



# THE ULTIMATE GUIDE TO ERPS FOR CUSTOM MANUFACTURERS

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Learn everything you have ever wanted to know about ERPs — plus why you need one.



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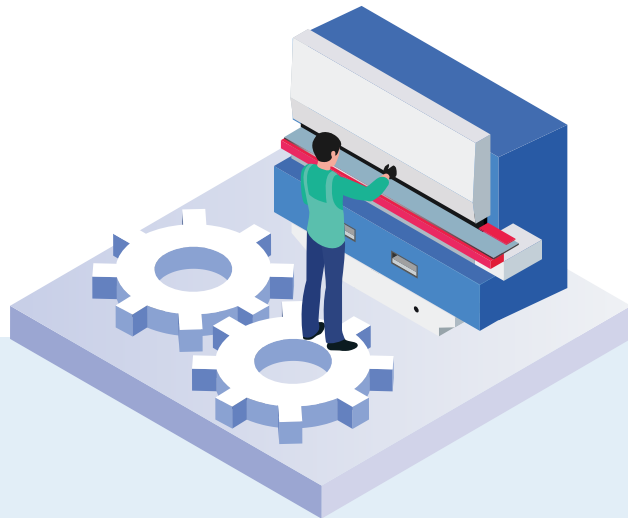
# 01 | WHY EVERY CUSTOM MANUFACTURER NEEDS AN ERP

## ERP stands for Enterprise Resource Planning — but what does that actually mean, and why do you need one?

An ERP is business process management software that connects and integrates every aspect of a business — giving manufacturers visibility over their entire operation and allowing them to create better manufacturing processes, improve performance, and lower costs.

Without an ERP system, manufacturers must rely on multiple software programs and systems — like Excel — that are not connected to run their business. This results in poor performance by slowing down collaboration and limiting efficiency.

ERP systems are crucial tools for manufacturers in today's fast-paced industry. As manufacturing gets more customized and more complex, manufacturers need a tool that lets them get a handle on their entire operation and move jobs more seamlessly through their shop from quote to cash.



ERP systems found on the market today are extremely flexible and offer a variety of tools, features, and functionalities designed to meet the unique needs and challenges of custom manufacturers. Modern ERP solutions include manufacturing, supply chain management, and financial and accounting capabilities and can also have advanced features like reporting and business intelligence, engineering, sales force and marketing automation, and project management functionalities.

## The benefits of using an ERP are endless.

ERPs are the industry gold standard for a reason — nothing streamlines business processes, provides accurate real-time data, and reduces costs better than an ERP system. ERPs touch on and improve every part of your manufacturing business.



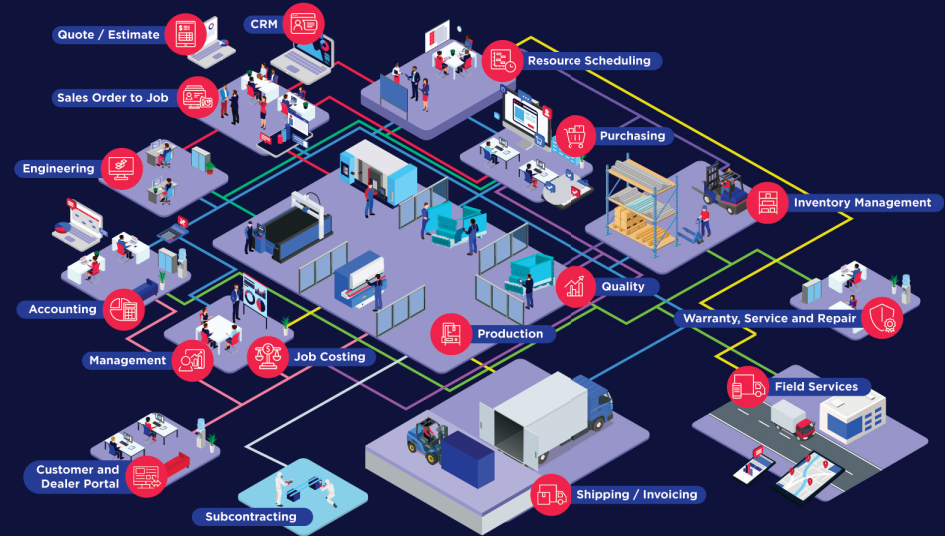
# THE TOP 5 REASONS YOU NEED AN ERP

## 1. CONNECTIVITY

ERPs link every department in your organization, including finance, purchasing, engineering, and operations, by connecting both the systems and the people who use them.

