



Manufacturing ERP for Industrial Machinery and Components Manufacturers

OptiProERP with SAP Business One is a complete business management solution that streamlines processes for greater efficiency and profitability.

Industrial machinery and components manufacturers often make custom, complex products. Customers expect them to turn products around quickly. Often, they make small batches of machines, maybe only one, so they must keep costs low and production efficient.

Industrial machinery and components manufacturers are adopting new technologies to be competitive. They use automation and innovations to free staff to work on more critical tasks rather than repetitive manual operations. Below are some of the situations that challenge industrial machinery and components manufacturers.



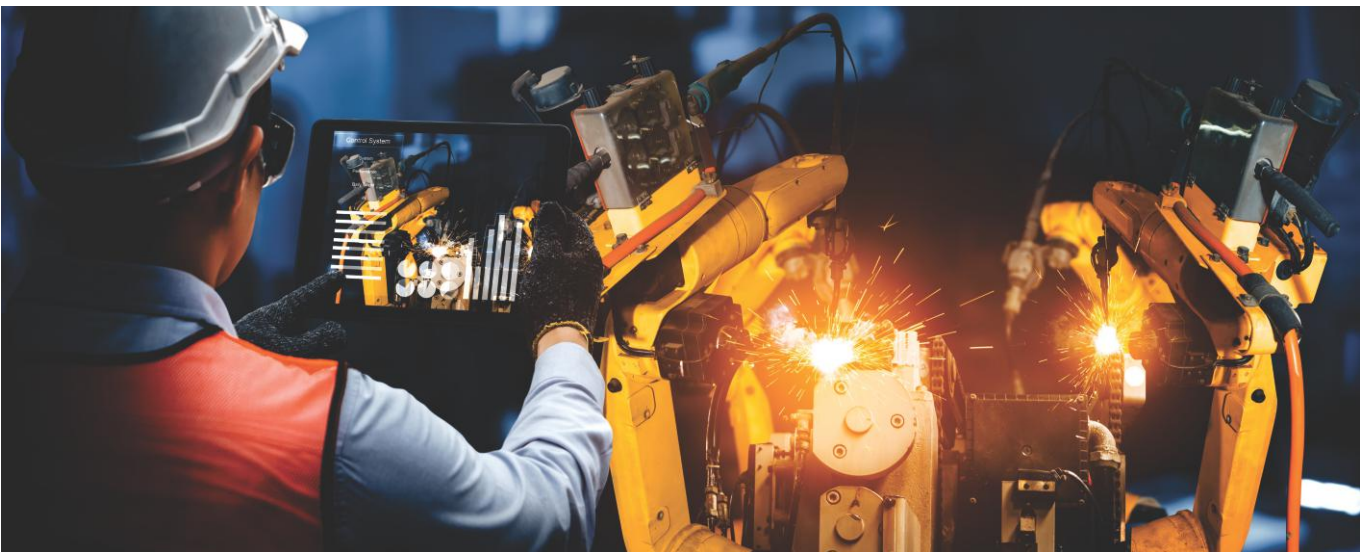
Common Challenges for Industrial Machinery and Components Manufacturers

- Receiving, recording, and translating engineering change orders.
- Quotation errors from missing costs or charging too much, causing loss of customers/prospects.
- Limited visibility for planning and scheduling materials and resources to meet production needs.
- Lack of inventory control and supply chain management resulting in material shortages that can halt manufacturing.
- Machines not at capacity due to escalations, interruptions, and absences from poor resource management.
- Difficulty managing the maintenance and repairs of equipment hindering production and delaying product deliveries.
- Inability to manage, cost, and price specialty and customized orders.




OptiProERP with SAP Business One Benefits Essential for Industrial Machinery and Components Manufacturers

OptiProERP is manufacturing ERP built on SAP Business One, the leading ERP for small and midsize enterprises with over 85,000 customers. It provides end-to-end functionality with best-in-class business and industry capabilities to help industrial machinery and components manufacturers streamline and connect all aspects of their business.



