



MANUFACTURING

ERP SELECTION GUIDE

ERP Selection Guide:

Manufacturing

With a \$4.7 trillion market size, US manufacturing accounts for 11.39 percent of the country's economic output and employs roughly 8% of the US workforce.

WHILE THE MARKET is still growing, the current manufacturing landscape requires manufacturers to be agile and pivot quickly during the turbulent times to maintain a competitive edge.

Increasing global competition, a pandemic, supply chain disruptions, and shifts in pricing and consumer demand are only a few of the challenges that manufacturers face today. To meet these challenges, manufacturers need real-time data to make quick, accurate

business decisions to remain profitable and competitive, especially in uncertain times.

Enterprise Resource Planning software (ERP) is designed to help manufacturers with challenges like these, both now and in the future. By connecting essential business processes and operations, ERP provides manufacturers with a single system that streamlines operations and provides a 360° view of the business.

Manufacturers face increasing challenges as supply chains are disrupted, global competition increases, prices shift, and consumer demands fluctuate. An ERP can help mitigate these challenges by providing a single source of truth that enables manufacturers to access real-time data and make quick decisions based on that data.

Benefits of ERP for manufacturers

The value of ERP for manufacturers lies in its integration capabilities. Pulling data from both internal and external sources, an ERP gives manufacturers the ability to streamline their operations from finance to distribution and beyond.

With a clear, global, real-time view of financials, inventory, supply chain, materials requirements, production and more, you can get the information you need to make decisions quickly. You can pivot when needed to remain profitable and also uncover new growth opportunities.

An ERP that lives in the Cloud will help manufacturers manage all phases of their operations from any internet-enabled device from any location and at any time. Cloud ERP connects your departments and teams. They can share information in the

same system and get up-to-the-minute data and reports that help them do their jobs more effectively.

ERP also helps manufacturers manage product complexity, balance supply and demand, and coordinate all business activities from one central system.

Simply put, an ERP makes sense of the complexities involved in manufacturing and brings order to what may once have been chaos.



Steps to take in the ERP selection process

Selecting the right ERP for your manufacturing business starts by establishing an internal selection team, ideally including the key stakeholders who will be using the ERP every day.

The team should be able to articulate the features and functions and other requirements that are needed for your specific company.

Together with your internal selection team, identify the areas of your processes and operations that would potentially benefit from ERP implementation. Where are the bottlenecks in your current processes? In which areas do you need more visibility and transparency? Are there areas of opportunity that you are currently missing?

Once you have defined the areas for improvement, you can move to the selection stage. Start by researching the various ERP solutions and how they compare. An implementation partner, like NexTec Group, can help you get started in this stage. Before you begin the research, think about your products and whether you are a discrete manufacturer or a process manufacturer. You are a discrete

manufacturer if you make products composed of parts that can be touched and counted, and the parts can be broken down and disposed of or recycled after production. You are a process manufacturer if you use a formula or recipe to make your products, and they cannot easily be taken apart after production since they are mixed together. Knowing whether you are a discrete or a process manufacturer will help you narrow down the list of ERP software that is best for your company.

Once comparisons are made, and the results are analyzed, you should have a good picture of which ERP solution and implementation partner best matches your requirements and can move forward with implementation.

The rest of this guide will focus on discrete manufacturing.

A well-defined needs assessment will help you determine the ROI of ERP implementation. Be sure to include all essential stakeholders in the selection process, and take time to listen to their input about which features and functions they need from an ERP to make it worthwhile for your company to invest.

Features and functionality of discrete manufacturing ERPs

Some of the top features to look for in a top-notch discrete manufacturing ERP include:

✓ Cloud ERP for maximum flexibility and adaptability

You have a choice for where your ERP software will be hosted, either on-premise or in the Cloud (public or private Cloud). During the COVID-19 pandemic, many manufacturers found that Cloud ERP gave them a distinct advantage because they could access the system while working remotely. A cloud-based ERP enables anytime, anywhere access to anyone that needs it. You can effectively run your business from the boardroom, the factory floor, the warehouse, the field, or your favorite armchair at home. Having access to your business operations and processes from anywhere and any time ensures business continuity in uncertain times.

✓ Integrated financials

The right ERP should simplify your financials and should include functionality for General Ledger, AP, AR, HR, and robust financial reporting. It should integrate seamlessly with any accounting or payroll system you currently use, enabling rapid reporting on your financial status at any given moment. It should also integrate with project management tools, enabling a comprehensive picture of your business at any time.

