

# Sage ERP MAS 500

## Inventory Replenishment

### Streamline Inventory Management through Demand Forecasting and Automated Procurement

The Inventory Replenishment module for Sage ERP MAS 500 provides two powerful, unique competitive advantages to your organization. First, forecasting can help accurately predict what customers will buy, reducing inventory carrying costs of unwanted goods while ensuring customers that you can carry the items they demand. Second, automated procurement produces system generated purchase orders and transfer orders to reduce labor costs and improve accuracy. Unparalleled cost calculations can minimize transaction and overhead costs by creating optimal orders for each vendor.

Knowing what to stock or build to meet your customers' demands is one of the most critical decisions you can make in your business. Too much stock can result in lower margins, high inventory carrying costs, and excess damage as stock remains in-house too long. However, shortages can be even worse, as customers who can't get an item in a reasonable time may call your competitors. Fortunately, the forecasting capabilities in Sage ERP MAS 500 can help you meet this demand-planning challenge by providing flexible calculations that can be adjusted by warehouse, customer, season, product group, or every individual item. This provides maximum flexibility and—more importantly for your customers and your bottom line—accurate inventory planning.

When a forecast is firmed, the Inventory Replenishment module creates purchase orders, reducing human involvement and the related costs. Replenishment can also be used to move stock between warehouse locations automatically, a valuable feature for centralized hub-and-spoke distributors. Suggested orders are created for items that are required in the immediate future.

However, Inventory Replenishment goes far beyond other automated procurement systems. Before a purchase order or transfer order is created, it also takes into account lead times, the overhead costs of placing purchase orders to minimize costly low-volume orders, and whether it makes economic sense to purchase other products from the vendor at the same time. You have the added flexibility to select a different vendor who can offer the best delivery and costs depending on market conditions and allowing for vendor driven promotions.

Sage ERP MAS 500 customers can use the Inventory Replenishment system or the Material Requirements Planning system to process replenishment orders. In short, Inventory Replenishment offers the strongest supply chain-centric forecasting and automated procurement tools available today.



### BENEFITS

- Accurately forecast demand for inventory items, and adjust calculations by warehouse, customer, season, product group, or individual item.
- Maximize revenue and customer satisfaction by minimizing the chance of stock outs.
- Reduce inventory carrying costs by accurately stocking warehouses.
- Improve accuracy and reduce labor costs with automated procurement that generates purchase orders and transfer orders based on forecasts and user-defined inputs.
- Optimize procurement by automatically taking into account vendor lead times, overhead costs, and economic benefits of purchasing other products from the vendor at the same time.
- Tailor replenishment calculations to match your unique business practices.

### SAGE MAS 500 SOLUTIONS

- Financials and Project Accounting
- Distribution and Manufacturing
- CRM and e-Business
- Human Resources and Payroll
- Customization and Integration
- Business Intelligence

Approve	Purch Prod Line	Vendor	Below OP	Below Min	Below Max	With BO	Target Reqmnt
<input type="checkbox"/>	Modems		1	0	0	0	0.0000
<input type="checkbox"/>	Monitors	MicroAcc	0	0	4	0	500.0000

  

Line Items	Item	Description	Stock UOM	Curr On Hand	Curr Committed	Curr Availa
	NEC15	15" Monitor	Each	1520.0000	1311.0000	20
	NEC17	17" Monitor	Each	3176.0000	3110.0000	66
	NEC19	19" Monitor	Each	2355.0000	2281.0000	74
	HP19	Hewlett-Packard 19" Color	Each	1021.0000	988.0000	33



"[Our buyers] use the replenishment function to automatically determine quantities of items to be ordered. The system even creates suggested order lists."

Elizabeth Vaziri  
Controller  
San Francisco Museum  
Of Modern Art

## Accurate Forecasting

### Calculate Future Demand for Items

Determining how much of an item you will sell is critical to controlling costs while maintaining enough stock to keep customers happy.

- Configure the demand calculation to meet your business requirements.
- Use demand formulas for product groups, even down to individual items.
- Factor seasonal adjustments in calculating demand, such as holiday items.
- Compensate for product lead times.
- Calculate demand from project estimates.

### Adjust Demand for Exceptional Events

Inventory Replenishment can monitor and report unusual usage for an item, so that you can determine if you need to adjust the demand for the item.

- Create low and high exceptional usage thresholds for each warehouse.
- Monitor usage exceptions with an Unusual Usage Report.
- Adjust demand for an item when exceptional events occur, such as a large onetime order, so that future demand calculations are more accurate.

### Improve Customer Service

Ensure that stock of critical items will be available when the customer needs them.

- Maintain optimal stock levels of key inventory items.
- Provide stock availability with Capable to Promise (CTP) features.

## Automated Procurement

### Purchase the Right Amount

Let the system calculate how much to purchase of each product, based on user-defined input that best suits your business practices.

Four popular methods are provided:

- Generate purchase quantities based on Economic Order Quantity (EOQ), factoring in the item costs, the costs to process and receive purchase orders, as well as inventory carrying costs.
- Set minimum/maximum purchasing rules for low-volume items, ordering up to the maximum quantity when stock falls below the minimum.
- Optionally keep stock at a maximum level and only order when it falls below those levels – ideal for high volume or perishable items.
- Manually calculate how much to purchase of any item.

## Advanced Calculations

Inventory Replenishment provides tools to minimize processing and carrying costs, while ensuring that the items your customers need are on hand.

- Accommodate a supply of safety stock for each item based on actual usage or prior vendor lead time performance.
- Let the system calculate how often you should order from each vendor, to balance ordering and receiving costs against inventory carrying costs.

## Single Screen Planning

Generate actual orders and firmed orders from a single point of entry.

- The system determines demand for all items purchased from a vendor to consolidate them on a single purchase order.
- Optionally review suggested purchase orders as a double-check.
- Override suggested vendor to accommodate special vendor pricing or promotions.
- Replenishment can also create suggested transfer orders to move stock from centralized warehouses to subsidiary warehouses. This feature is an excellent tool for hub-and-spoke, centralized distribution.
- The planner can firm planned orders or create actual orders from system generated planned orders.
- Late orders are flagged for quick identification.

## Material Requirements Planning (MRP)

- Distributors can optionally use either the Inventory Replenishment or MRP planning screens to generate orders.
- Primary Vendor and/or Buyer selection is available during order generation if Primary Vendor is not set to Warehouse Replenishment.
- Manufacturers should use the MRP activity to calculate dependent demand and transactions related to component and finished goods assemblies.
- Customers who purchase Inventory Replenishment are automatically licensed to use the MRP module (and vice versa).

## Business Insights

Analyze and monitor Inventory Replenishment and MRP data and transactions.

- Organize, analyze, and graph inventory and material demand information, such as on-hand quantities, inventory history, sales history, purchase history, inventory transaction history, material plans, and more.
- Use the Alerts module to monitor Sage ERP MAS 500 when items are at or below their minimum stocking levels by warehouse, when items are out of stock by warehouse, and when back-ordered items are received.