Deep and End-to-End Industry Functionality

A fully integrated manufacturing ERP solution for industrial machinery and components manufacturers manages and streamlines all business operations. Sales, production, and purchasing departments are connected for greater coordination.



OptiProERP provides end-to-end visibility, advanced manufacturing functionality, and best-practice business processes for industrial machinery and components manufacturers. It delivers increased data for real-time insight into business performance to make informed decisions.

Optimized Production with Planning, Scheduling, and Shop Floor Execution

Balance demand, capacity, and constraints with advanced planning and scheduling to generate achievable production schedules. Take all resources, including machines, into account to improve equipment usage and minimize resource downtime.

In planning, visualize what production will look like based on “what if” scenarios—capture plant floor data and leverage it to increase throughput and improve quality. Increase on-time deliveries with accurate scheduling for greater customer satisfaction.

Real-time Inventory Status with Inventory and Warehouse Management

The real-time status and location of inventory cover materials, parts, work in process, and finished goods. Knowing lead times for procurement and production can help maintain optimal inventory levels. Inventory and accounting are integrated, so stock levels are adjusted, accounts are credited or debited, and inventory discrepancies are noted.

Execute transactions and track activity using the mobile app and hand-held scanners with barcodes or QR codes for greater efficiency. The system suggests alternative scenarios for materials considered critical for an expedited order or materials that have been delayed, helping you adapt and keep projects on track. Eliminate stock outages, reduce unused inventory, and lower carrying costs. Ensure sufficient stock levels to maintain production schedules.

CAD System to Integrate Engineering and Manufacturing for Customized Products

Use a configured product rendering, including all selected options and customizations, to generate an actual CAD drawing that helps you work out details with the customer or the engineering team until the order is final. This important CAD information can be sent to the production team to support manufacturing automation and quality assurance.

Easily Configure, Price, and Build Configurable and Made-to-Order Products

The product configurator functionality guides you through creating accurate quotes, building a bill of materials, and processing a production order for your configurable products, which have multiple options, unique part numbers, and component combinations. It is web-based, rule-based, and can be customer-facing. Each configuration has a unique item code for tracking and traceability.

Calculate Exact Job Costs

Data from modules such as inventory management, shop floor execution, sales, and purchasing help to determine accurate job costs. Up-to-date information can be obtained in real-time to calculate the cost of each job. Manufacturers can easily examine estimated vs. actual costs by personnel, department, work center, operation type, material type, outside service/operations, work orders, and more. Differences between standard and actual costs can also be analyzed by date range, work order, sales order, lot number, etc. Even costs for work in progress can be examined as the information is updated as the job is processed.

Fast and Accurate Estimates

Your staff can quickly respond to customer requirements with detailed and accurate estimates. Quickly create them using the Estimation Wizard that walks users step-by-step through an automated process. Ensure the correct markup, overhead, and shipping costs are included in every estimate.

OptiProERP with SAP Business One: Functionality Industrial Machinery and Components Manufacturers Need

Financial Management



- Manage and forecast cash flow, control budgets, and monitor job costs.
- Use real-time reporting with either standard or customized reports for better-informed decisions.
- Track fixed assets through a virtual function to eliminate manual entries.
- Post and create journal entries and allocate them to a project or profit center.
- Track all banking processes and easily reconcile accounts.
- Accelerate your financial close and utilize role-based dashboards.

Sales & CRM



- Reps can track all opportunities and lead activities throughout the sales cycle.
- Create, manage, and analyze marketing activities to help turn prospects into customers.

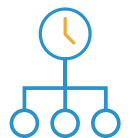
- All critical customer information is stored in one place to assist customers quickly.
- A mobile app lets sales reps work from their mobile devices anytime and anywhere.