✓ Inventory management

An ERP designed for manufacturing should help you balance stock levels, take control of inventory and purchasing, and keep track of product lots, quantities, and movements. It should provide you with insights that help you keep costs under control and your inventory at optimal levels.

✓ Warehouse management system (WMS)

Manufacturers should choose an ERP with advanced warehouse management capabilities. The right ERP should streamline distribution processes and integrate with inventory management and order fulfillment capabilities. It should also reduce costs and improve customer satisfaction with the use of barcode scanners and mobile devices.



Bills of material/routing

Manufacturers also need an ERP that facilitates integrated multi-level bills of material for engineering and provides costed views of the entire product structure.

Your ERP should be able to connect materials, work centers, and overhead costs to an operation accommodating the time-phased release of materials. It should also manage inventory, costs, and processes, all while maintaining full revision control.

With the right ERP, you can get a complete view of costs including average, standard, actual, tooling, and overhead costs (both fixed and variable).



Materials Requirements Planning (MRP)

A manufacturing ERP should have Material Requirements Planning (MRP) functionality, including sales forecasting, purchase order and production order generation, and demand planning.

Ideally, the ERP should allow you to generate time-phased plans for optimal inventory availability, view all supply and demand, and create purchase and production orders from a centralized hub.



Production management

Look for an ERP that can track labor, materials, and lot and serial numbers. From a centralized database, a modern ERP could enable you to control the entire planning and scheduling process, using multiple scheduling options.

Your ERP should be able to capture actual manufacturing costs, including material, labor, machine, tool, overhead, and outside processes, and compare to planned, estimated, or standard costs.

In today's manufacturing environment, you will also want your ERP to integrate with your barcoding system as well as any IoT sensor devices in your factories and warehouses. Production management capability should also include access to an event audit trail when needed and support multi-site operations.



Product configuration

Look for an ERP that can configure product features, options, and dimensions to maximize manufacturing performance.

Rules-based product configuration gives you the flexibility to configure products in multiple ways on quotes, sales orders, and production orders and reduce the number of Bills of Material for a finished good. With it, you can enhance quality and accuracy even when your products are complex. You can also link to sales opportunities to ensure your products meet the needs and requirements of customers.



Accurate estimates

Look for a manufacturing ERP that provides accurate, timely estimates and allows you to prepare a simple or detailed estimate for an existing product or a custom one in minutes.

Because an ERP draws information from multiple departments within your company and even from external sources, you can quickly generate accurate estimates for expected labor, material, tooling, and overhead costs, and even non-inventory items.

When estimate revisions are needed, your ERP should be able to track revision history, including keeping a record of who made the revisions.

When estimates are confirmed, the ERP can link those estimates to sales orders, providing a seamless record for sales in the process.





Customer relationship management (CRM)

Look for an ERP that has customer relationship management (CRM) functionality or that integrates with your CRM. An integrated ERP/CRM can improve customer experience by giving your marketing, sales, and service teams access to customer data on past sales, order history, account status, and more.



Machinery lifecycle management

Machinery failures represent a significant challenge to manufacturers. The right ERP can help with machine lifecycle tracking, which alerts you when maintenance or repairs are needed – before machine failure occurs.



