

SAGE MAS 500

## Manufacturing and Distribution Overview



sage  
software

*Your business in mind.*



*“Sage MAS 500 runs the whole show here at Centiv. The bottom-line benefits have been immediately evident. We’ve reduced operating costs by 30 percent while increasing our service levels by 50 percent.”*

Jim Kearney  
Vice President and CIO  
Centiv, Inc.



A hand is shown typing on a computer keyboard. The background is a soft, out-of-focus yellow and white, suggesting an office environment. The text is overlaid on the right side of the image.

# ***Sage MAS 500***

## ***Managing the Distribution and Manufacturing Supply Chain with Insight***

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In today's challenging business environment, it's never been more critical that every aspect of your company be operating at peak efficiency. Locking in your competitive edge requires streamlining your operations and managing with insight. Unfortunately, most companies are so preoccupied with just getting by from month to month that they fail to recognize opportunities that would help them realize their potential for success. Distribution and manufacturing are two areas that can return the investment in strategic processes by improving customer satisfaction, lowering administrative and carrying costs, and responding to changing market opportunities and challenges. The Sage MAS 500 ERP distribution and manufacturing solutions are designed to help you maximize operational efficiency by increasing productivity and profitability. The advanced capabilities of these modules address many of the challenges you face in day-to-day operations while providing the management insights you need for continued success.

Bottom line, if you want to source, manufacture, and ship more products on time and more profitably than your competitors do, you need to equip your company with the Sage MAS 500 distribution and manufacturing advantage.

## *Capitalize on the Synergy of the Distribution Solution*

The Sage MAS 500 distribution solution is a robust suite of modules that work synergistically to provide advanced capabilities for tracking, managing, and replenishing inventory and managing warehouse operations through the entire distribution cycle, from purchasing to stocking, all the way through sales. The Inventory Management, Inventory Replenishment, Warehouse Management, StarShip, Purchase Order, Sales Order, Advanced Kitting, and eOrder modules integrate seamlessly, so valuable data is always available when you need it—even on the Web. While each module works well independently, the complete distribution suite provides a solution that offers unparalleled efficiency and control. Specially designed features include comprehensive inventory demand forecasting, a Web-integrated product catalog, flexible sales and returns processing, and automated procurement. The Sage MAS 500 distribution solution empowers you to strategically manage every aspect of the distribution cycle from increasing your cash flow by reducing carrying costs to improving customer retention by stocking the products they need.

### **Inventory Management**

With its warehouse-centric design, the Inventory Management module can help save you time and money. You can organize, analyze, and graph sales history and inventory transactions by warehouse and choose from standard, average, actual, FIFO, or LIFO costing methods. Further, different costs can be established at different warehouses. Inventory pricing can be defined by customer type or warehouse location and supports contract pricing; price breaks based on quantity, monetary amount, weight, or volume; effective and expiration dates; and sales promotions. Downtime turns into uptime because you'll be able to take orders while inventory cycle counting is being conducted. You can even attach images to inventory items and organize your products into a comprehensive catalog, which translates to easy item lookup in both the Sales Order and Purchase Order modules as well as online through eCustomer and eSalesforce.

### **Forecasting and Replenishment**

Sage MAS 500 gives you the insights to maximize your profits by finding the optimal balance between accelerating inventory turnaround and maintaining adequate stock levels to meet customer demand. The Inventory Replenishment application features demand forecasting and automated procurement capabilities, which enable you to automatically generate purchase orders and warehouse transfers based on your inventory requirements. By tracking overhead costs and optimal purchase levels for vendors, you can combine orders so that you receive maximum discounts from your vendors as you minimize your overhead costs. Inventory Replenishment uses seasonal cycles, sales history, and lead times to forecast the appropriate inventory levels that meet customer requirements while minimizing carrying costs.





### **Warehouse Management**

The Warehouse Management module includes stock management tools for larger distributors and manufacturers. Three-step inventory transfers use in-transit warehouses and replenishment logic to drive demand backward to source warehouses while tracking supplies as they move from warehouse to warehouse within the internal supply chain. Bins are embedded within Sage MAS 500 to manage stock movement and inventory transactions, such as receiving, picking, physical inventory counting, and even manufacturing material issues and finished goods processing. Advanced zone and wave picking minimizes employee movement while dramatically increasing the number of orders that can be picked during each shift.