Inventory Management



- Maintain the minimum stock needed with real-time reports that utilize past buying patterns to forecast demand.
- Keep track of inventory by physical counting, spot checks, and cycle counting.
- Use ABC item analysis to categorize inventory by highest consumption value, lowest consumption rate, and interclass items.
- Forecast inventory requirements accurately with hindcasting based on historical demand.

Production Management



- Bill of Materials (BOM) lets you build a comprehensive list of materials, resources, and costs to complete a job.
- Manage revisions or create alternate BOMs to ensure updated documents get associated with the correct production orders.
- Use alternate BOMs to create engineering change orders and automatically update all changes.

- Managers can monitor workers' and machines' performance and job status for any work center.
- Identify and track direct and indirect costs for material resources and labor.
- Use production move orders to automate requests to move materials from one onsite location to another while keeping track of the inventory.
- Set up tooling specifications for machines to monitor performance and maximize capacity.

Materials Requirements Planning (MRP)



- Material requirements planning (MRP) consolidates demand, scheduling, and inventory requirements into a single view for manufacturing and purchasing requirements.
- Works with projected and actual supply chain demand to create production, purchasing, and inventory schedules.
- Forecast inventory demand by sales order, historical sales patterns, or to meet minimum stock requirements.
- Working backward, the planning engine automatically calculates the materials, resources, and capacity needed to complete each step.

- Use MRP to automate purchasing and production to ensure inventory levels are available when needed.
- Working within a predefined operational capacity, the Resource Planning tool allocates work based on the capacity of available resources.

Product Configurator



- Configure products and create quotations or sales orders according to your specific specs using a rules-based engine.
- Create BOMs and assembly routings to manufacture made-to-order or standard assembly products.
- A step-by-step guide through the configuration process to help you structure your products to a specific configuration.
- Access to previous and existing configurations to create new orders, make adjustments, and find profitable product combinations.
- Use multiple dimensional calculations and formulas to determine product material requirements.
- See if order configuration components are available and allocate at quote or order level.

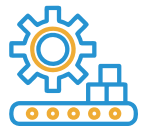
- Take an existing configuration and copy and modify it to create a new product configuration.
- Monitor orders with customizable reports and an order queue to review before final approval.
- Customers can select the exact product options using a browser-based configurator.

Warehouse Management System



- Issue materials for delivery or production using the mobile app.
- Record receipt of goods from vendors or the shop floor.
- Capture cycle or physical inventory counting for real-time status of on-hand stock and set replenishment alerts.
- Execute transactions and track activity using the mobile app and hand-held scanners with barcodes or QR codes.

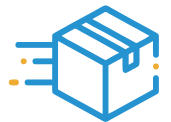
Shop Floor Execution



- Manage labor, machines, and materials for optimal shop floor performance.
- Include documents, drawings, and videos as attachments for work instructions.

- Operators utilize touch screens to log in, start work, manage tasks, and report job status.
- Supervisors use the mobile app to monitor production status from anywhere and assign workers with a specific skill set to a particular machine.

Shipping



- All major carriers are supported.
- Validate addresses and create shipping quotes and labels.
- Use a consignee account for shipments.
- Scan the Bill of Ladings.
- Track shipments, cancel shipments, and create a pickup request.
- International shipping with multi-language and multi-currency support.
- Print shipping labels in batches.
- Receive email notifications on the progress of shipments.
- See rates for different shipping options.

Container Management



- Add information from the vendor regarding the contents and shipment data, including landing costs.
- Containers can be received with items from multiple vendors.
- Estimate what items will fit in the container with calculations made based on weight and dimensions.
- You can create a container with eligible lines selected from different sales orders to a customer.
- Keep tabs on the shipment's status and update changes; when received, they are noted across the system.
- When a container is received, the lines correlating to the container on the purchase order are adjusted.
- When a container is received, a receipt document is created, and all items in a container are updated in inventory management.

CAD System Integration



- Quickly and easily create meaningful 3D layout plans required for design and distribution with CAD system integration.
- Components can be easily positioned, configured, and assembled in one layout.