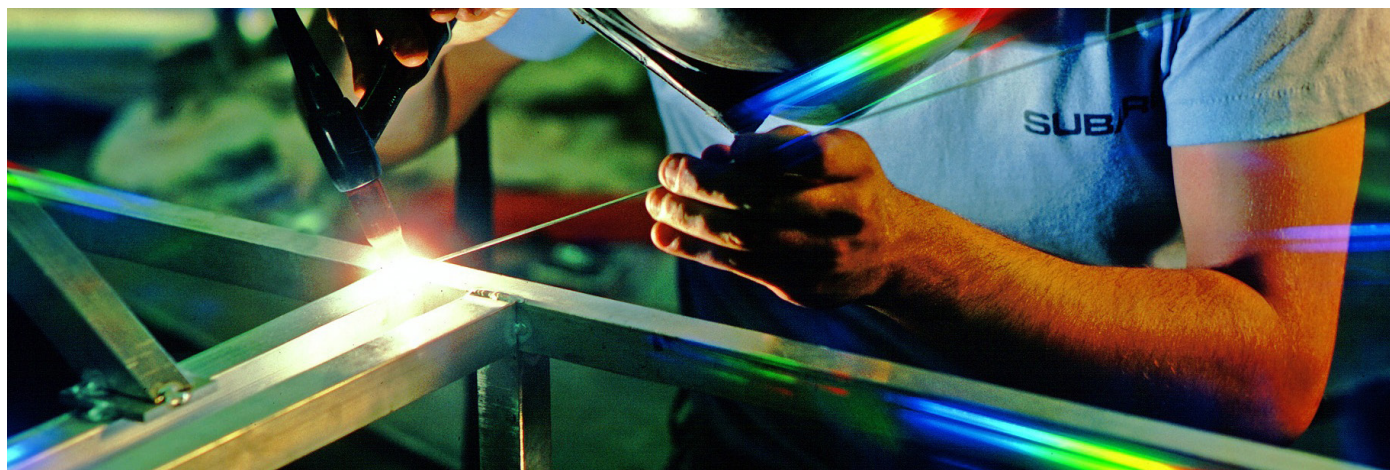
Supply chain visibility

Whether your business includes make-to-stock, make-to-order, project-centric, job shop, repetitive, or batch manufacturing, having a clear view of your supply chain is vital to your success. A good ERP helps you gain visibility throughout your supply chain with a single source of truth via automated business processes, real-time data collection and analysis, financial analysis, and business forecasting that helps you manage suppliers and costs.



Scalability

Implementing an ERP can be a costly endeavor, both in terms of time and monetary considerations. That's why it is crucial to find an ERP that will scale with your business. Consider whether the ERP you choose will meet both current needs and future needs. Look for solutions that enable you to add users as needed, scaling up or down as the situation dictates.



NexTec recommends Acumatica

- Manufacturing Edition

For discrete manufacturers, NexTec recommends Acumatica Cloud ERP - Manufacturing Edition.

Acumatica offers a complete, multi-site manufacturing control and planning system for discrete manufacturers, including make-to-stock, make-to-order, configure-to-order, engineer-to-order, project-centric, job shop, repetitive, and batch manufacturing. It also integrates seamlessly with Acumatica's Financial Management, Distribution Management, CRM, and Project Accounting tools.

The Acumatica difference

Acumatica has been named the Best Cloud ERP Solution, the Best Manufacturing Solution, and the Best ERP Software. In 2020, Acumatica ranks highest in customer satisfaction and usability.

Here are some of the factors that make Acumatica stand out in the ERP space:

True cloud solution

Acumatica is a cloud-based ERP. Its consistency is unmatched, providing the same experience whether you access the ERP from a mobile phone, tablet, or computer.

Its SaaS model ensures reliability and security, providing you with the assurance that your data is managed appropriately and in compliance with all applicable regulations.

Real-time collaboration, reporting, and analytics

Acumatica - Manufacturing Edition is a complete manufacturing automation solution that integrates shop floor with sales, accounting, ordering, projects, and inventory in real-time. With this ERP, you can know exactly where you stand at any moment with real-time reporting and analytics. It also enables real-time collaboration with staff, customers, and suppliers from a single system.

Flexible deployment options

Acumatica Cloud ERP - Manufacturing Edition can be deployed on-premise, in a private cloud, or in a public cloud. No matter where Acumatica is deployed, you can rest assured that your company data is secure, compliant, and wholly owned by you.

Open architecture and rapid integration

Acumatica Cloud ERP seamlessly integrates with hundreds of commonly used applications, including Office 365, Salesforce, Magento, Power BI, Box, HubSpot, Amazon Alexa, and Tableau.

The Manufacturing Edition further integrates with standard manufacturing APIs such as CADTalk, Scanco, Savant, Fusion, and more.

Working with an Acumatica partner, like NexTec, you can quickly integrate all your mission-critical applications with the platform, customizing the ERP to your specific needs and use cases.

Anytime, anywhere access

Because Acumatica is a secure, cloud-based ERP, you can be confident that all critical stakeholders with whom you share credentials can access the platform from any device and any location.

Run your manufacturing business from the factory floor to the boardroom and beyond with Acumatica's mobile solution.