### **Kitting**

There are several options for kitting to meet your business needs. The Inventory Management module provides the ability to create pre-assembled kits that are ordered from stock, or to customize kits that are built to order. The Advanced Kitting module takes this a step further by providing the ability to incorporate labor costs into the kitting process and to create routings within the components.

### **Lot Control/Serialization**

Comprehensive tracking capabilities enable distributors and manufacturers to trace lot and serial numbers backward or forward for complete traceability from receipt of goods through customer shipment. What's more, Sage MAS 500 provides expiration date tracking for specific lots from receipt through production.

### **Online Ordering**

The Web-based eOrder module puts critical information (order entry, recent shipment, order, payment, invoicing, and customer credit information) at your sales team's fingertips whenever and wherever they need it so they can close more sales on the road, at home, and in the office.

### **Purchasing**

The Purchase Order module manages the requisition, purchase, and physical receipt of materials. It gives you the ability to track received goods by matching the delivery receipt with the invoice and the original purchase order. You're assured of tighter tracking, and more accurate inventory control within your warehouse. You can even tag incoming product against customer sales orders so when product is received, it is immediately designated to customer backorders. In addition, manufacturers can tag a purchase order line to a work order, enhancing costing accuracy. The system also tracks and generates reports regarding vendor performance on timeliness, accuracy, and quality of shipments received.

### **Returns**

Multiple returns policies are easily managed. You determine if return material authorizations (RMAs) are required. Customers can return items from multiple orders on one RMA, even if you shipped them from different warehouses, saving your customers and employees time.

### **Sales Orders**

The powerful flexibility of the Sales Order module leverages pricing models from inventory, which can be based on customer class, location, discounts, and more. Each line item can have its own ship-to address, sales person, tax rate, ship date, ship-from location, and drop-ship designations. Adding the Sage MAS 500 Multicurrency Management module equips Sales Order to accommodate multiple currencies for easy entry into global markets and unsurpassed pricing flexibility. Manufacturers can also easily create work orders directly from sales order entry.

### **Shipping**

StarShip makes the entire shipping process more fluid. StarShip works with major parcel carriers including UPS®, DHL (formerly Airborne Express), Speedee Delivery, FedEx, and the United States Postal Service. StarShip calculates freight charges through the use of integrated scales; facilitates rate shopping between carriers; and prints carrier-approved, bar-coded shipping labels and COD tags.

## *Manufacturing Productivity and Profitability*

Sage MAS 500 provides manufacturers with the flexibility and expanded capabilities to meet the diverse business requirements of varied industries, including industrial, automotive, high tech, electronics, consumer packaged goods, and other industries. One of the key advantages of the manufacturing suite is its streamlined integration of routings and bills of material, which allows for improved lead-time calculations, more accurate material plans, and better resource allocation. The manufacturing solution optimizes your operations for maximum productivity while it provides a real-time business picture that gives you the vision to manage profitability with insight.

### **Capable To Promise**

Sales order entry includes a Capable-To-Promise (CTP) calculation, which uses on-hand and on-order data to quickly determine the specific date a desired quantity of product will be available. CTP is available for both distributors and manufacturers who want to enhance customer satisfaction by ensuring that customer service has the information they need to provide quick and accurate customer support.

### **Co-products and Disassembly**


Sage MAS 500 provides complete support for co-products and multiple parts produced per production order. Industries uniquely positioned to capitalize on this feature include injection molding and stamping, where more than one unique part is produced per production run, as well as those where the same product is packed differently and stocked with separate part numbers. Manufacturers particularly like the flexibility of being able to use co-products to disassemble an item into base components.

### **Engineering Change Management**

A routing/bill of material may be placed under engineering change control to track any changes made to the production standards. Members of predefined user groups are notified by e-mail when a change is made to controlled routings/bill of materials.

### **Estimating**

Internal product structure and cost estimates can be custom created quickly from scratch or copied from an existing routing/bill of material, estimate, or work order, and are easily converted directly into a quote, sales order, or production routing/bill of material. Engineers can estimate multiple quantities with different markups to amortize setup and one-time costs across multiple quantities. Estimates may include labor, material, subcontracted operations, prototyping, special tooling, and other costs.