Planning and Scheduling



- Work with projected and actual supply chain demand to create production, purchasing, and inventory schedules.
- Identify demand for multi-plant entities and consolidate orders for efficient procurement.
- Explode the planning BOMs and do the same for lower-level items in the production plan.
- Visualize and interact with your production schedule by clicking and dragging to automatically move production orders and watch schedules update.
- Use 'what if' simulations to see how different scenarios impact production.
- Evaluate the effects of future demand changes to see how or if they can be met.
- Consider rough cut capacity, target days of stock cover, re-order quantities, and more for scheduling.
- Model constraints to include primary, secondary, materials, resources, tooling, labor, and machines.
- Implement custom rules about how materials are consumed to ensure sub-assemblies and raw materials are used according to business rules.

- Define schedule optimization rules to deal with problems such as minimizing changeover times, WIP, and stock levels.
- Create order-based schedules and apply a ranking or weighting to prioritize orders based on resources available and additional constraints.
- Trace and manage changes, costs, delays, and more.
- Flexible and customizable to set up the way you need.
- Quickly run best-practice reports and alerts that are ready out of the box.

Purchasing



- Synchronize goods receipts and inventory and have purchasing processes in a central location to manage detailed data.
- Match documents and view information trails for audit efficiency.
- Use a PO reference to process AP transactions to plan for and purchase needed materials.
- Request vendor quotes, create purchase requests, and pay vendors systematically.
- Set approvals by dollar thresholds, users, departments, and locations.

- Match purchase orders, invoices, and packing slips to ensure accuracy.

Customer and Vendor Portal



- Customers can access their account, order, payment, and service/support information via a web-based, two-way portal.
- Suppliers can log in 24/7 to view purchase orders and other pertinent information.

Mobility



- Set up triggers and receive alerts for quality issues, inventory levels, machine malfunctions, and purchase requests.
- Customize dashboards and receive information from across the business to stay informed.
- Have a 360-degree view of customer information, including account, order, payment, and service/support information.
- See inventory by item or warehouse and know the location and status of every type of inventory.
- View employee productivity to include items made, time to make, interruptions and causes, and faulty items.
- Warehouse staff can quickly locate inventory and complete tasks using mobile devices.

- Sales staff can manage leads and customer accounts, view stock, and place orders on mobile devices.
- Immediate visibility of the supply chain and trading partner transactions and communications.
- Configure products easily and assemble quotes/orders on the fly with accurate price lists.

Estimation



- Create attributes such as length, weight, height, thickness, etc., and make groups of attributes.
- Define rules for computing raw material requirements.
- Add, edit, and delete catalogs (list of bought-out items for finished goods), categories, and departments.
- Define a markup group with percentages.
- Define an overhead group with overhead as a percentage or a fixed value.
- Create BOMs and sales quotations within the estimation tool.
- Define template estimates for commonly sold products, copy and customize an existing template or estimate and modify it for new requirements, or create a new one.

OptiProERP Customer Profile: Haven Manufacturing

Headquarters: Brunswick, GA

Replaced: Made2Manage

Evaluated: Rootstock, Workwise, OptiProERP

Pain Points:

- They were running on an outdated system with no MRP functionality, and operations were mainly paper-based.
- Their legacy system could not pull purchasing and profitability data for their eight product groups.
- Shop floor tasks were reported manually at week's end, so they couldn't know at any given time where they were in production.
- They couldn't quickly get essential metrics about business performance or future opportunities.
- Sales staff had to spend time gathering inventory, shop floor data, and past pricing to prepare quotes.

Benefits:

- They have dashboards that show critical information about what is happening with the business in real-time.
- They gained insight into shop floor production to better understand assembly times, backlogs, and inventory shortages.
- They achieved time savings as data no longer has to be manually entered, and employees can focus on higher-level tasks.
- They can quote faster as sales have immediate access to past pricing, current inventory, and shop floor productivity data.
- They can cross-train more quickly as the system is the same throughout, and OptiProERP is easy to use and intuitive.