Make-To-Order Manufacturing

Driving growth through
greater visibility and insight

EPICOR®

What's Inside

Embracing the Future of Make-to-Order Manufacturing

Make-to-order (MTO) manufacturers operate in a dynamic landscape where a number of trends—new and old—are shaping the future. You need to keep pace with these changes and take advantage of them—or risk falling behind.

In this eBook, we introduce five of the key trends. We also look at how an enterprise resource planning (ERP) solution can help you address them by delivering greater visibility and insight. As a result, you'll be able to:

▶ Deliver a great customer experience

▶ Make operations as efficient as possible

▶ Drive business growth and profitability

57%
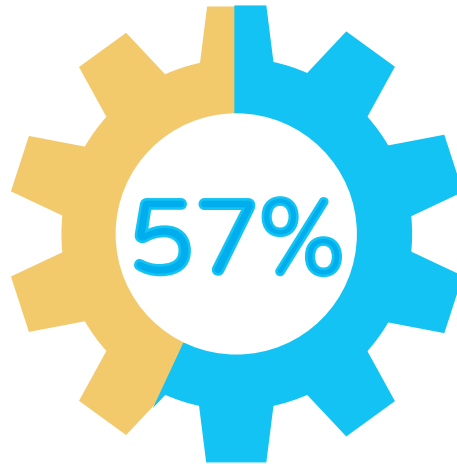
57% of manufacturing is expected to be engineer-to-order (ETO) or assemble-to-order (ATO) because of increasing pressure to meet customer demand[1]

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[1] IDC Manufacturing Insights, 2017 Predictions

5 Trends in MTO Manufacturing

MTO manufacturers must profitably address a "market or lot of one" with a customized product. As several overlapping trends reshape the landscape, a big question looms for MTO manufacturers. Will you struggle with increased competition, or will you take advantage and become more competitive?

1. Mass customization

The techniques of mass customization can overcome many of the issues associated with a lot size of one. Combining personalization with the low unit cost of mass production can help you meet customers' needs and stay profitable. To succeed, you'll need flexible work processes and the technologies essential for mass customization.

2. Lean manufacturing for waste control

Research shows 60 percent[2] of activities in a typical manufacturing operation are waste. Adopting practices like lean manufacturing can help you control this waste so you can manage costs and preserve margins.

3. The Amazon effect

Business buyers expect the same online purchasing experience as consumers. They want to research, order, and configure their items online—and they want full visibility into shipping and delivery status. Only an advanced MTO business can support this level of self-service and transparency.

4. Globalization

Globalization can grow market share and revenues—but it also increases competition. Products must outperform global competitors on both price and quality—and meet the local regulations of each new market. MTO manufacturers need a "global" level of visibility that covers both the supply and demand chains.

[2] Lean Enterprise Research Center, www.leanproduction.com

Variations on MTO manufacturing

In MTO manufacturing, the business manufactures customized products once they receive an order. Many manufacturers handle one or more variations, including:

Assemble-to-order (ATO) or **build-to-order** (BTO)— manufacturers stock basic parts or assemblies to fill customer orders.

Configure-to-order (CTO)—this approach is like ATO and BTO, but the buyer specifies the components that make up the product.

Engineer-to-order (ETO)—the business designs and manufactures one-off orders for customer-specified products.

Custom manufacturing—the manufacturer makes standard or custom products just in time to meet shipping dates.

5. Digital transformation

Digital transformation is accelerating these trends in every area of business. For MTO manufacturers, as for all manufacturers, wise investment in new technologies is the key to:

▶ Increasing efficiency and visibility

▶ Achieving insights that translate into smart decisions and action

The role of ERP

Responding to these trends depends on visibility and insight across your business and its value chain. Thankfully, that is precisely what an ERP system offers. This guide will help MTO manufacturers choose an ERP solution that will give you the visibility and insight to:

▶ Deliver a great customer experience

▶ Make operations as efficient as possible

▶ Drive business growth and profitability

Questions to ask potential providers ?