ERP systems allow all users — from the CEO to shop-floor employees — to create, store, and use the same data. In this way, ERPs eliminate data duplication (which saves both time and money and reduces errors) and also give you data integrity as they are a single and common source of truth for your organization.

Simply put, an ERP is the best solution for integrating people, processes, and technologies across a business — the advantages of which are almost endless.



### Better Collaboration

Using one integrated system across your organization — from accounting to engineering to production to shipping — will increase collaboration across your shop.

Easily share accurate data and information between departments and break down information silos to create a more open, transparent, and collaborative workplace.

## 2. REAL-TIME DATA

Real-time data has revolutionized the manufacturing industry by changing how shops are managed and goods are manufactured.

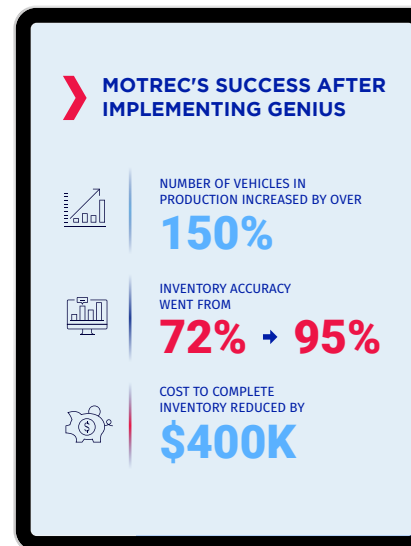
Real-time data is just that; it lets you see your data and how your system is running in real time. With it, you can continually track, control, and fine-tune your shop for maximum efficiency.

Real-time data lets you oversee your shop floor schedule, production processes, and work centers, as well as consistently improve product quality and monitor your equipment to create a higher-performing manufacturing plant. By relying on an ERP's real-time data, manufacturers are gaining quicker and better insights into their shop floor operations and can determine what is impacting their shop's performance the most.

## 3. REDUCED COSTS

ERPs reduce operational and administrative costs because they help you better manage every aspect of your shop.

From labor costs to supply chain management to your engineering department — an ERP will make you more efficient and less wasteful, lowering operational costs.



**Want to see a real-life example of how an ERP can reduce costs?**

Read our [\*Genius ERP + Motrec International\*](#) case study to see how Motrec saved \$400,000 on inventory management costs alone.

You will also lower your administrative costs, in part because you are more efficient, but also because you only have the costs associated with one software system — including maintenance — to pay.

A recent study by the Aberdeen Group found that **an ERP solution could reduce operational costs by 23%, reduce administration costs by 22%, and increase on-time deliveries by 24%.**

## 4. IMPROVED EFFICIENCY

ERPs help you increase your shop's efficiency because they streamline your business processes.

For example, with an ERP system, you can automatically keep track of the inventory you use on each job, which in turn will let you do proper procurement and production planning as you know exactly the amount of raw materials you have on-hand — and what you need to order.

ERPs eliminate production bottlenecks, improve shop-floor scheduling, and help you decrease lead times to boost throughput and maximize efficiency. They streamline your tasks and business processes so that you can do things faster, better, and with more consistency.



## 5. BETTER ANALYTICS

The right ERP will not only house all of your data in one place but will also have built-in business intelligence (BI) tools to analyze data and create powerful reports to help you become more effective and productive — and make better decisions about your manufacturing business.

A good quality ERP system will include a full range of helpful and easy-to-understand reports. These reports will help you to scrutinize your operations to see where you need to make improvements, plus make it easy to keep on top of your key performance indicators (KPIs).

Armed with the right data, you can set the right direction for your business.



## 02 | HOW TO PICK THE RIGHT ERP SYSTEM FOR YOU

## The right ERP is all about fit.

It doesn't matter if you have 20 or 2,000 employees, you need to find the ERP that is right for you, and it will vary depending on your business, industry, size, budget, and needs.

## Not all ERPs are created equal — and that is a good thing.

Not so long ago, there were only a few ERP providers in the marketplace, but today there are ERP vendors for every industry, size, and specialty. The best ERP for you will be one that specializes in your business line and has the features you need to improve your operation.

When looking for a new system, it's important to research and find one that serves your industry and your niche, but — more importantly — one that meets your business's needs.

