Frozen.

Safety Stock Safety stock is the buffer against uncertainty in vendor deliveries. The system uses 33% of estimated usage during lead-time. 33% is arbitrarily set and should result in a 90% customer service level. It is easy to calculate and effective.

A value for the field Safety Stock Status field is set to Frozen.

When you use the Calculate Reorders function, the system calculates reorder amounts for all three reordering methods and creates entries for each reorder method in the Inventory Requisitions file (INRQxxx).

1. The EOQ method compares the cost of placing a purchase order (and all associated receiving and invoicing costs) against the cost of carrying stock in inventory. It uses the **Carrying Cost Pct** and **Order Cost Amt.** fields from the Location. If an item is expensive to order or expensive to stock you can override the **Carrying Cost Pct** and **Order Cost Amt.** in the EOQ Overrides section of the Cost Information screen in Item Locations. In general, the higher the cost of the item, the lower the purchase quantity. The traditional EOQ formula is used using Annual Use as the movement variable. The EOQ formula is:

$$\sqrt{\frac{2*\text{Annual Usage}*\text{Order Cost}}{\text{Value}*\text{Carry Cost}}}$$

2. The Forecast method calculates estimated usage based on the formula set up in the forecast type assigned to the Item Location. The **Safety Stock** value set up in the Order Quantities section of the Location Information screen in Item Locations is added to the estimated usage. The On Order quantity plus the Quantity Available Is subtracted from that sum.

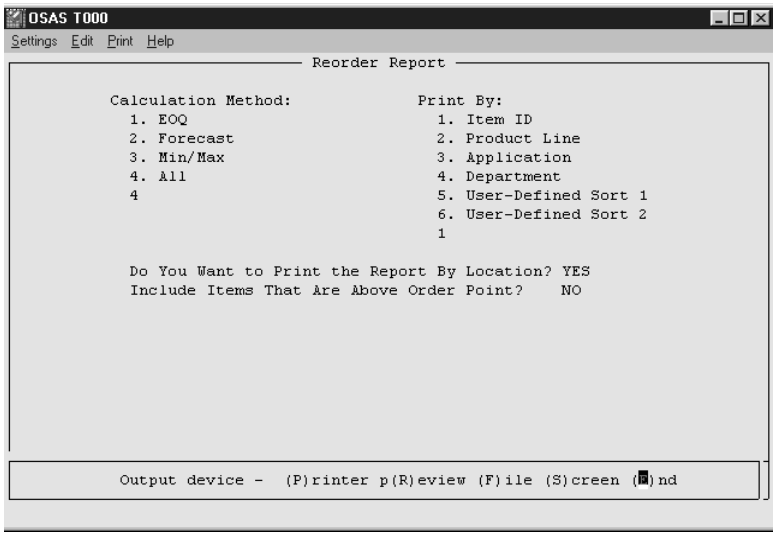
   Estimated Usage Calculated from Forecast Type
   + Safety Stock
   - On Order + Available
   ———————————
   Reorder Quantity

3. Min/Max calculates a reorder quantity for an item whenever the Available quantity plus the On Order quantity is less than the **Minimum Order Qty** set up in the Order Quantities section of the Location Information screen in Item Locations. The reorder amount is the **Maximum Qty** minus the On Hand quantity plus the On Order quantity. (It is assumed that any safety stock buffers are included in the minimum stock level, **Minimum Order Qty**.)

   If (Available Quantity + On Order Quantity) < Minimum Order Qty THEN

   Maximum Qty
   - On Order + Available
   ———————————
   Reorder Quantity

Reorder Report Screen



All three-order methods can be shown on the Reorder Report. When you generate purchase requisitions in Purchase Order, you may chose from any of the three methods OR the lowest reorder quantity OR the highest reorder quantity.

The following notes may occur in the Nt. column when and error condition is found while printing the Reorder Report:

HM - History Missing	One or more months of summary history are missing in the last year. Summary sales history is used to produce the forecast used to calculate EOQ.
FM - Forecast Missing	The item is not assigned a Forecast Type.
FQ - Frozen Order Quantity	The EOQ Status field is set to Frozen.

This is a sample of the Reorder Report

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08/31/1999                                    Builders Supply                                    Page    1
2:10 PM                                       Reorder Report
                                        Location ID TX0001 By Item ID

 Item ID            Product Line  Loc. ID Application     Last Cost     Available    Annual Use   Order Point          EOQ  Nt.
 Description                      UOM     Department      Lead Time      On Order  Forecast Use                   Forecast
                                          Forecast Type               Safety Stock                              Min/Max
900                APPLIANCE     TX0001  MJR APPL         239.6600        1.0000       1.0000-       3.0000         .0000  HM
 Refrigerator - Black              EA     ELECTRIC              7.0         .0000      10.0000        3.0000        10.0000  HM
                                          REG                               1.0000                    8.0000       24.0000



 ------------------------------------------------- Notes ------------------------------------------------------------
 HM = History Missing   FM = Forecast Type Missing    FQ = Frozen Order Quantity    * = Frozen Quantity or Forecast Type Missing

End of Report
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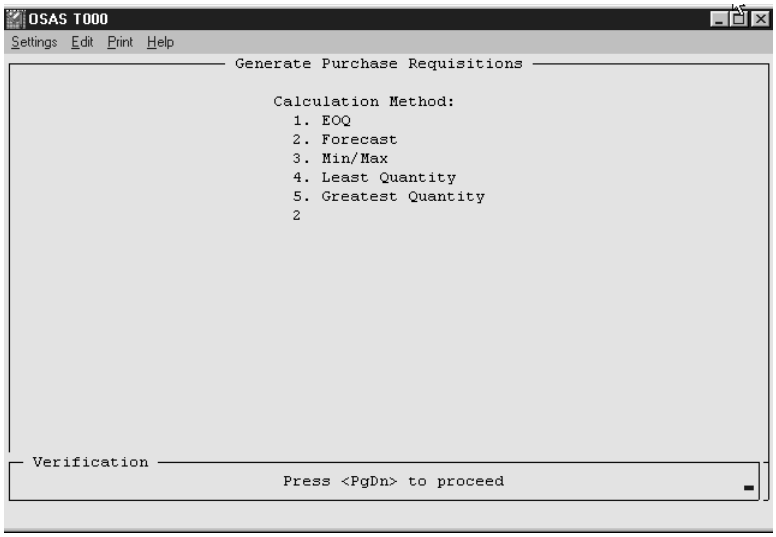
Generate Purchase Requisitions

Generate Purchase Requisitions Screen



If Inventory is interfaced with Purchase Order, the Inventory Requisitions file (INRQxxx) is used to create purchase requisitions for each item location in the Purchase Order Purchase Requisitions file (POPQxxx) based on the reorder method selected on this screen. You can use the Generate Orders function on the Daily Work menu in Purchase Order to complete the purchase requisition process.

Physical Inventory

At selected times during the fiscal year, a business conducts a physical inventory. This process is used to correct discrepancies between the perpetual-computerized-inventory quantity and the actual-counted-quantities at a location. Discrepancies might be the result of broken stock not removed from perpetual inventory, theft, inaccurate previous counts, and so on.

You can create multiple batches of inventory items if you want to conduct the physical inventory count in stages or cycles. Tags and/or worksheets can be used for recording the physical count for an individual batch or multiple batches, depending on your needs.

The functions on the Physical Inventory menu are used to prepare for the physical inventory count, enter the counted quantities, and update the perpetual inventory information with the counted quantity information.

Physical Inventory Menu Screen