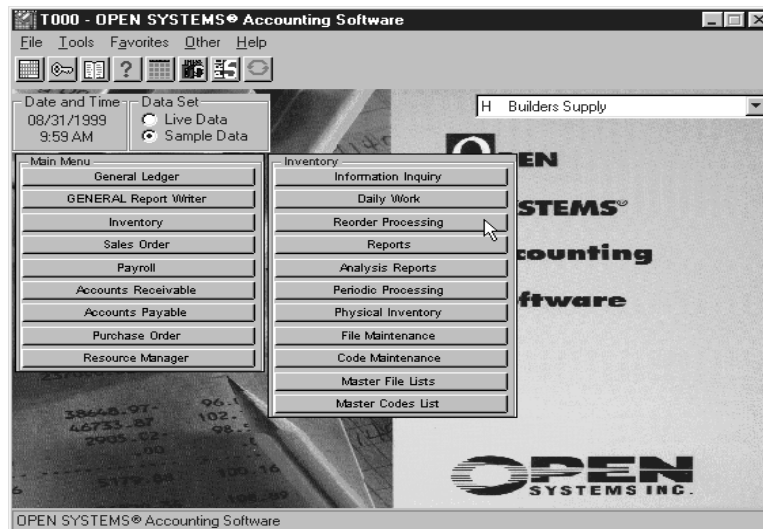

Physical Inventory

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

Items - General Information			
Item ID	100		
Description	Electrical Package		
General Information			
Status	Active	Sales Category	P1
Item Type	1 Nonserialized	Product Line	MATERIAL
Kitted Item?	NO	Item Price ID	BUILD
Track Lots?	NO	Tax Class	03 Ind/Aggr Prod.
Auto Reorder?	YES	Item Weight	.0000
Base UOM	PKG		
User-Defined Fields			
Sorted Fields	01 Application BUILDING 02 Department ELECTRIC		
Other Fields	03 Color		
Company H Verify			

CALCULATE REORDERS

Calculate Reorders Screen

OSAS T000

Settings Edit Print Help

Calculate Reorders

Pick Item ID From Thru

Location ID From MNO001 Thru MNO001

Product Line From APPLIANCE Thru APPLIANCE

Application From Thru

Department From Thru

Include Issues in Annual Usage? YES

Include Transfers Out in Annual Usage? YES

Include Material Requisitions in Annual Usage? YES

Remove All Calculations and Start Over? NO

Replace Overlapping Calculations? NO

Verification

Press <PgDn> to proceed

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

OSAS T000

Settings Edit Print Help

Calculate Reorders

Pick Item ID From Thru

Location ID From Thru

Product Line From Thru

Application From Thru

Department From Thru

Include Issues in Annual Usage? YES

Include Transfers Out in Annual Usage? YES

Include Material Requisitions in Annual Usage? YES

Remove All Calculations and Start Over? NO

Replace Overlapping Calculations? NO

Verification

Press <PgDn> to proceed

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

Item Locations - Location Information			
Item ID	100	Location	MN0001
Description	Electrical Package	Units	PKG
Defaults		GL Accounts	
Vendor ID	ELL001	GL Account Code	01
Bin Number	E-10	Sales	401000
Price ID	BUILD	COGS	501000
Lead Time	5.0	Inventory	104400
Status	Active	WIP	104200
Forecast Type	REG	Inventory Adjustment	104400
Inventory Value		COGS Adjustment	504000
Item Value	6183.90	Purch Price Variance	504000
COGS Adjustment	.00	Phys Count Variance	504000
Adjusted Value	6183.90	Transfer Cost	503000
Order Quantities		Item Quantities	
Quantity	Status	On Hand	18.0000
Maximum Qty	25.0000	Committed	.0000
Order Point	12.0000 Manual	In Use	1.0000
Safety Stock	4.0000 Manual	Available	17.0000
EOQ	12.0000 Frozen	On Order (PO)	6.0000
Min Order Qty	7.0000		
Company H		Verify	

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.

$$\begin{array}{r} \text{Estimated Usage Calculated from Forecast Type} \\ + \text{Safety Stock} \\ - \text{On Order + Available} \\ \hline \text{Reorder Quantity} \end{array}$$

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

$$\begin{array}{r} \text{Maximum Qty} \\ - \text{On Order + Available} \\ \hline \text{Reorder Quantity} \end{array}$$

REORDER REPORT

Reorder Report Screen

OSAS T000
Settings Edit Print Help

Reorder Report

Calculation Method: Print By:

1. EOQ 1. Item ID
2. Forecast 2. Product Line
3. Min/Max 3. Application
4. All 4. Department
4 5. User-Defined Sort 1
 6. User-Defined Sort 2
 1

Do You Want to Print the Report By Location? YES
Include Items That Are Above Order Point? NO

Output device - (P)rinter p(R)eview (F)ile (S)creen (M)nd

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:

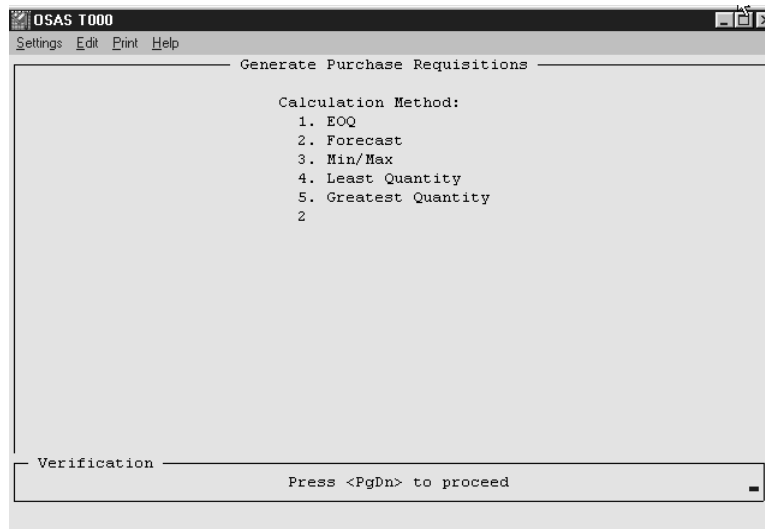
- HM - History Missing** One or more months of summary history are missing in the last year. Summary sales history is used to produce the forecast used to calculate EOQ.
- FM - Forecast Missing** The item is not assigned a Forecast Type.
- FQ - Frozen Order Quantity** The EOQ Status field is set to Frozen.

This is a sample of the Reorder Report

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

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