*"Sage MAS 500 has improved our inventory systems, reduced manual processes, and given us the exact information we need for managing our manufacturing operations. It's been responsible for a lot more smiling faces—including mine."*

*Melissa Wilson  
Customer Service Manager  
Arc-diversified, Inc.*

## Integrated Engineering

Engineering change management functions are integrated with e-mail systems and an import function is offered to transfer a bill of material from popular design programs to a routing and bill of material, which saves time by eliminating duplicate data entry and minimizing errors. Access to a built-in CAD viewer provides engineering drawings directly from the manufacturing system.

## Labor and Production Reporting

Manufacturers have the flexibility to manage labor and production entries at the appropriate level for their operations. Management can direct resources with real-time inquiries to see who's working on specific jobs—even in multiple locations. Paperless labor assignments allow employees to see which jobs they've been assigned for their shift. Employees can report production on paper tickets for after-the-fact data entry. A Production Entry screen is also available for one-step labor and production reporting, which streamlines the data entry process by automatically assigning—or backflushing—defined material and labor quantities, costs, and overhead.

## Lot Control/Serialization

An easy-to-use lot-tree allows engineers to trace backward or forward from any given lot or serial number in the system to identify the lot or the serial number's origins or where it was used in other production orders.

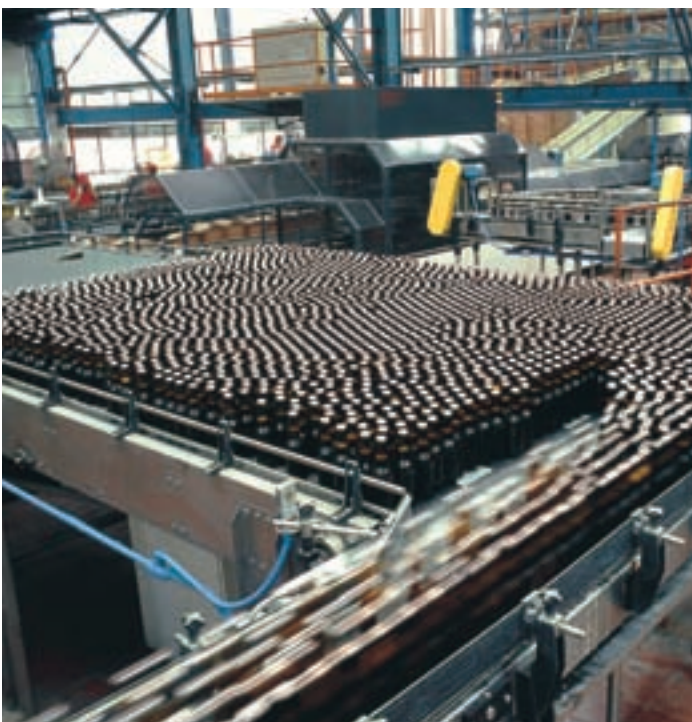
## Material Requirements Planning

MRP is integrated with finite scheduling to provide a true closed-loop system, which utilizes actual demand and transaction data from sales orders, purchase orders, inventory management, project accounting estimates, and work orders. It also provides integration with demand forecasts for items based on advanced replenishment rules and formulas, thus enabling more accurate material plans by item. Planners have total control over generation criteria, including start and stop dates, planning bucket sizes, and a demand time fence. Multiple MRP versions provide greater flexibility, plus simulation and comparison capabilities. MRP may be instantly accessed for material data from sales orders, purchase orders, work orders, and inventory.

## Preventative Maintenance

Use the powerful Alerts module to notify your maintenance and production departments when machines, work centers, or tools are coming due or overdue for inspections. Supervisors can set up maintenance schedules for each machine, work center, or tool. They can also view notes, e-mail tasks to employees, and take assets out of service so that orders cannot be scheduled against the out-of-service resource while it is being maintained.





### **Mixed-Mode Manufacturing**

Companies that manufacture food and beverage products, chemicals, primary metals, or other products that are mixed, blended, or created from recipes have very specific requirements. Sage MAS 500 enables many batch-driven manufacturers to easily and quickly manage shelf life, expiration dates, lot transactions, batch sizes, and other process-oriented requirements.