▶ Does your solution have mobile functionality that supports all roles and tasks?

▶ Can your employees access customer and order status information in one place?

▶ How easy is it to give customers control through secure self-service functions?

> FiFab's ERP implementation has been transformational… ensuring customer-focused departments can deliver the right product to the right customer at the right time—every time.
>
> —Roberto Morris, ERP Project Consultant | Fife Fabrications

Optimizing the Customer Experience

Smart manufacturers understand that buyers of MTO products have high expectations. Customers want an experience that's as easy as any other online store.

Putting customers first

Customers want to be in control. Whether researching options or placing orders and tracking progress, customers want manufacturers to provide the information they need at any time. To do this, you'll want an ERP solution that offers:

▶ Customer relationship management (CRM) integration

▶ Support for mobile working

▶ Web capabilities

Integrated CRM

Look for an ERP solution that integrates CRM capabilities to provide a 360-degree view of every customer relationship. That way, you can put the customer at the center of your business—and enable easy access to enterprise data for efficient responses to requests and queries.

Support for mobile working

An ERP solution that works on any device will let your people respond to customers wherever they are—at home, on the factory floor, or traveling. Mobile capabilities add agility and responsiveness to formerly desk-bound or manual jobs. They help you serve customers with instant access to scheduling, inventory, and quoting tools.

eCommerce capabilities

Respond to the Amazon effect with an ERP system that enables eCommerce for your business. You can easily enable customers to configure, place, and track orders themselves. You'll also gain insight into customer purchasing behavior, so you can modify your offer or have sales teams follow up in person.
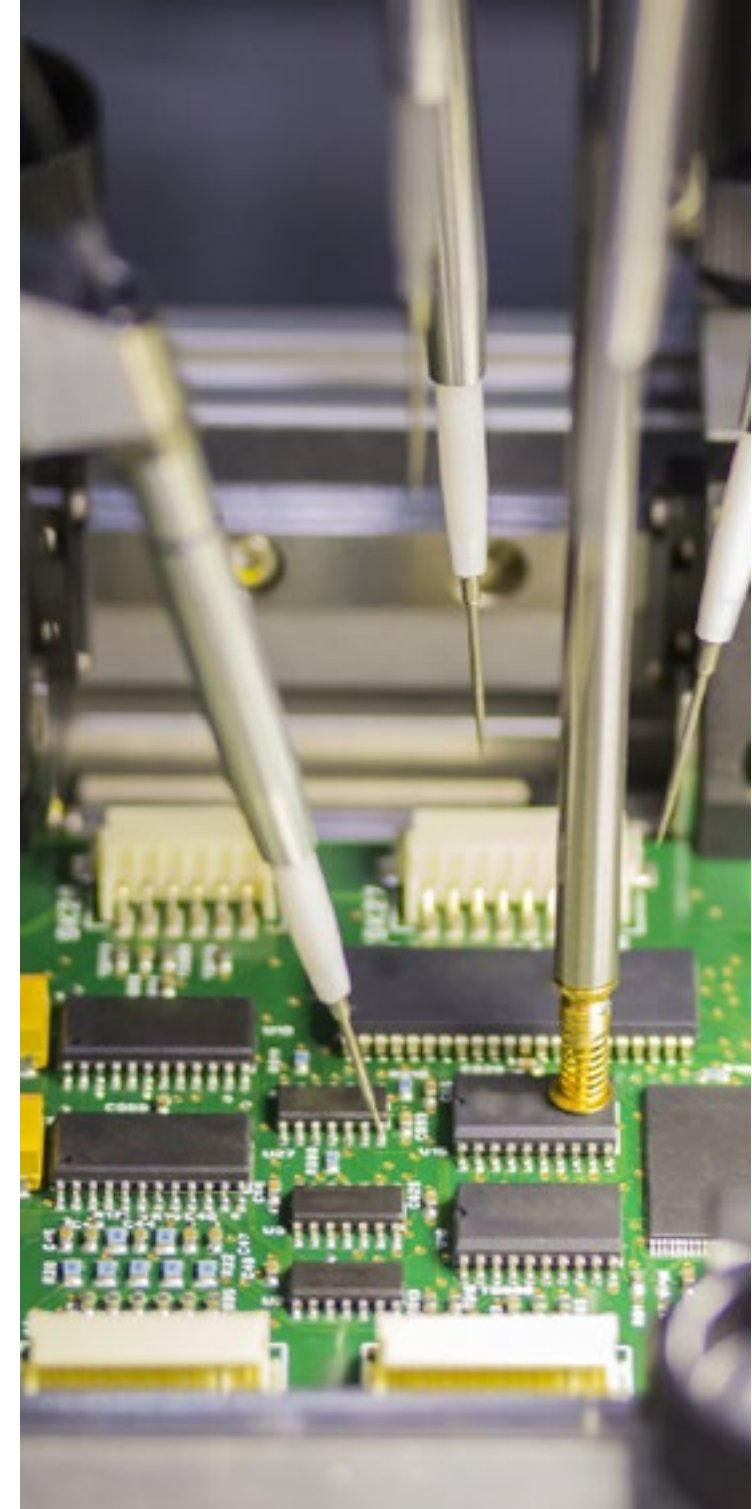
Maximizing Operational Efficiency