Our best advice is to figure out **what you need from an ERP system before looking for one**. Take time to evaluate your company's strengths and weaknesses, what you do well, and where you need to improve. Really think about and discuss **why** you need an ERP in the first place before you start researching different ERPs and their features, costs, and implementation methods.

In this way, you won't be swayed by fancy sales pitches and presentations. Instead, you'll know what your company needs to get out of an ERP system and will be able to go out and find the system that fits you best.



Identify your pain points and how an ERP will help. A good sentence to use to figure this out is “We need to improve/increase/reduce \_\_\_\_\_ by \_\_\_\_\_.”

Maybe you need to increase profitability by cutting down on raw material costs. Or maybe you need to reduce errors by clarifying procedures.

This isn't an easy step — it will take time and work to figure out exactly what your business needs to do to improve — but once you have, you can almost guarantee that you will find the right ERP for you.

We need to

Select An Item



Increase

Improve

Reduce

Select An Item



Profits

Throughput

On-hand inventory

by

Select An Item



Cutting waste

Identifying bottlenecks

Purchasing just-in-time

Need more guidance on how to find the right ERP system for your organization? Download our eBook  
[\*\*How To Select the Right ERP: A Step-by-Step Guide for Manufacturers Choosing an ERP.\*\*](#)



# 03 | TOP ERP FEATURES FOR CUSTOM MANUFACTURERS

The ERP features that best suit you will be unique to your business and your needs, but to help you out, here are the top ERP features for custom manufacturers:



## INVENTORY MANAGEMENT

ERP inventory management software allows you to know your inventory levels every second of the day. Track your inventory needs, control costs, and replenish stock based on actual on-the-job demand with one streamlined and fully integrated system.

**ERP inventory management software lets you keep tabs on your inventory down to the serial number.** For every item in your inventory, you will always know how many are reserved for a job, how many are available, how many are currently in production, and how many are on order — to avoid production interruptions and eliminate surprise material shortages.



## SCHEDULING

ERP scheduling software creates schedules that actually work for your shop.

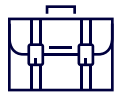
You can manage all aspects of each job in your shop and balance shifting priorities: Schedule work centers, personnel, required parts, and tools based on your BOM, workload, and capacity. **ERP scheduling software aligns your entire company and ensures everyone works on the right priorities at the right time.**



### Smart Scheduling

Schedule your shop smarter with a *built-in DBR (Drum-Buffer-Rope) scheduling tool*. DBR scheduling gives high-mix shops a better way to create accurate schedules by simplifying the process.

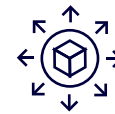
By identifying a plant's most limited resource, and then automatically generating a schedule around this resource, a DBR scheduling system creates an accurate, reliable, prioritized, and easy-to-follow schedule — to maximize efficiency and help you deliver jobs on time and on budget.



## PROJECT MANAGEMENT

With ERP project management software you can move beyond the whiteboard and use real-time visibility to track and manage every single job in your shop. Dashboards with real-time data allow you to follow the progress of all your projects and always be up to date on job status.

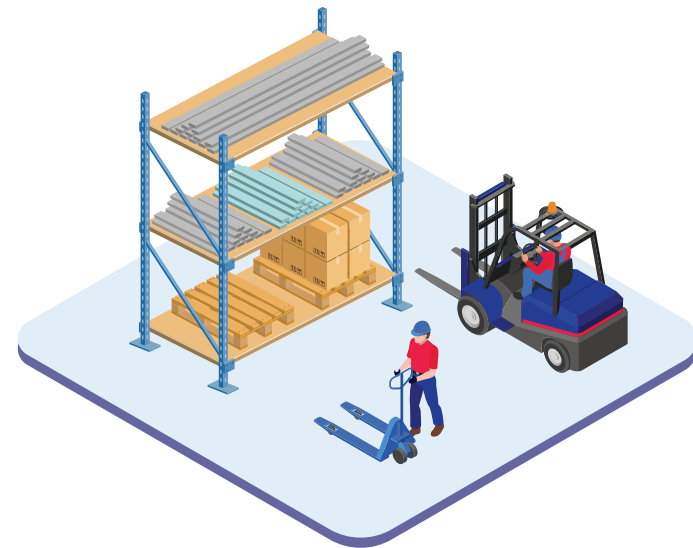
You can assess overrun risks with built-in project management tools, including budget management, milestone management, payment planning, and revenue recognition. **High-level visibility and real-time data let you monitor the progress of every project you have on the go, letting you know instantly if a project is on-time — or at risk of being held up.**



## SUPPLY CHAIN MANAGEMENT

**ERP systems allow you to manage all your interactions with vendors and suppliers — including quote requests, purchase orders, receiving, and invoicing — in a single system that syncs with your projects and your inventory.** Quickly evaluate vendors on factors like on-time delivery, quality, and cost — guaranteeing that you always choose the right supplier for every job.