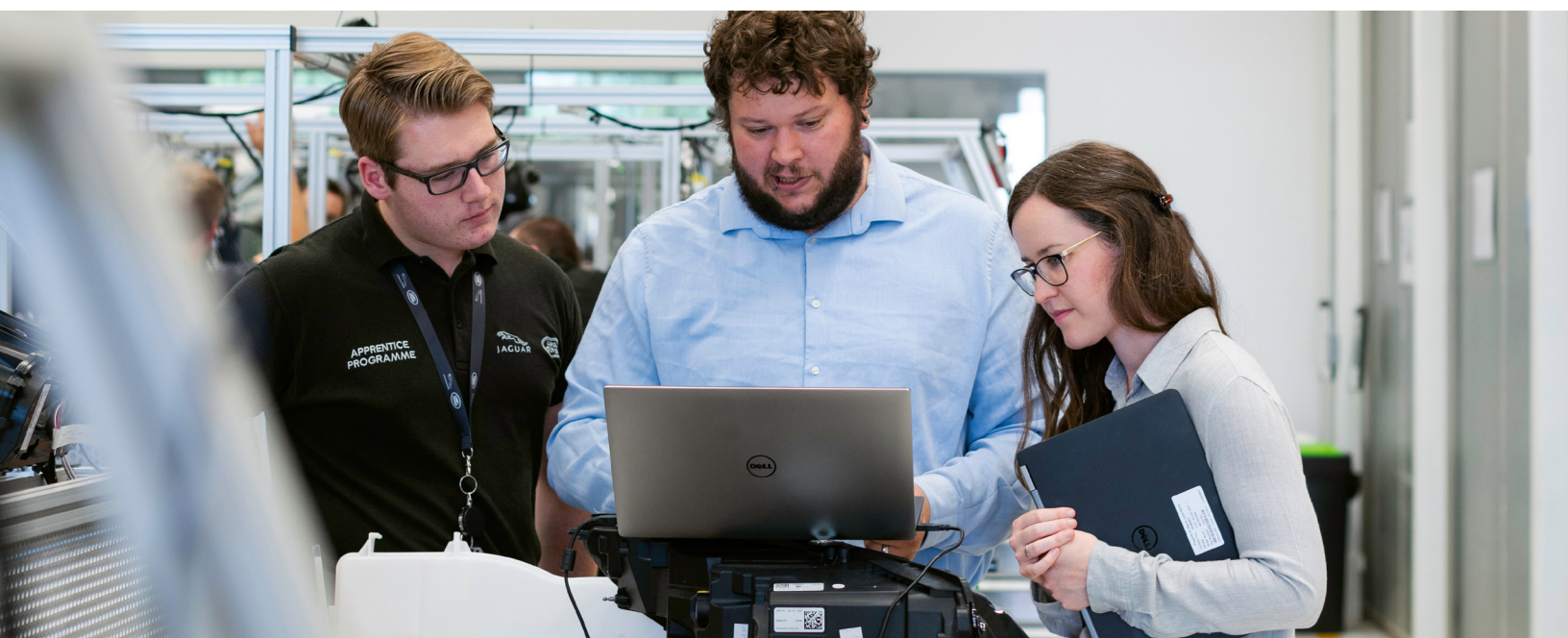
End-to-end high-value features

Acumatica offers an end-to-end manufacturing solution that includes:

- » Financial management
- » Manufacturing management
- » Distribution management
- » Project Accounting
- » CRM
- » Bill of Material/Routing
- » Production management
- » Material Requirements Planning
- » Product Configurator
- » Estimating
- » Advanced Planning and Scheduling
- » Workflow management
- » Document management

Future-proof functionality

Acumatica ERP grows with you. Use what you need, add users as desired, and scale your business up or down as the circumstances dictate. Pay only for what you use, not for how many users you have.



Choose NexTec as your Acumatica partner

NexTec is a gold-certified Acumatica implementation partner with more than 25 years of experience in consulting and industry.

Throughout our history, NexTec has focused on giving our customers the best software options found anywhere. In addition, our consultants are very experienced in ERP and come from the industries we serve.

Our goal is to deliver a successful ERP implementation that supports your key business initiatives and drives tangible

growth across your manufacturing organization. To date, we've served more than 600 companies with ERP, CRM, and BI solutions — and we're looking forward to putting our expertise to work for you

[Embrace technology and transform your manufacturing business with NexTec and Acumatica.](#)

Streamlined business management

TAKE THE ACUMATICA PRODUCT TOUR



Contact us to learn more:
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About the NexTec Group

NexTec Group is a national consulting firm with 25 years of experience in the areas of enterprise resource planning (ERP), customer relationship management (CRM), business intelligence (BI), and cloud and on-premises solutions. With deep industry experience in manufacturing, NexTec understands the challenges manufacturers face and provides solutions tailored to their specific needs today.

As a gold-certified Acumatica partner, NexTec brings its depth of knowledge to bear to help manufacturers with their ERP implementation and ensure their long-term success with Acumatica.