### **Product Configurator**

The Product Configurator module controls sales orders and bills of material by associating rules to build finished goods items. It includes an intuitive interface for quick sales order entry of configured parts. Product Configurator is a useful tool to determine which components to use, how much configured parts will cost, and how much to charge the customer. Product Configurator can automatically build new part numbers and bills of material, including all manufacturing requirements and instructions to make the configured part.

### **Production Costing**

Sage MAS 500 supports Standard, Average, Actual (Lot), FIFO, and LIFO costing methods. Costs accumulate in work-in-process during production and are subsequently posted to user-defined general ledger accounts. This data gives management the insight to quickly identify the profitability of each product line so that resources can be concentrated on the most lucrative opportunities.

### **Production Scheduling**

Sage MAS 500 provides ultimate operational flexibility through both finite and infinite production scheduling, as well as backward and forward scheduling. The system also accommodates up to nine different industry-standard scheduling rules and displays schedules in an easy-to-use, drag-and-drop schedule board. Multiple schedule versions provide planners with powerful what-if simulation capabilities and allow for finite scheduling of machine and tooling resources—all without affecting the master schedule. This interactive tool empowers managers to zero in on production bottlenecks, immediately test possible solutions, and make the best decision based on the insight of how it will impact the bottom line. Production scheduling fully integrates with the MRP module so that material plans accommodate both scheduling capacity and material constraints.

### **Project Management**

Streamlined integration of Sage MAS 500 Manufacturing and Project Management modules puts you in control of engineering and prototype production projects by equipping you with the tools and insights you need to manage your projects more profitably. Employ the MRP module to balance supply and demand for material-intensive projects and create work orders directly from the Project Accounting module for projects requiring manufactured items. This integration is also helpful for grouping work orders for costing and reporting purposes.

## **Routings and Bills of Material**

Sage MAS 500 utilizes an integrated routing and bill of material to accurately calculate manufacturing lead times by taking into account both production cycles and material procurement. The manufacturing process is captured and standardized throughout four key areas: material (bill of material items), labor, outside (subcontract), and other (miscellaneous operations and costs).

## **Shop Floor Control**

Designed for use with bar code and touch screen technology, the Shop Floor Control system can run on a terminal or from many handheld PCs or terminal devices. Shop Floor Control features start and stop job entry, work order inquiry, material/outside/other issues entry, receipt of goods entry, labor assignments, and access to other essential shop floor activities.

## **Work Orders**

Work orders may be created manually or automatically using predefined standards in routings and bills of material. The work order inquiry provides a portal to view any information related to production orders, including scheduled dates, production status, current activity, cost comparisons, and production standards. Make-to-order manufacturers can create work orders directly from a sales order line for order-specific jobs.

# *Business Intelligence for Distribution & Manufacturing*

Successful enterprises are those that are smart enough to leverage their business intelligence to lock in their competitive edge. Sage MAS 500 includes powerful business intelligence tools, including Business Intelligence Analyzer, Alerts, and analysis reports to help distributors and manufacturers gain deeper insight into their sales, purchasing, inventory, and production information. These tools not only help provide the insight behind the numbers, they help you move from reactive mode into proactive mode. It's what you need to work smarter, not harder.