You will not only better control costs, improve relationships with your vendors, and streamline purchasing and ordering processes, but you will also ensure that you always have the right materials on hand.





## PRODUCT ENGINEERING

ERP product engineering software connects your engineering department with the rest of your shop to alleviate design bottlenecks and ensure your engineers are fully integrated within your operations.

**Your engineers will have all the tools they need to efficiently engineer products from scratch.** Or they can use historical data and specs to design custom products easily and anticipate resource requirements with greater accuracy. Use product engineering software to create bills of materials (BOMs) more efficiently, saving time, eliminating errors, and giving you an accurate BOM that is ready for procurement and production.



## FINANCE AND ACCOUNTING

ERP systems give you an easy-to-use, full-featured accounting and financial management system.

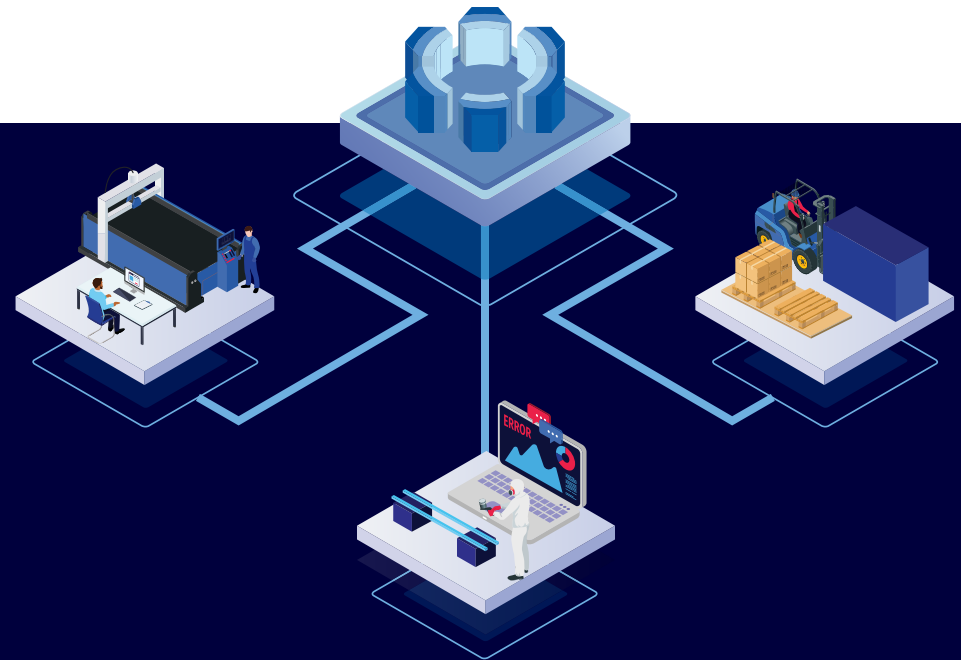
A single system fully integrated from quote to payment eliminates the need to operate and maintain parallel systems. **Real-time data and fully customizable dashboards allow you to easily manage your accounting and financial management operations from one place.** With all financials in a single database, accounting staff won't spend hours cross-referencing, re-entering, or reconciling data manually — and will have more time to focus on delivering critical reports and other vital tasks.

## CAD2BOM

ENGINEERING TO MANUFACTURING

In a typical custom shop, **up to 20% of engineering time is wasted on transferring information from your CAD system to your ERP.**

Software that automatically connects the two systems lets you turn a Solidworks or Inventor model into a fully itemized BOM. This allows you to create complete BOMs quickly — regardless of the number of assembly levels — to identify the components and resources required, helping you to plan purchasing, delivery times, and costs.





## ANALYTICS AND BUSINESS INTELLIGENCE

**Integrated business intelligence (BI) and analytics let you make the right decisions when it counts.** ERP BI software delivers real-time visibility across your whole company. It puts a range of reports and analytics at your fingertips — giving you oversight into every aspect of your operations.

You can quickly harness accurate real-time data and insights from your ERP, create easy-to-understand reports, and arm yourself with all of the information you need to make the best decisions for your business. Reach objectives by setting targets and measuring progress with each new job order. With an ERP, you can produce hundreds of accurate, real-time reports to better understand your organization and manufacturing processes to improve your bottom line and grow your business.



## BONUS: CUSTOMER RELATIONSHIP MANAGEMENT

CRMs are an indispensable tool for custom manufacturers. CRMs incorporate many features that make managing the sales process easier, including personalized sales dashboards for handling customer information, leads, and opportunities, as well as marketing automation tools to create marketing campaigns and mass emails.

**A CRM integrated into your ERP will help you close more deals and generate more revenue to grow your business.**

Your sales team will be instantly connected to the rest of your system, giving them access to price lists, past deals, and product configurator tools to create faster and more accurate quotes.





# 04 | HOW TO IMPLEMENT AN ERP THE RIGHT WAY

## The hard truth is most ERP implementations and installations are considered failures.

Systems are purchased but are never fully installed or functional, leaving manufacturers frustrated.

**75% of ERP implementations are considered failures.** Don't be a statistic.



Implementing an ERP is difficult and disruptive — and it should be. **Implementing an ERP is one of the biggest, most wide-sweeping changes you can make as an organization.** With it will come challenges and roadblocks, but change is also your path to growth.

Acknowledge the disruption up-front: Put systems in place to manage the chaos and help you to persist and achieve your goal. Manufacturers who do the hard work will benefit significantly once their ERP system is up and running.

Here are our top tips for a successful ERP implementation:

1. **Plan, plan, then plan some more.** Implementing an ERP is a massive project. Take the time to create a detailed plan before you start.
2. **Communication is key.** Get everyone on your team on board by communicating your vision for the new system early and often. Explain why you are undertaking the project and what the new system will mean for your organization.
3. **Pick a champion to guide your project.** Choose wisely — you need someone with both the right technical skills plus great communication and interpersonal skills to steer your team through implementation.
4. **A phased approach is best.** A short implementation timeline is key. Use a phased approach — implementing the features you need most first — to keep the timeline manageable.
5. **Train, train, then train some more.** Build plenty of time for training and problem-solving into your implementation timeline, giving your staff time to use the new system and work out kinks before you are running live.
6. **Celebrate successes.** Take time to acknowledge your team's hard work and celebrate the milestones you have achieved. Keeping your team's morale high will help you push through the tough spots and achieve your ultimate goal: A successful ERP implementation.

**Manufacturers that successfully implement an ERP system reap the results, with more streamlined and efficient shops and increased throughput.** Set yourself up for success by implementing an ERP the right way.

Need more guidance on how to make your implementation project a success? Download our eBook [How To Successfully Implement an ERP.](#)



# 05 | HOW TO GET THE MOST OUT OF YOUR ERP

Many manufacturers think learning about their ERP system ends with implementation. But this is wrong.

To increase your efficiency and grow your business, learning and education are essential long after implementation. To get the most out of your system, you need to keep investing time into learning and training — both to become more proficient with your ERP and to get new hires up to speed.

Your ERP is a crucial component of your manufacturing business. All your business processes are tied to it, and your ERP provider should become a valuable long-term partner for your organization. **A strong partnership with your ERP provider — especially with one that supports continuing education — is critical. Over the years, they will help you maintain your level of knowledge about your system as employees come and go, plus further develop your ERP expertise and take on new challenges.**

For example, the material shortages and supply chain disruptions that currently plague the industry were probably not an issue for you if you implemented your ERP a few years ago — but they are now. Your ERP can help you cope and mitigate these new obstacles, but you need to learn how to use your system to do so. A strong partnership with your provider — coupled with an easy-to-access training system — can help you to succeed for years to come.



Continuing education is a key to your business's success. Look for an ERP provider with a robust, *built-in education and training system*. 24-7 access to an e-learning platform allows you to get up to speed quickly and efficiently — helping you to take on new challenges and grow your business.



**Genius ERP** delivers a complete enterprise resource planning solution, including software, implementation services, and field expertise for small to mid-sized custom manufacturers across the US and Canada.

Genius ERP is built for SME manufacturers handling make-to-order, engineer-to-order, custom-to-order, and assemble-to-order manufacturing. Accurate estimating, product engineering, inventory control, production planning, account management, and complete oversight: One system that helps simplify complex manufacturing.



Learn more at: [www.geniuserp.com](http://www.geniuserp.com)