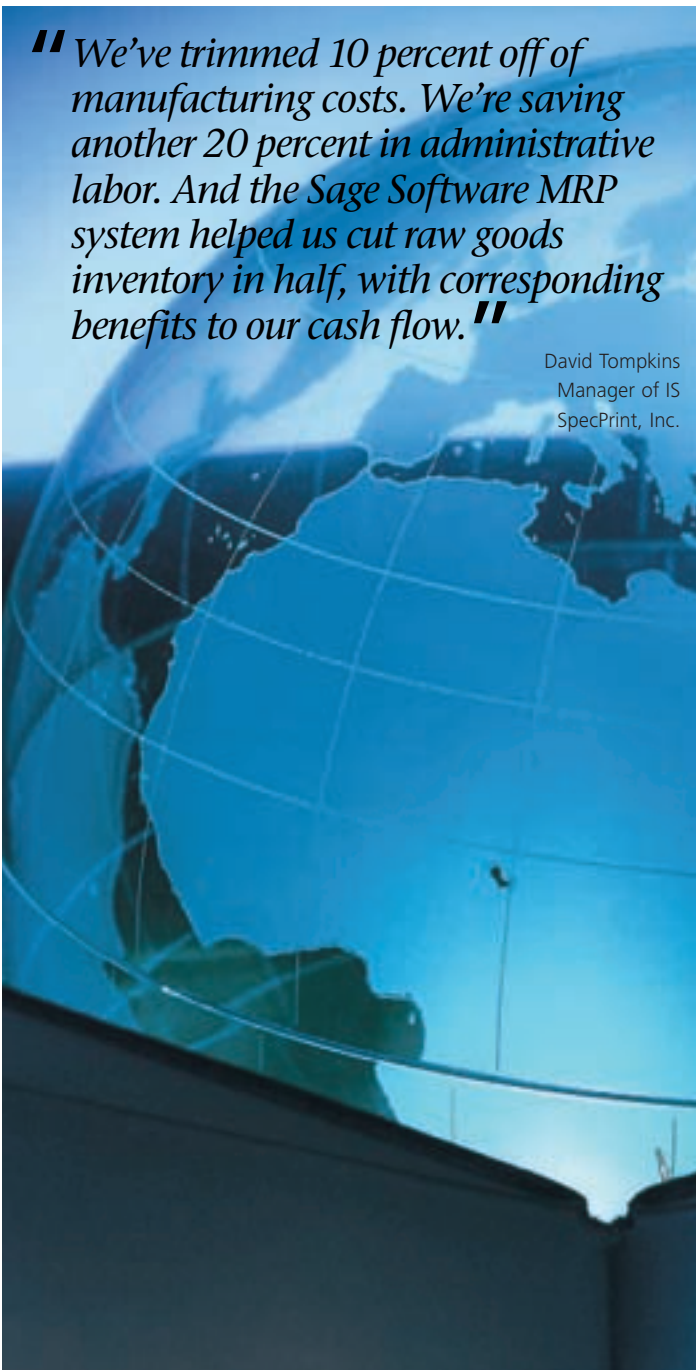
## **Supply Chain Analysis**

Business Insights Analyzer users have the ability to organize, graph, and format summarized information within the Sage MAS 500 system. Contextual mappings have been configured that allow a user to jump directly to data views for advanced analysis and reporting on virtually any data in the Sage MAS 500 database. Predefined views include purchase and vendor history, sales history, inventory and inventory transaction history, and production analysis.

## **Distribution and Manufacturing Alerts**

This innovative module utilizes standard and customized early warning e-mail messages to notify you of critical events in your Sage MAS 500 system, including potential stock-outs at warehouses, quotes due to expire, receipt of back-ordered stock, late work orders, and more. You can configure your e-mail system to forward alerts to your mobile phone or pager so you can be instantly alerted to important warehouse and production issues no matter where you are. Enterprise Alerts puts your enterprise ahead of the game by keeping your managers in the know, giving them a proactive edge.





***"We've trimmed 10 percent off of manufacturing costs. We're saving another 20 percent in administrative labor. And the Sage Software MRP system helped us cut raw goods inventory in half, with corresponding benefits to our cash flow."***

David Tompkins  
Manager of IS  
SpecPrint, Inc.

## *Global Presence, Local Service*

Over the last two decades Sage Software, along with its parent company, has established itself as a global provider of superior accounting and business management solutions and services. Over 4.5 million discriminating customers and 26,000 resellers worldwide choose wisely by selecting Sage Software for their solutions. We produce the software that transforms data into the business insights that help our customers succeed on all fronts. From creating innovative products that anticipate our customers' changing needs to providing exceptional customer support, we are dedicated to surpassing expectations in all aspects of our business. Rest assured because our software is supported by a nationwide network of specialists who are your resources for implementation, training, service, and support. Our specialists are also trained and certified to provide Microsoft product and network expertise. In addition, we offer outstanding training classes, 24-hour online support, and award-winning technical phone assistance.

## *The Clear Choice for Business Management*

At Sage Software, we've made it our business to provide powerful, flexible, and comprehensive solutions that help you build your business. With Sage MAS 500, you have everything you need to streamline your business processes for maximum efficiency, productivity, and profitability. Whether you distribute durable or nondurable goods, make-to-stock, or make-to-order, Sage MAS 500 is designed to provide you with the insights and management tools you need for success today, tomorrow, and well into the future. Find out for yourself why Sage MAS 500 is clearly the best complete software solution for your manufacturing and distribution needs—call us today.

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