In the highly competitive MTO market, investing in an ERP solution helps ensure operational efficiency.

Optimizing capacity

Your business needs a clear view of capacity and accurate capable-to-promise calculations. To be successful, you'll want an ERP solution that:

▶ Simplifies scheduling

▶ Provides visibility and insight into operational capacity and activity

▶ Incorporates tools to maximize productivity and throughput

Planning and scheduling

To maximize throughput, you must boost machine efficiency and run times, and correctly sequence raw materials. You can't afford to rely on disparate, disconnected tools. Instead, choose an ERP system that helps you manage production schedules, what-if scenarios, and constraints.

Operational insight

You'll often have many orders in production at once. Understanding whether you'll meet your delivery dates depends on knowing the real-time status for each order. Look for an ERP system that shows you how individual orders are moving through the factory. It should provide insight into machine performance and usage so you can address issues or adjust workflows.

Productivity and innovation

Choose an ERP solution that helps people be more productive. You'll want an easy-to-use interface, personalized work queues for "what's next," and mobile access to information. Increase productivity by choosing a solution that promotes collaboration through social networking tools.

Deploying Epicor ERP has allowed us to rely on systems rather than manual processes, improve communication between departments, streamline operations, and ultimately ensure that we deliver the highest quality product and service to our customers.

—Aiman Mahmoud, Senior IT Manager | Havelock AHI

Questions to ask potential providers ?

▶ Does your ERP solution incorporate comprehensive estimating functionality, including the ability to quote for highly customized orders?

▶ Does your ERP system help MTO manufacturers develop a responsive supply chain that reduces inventory requirements?

▶ Is work-in-progress inspection capability built in to your ERP system?

[Epicor gives us real value. The whole team can access… appropriate information to produce estimates and quotations. Contracts are immediately converted into production, and we no longer have to visit the workshop three times a week to carry out an inventory.]

—Richard van den Engel, Finance and Information Manager | Derako

Driving Growth and Profitability

74 percent of manufacturers say that growth is a high or extremely high priority for their organization.[3] Ensuring profitability when you're manufacturing in response to customer orders—rather than to meet product forecasts—requires effective cost management.

Accurate, agile quoting

Quoting too low for a customized product can lead to cost overruns and decreased profit margins. Quoting too high risks loss of business to a competitor. If your ERP system offers quoting and estimating—including the ability to quote parts without inventory numbers—you can build accurate quotes to win more bids and maximize margins.

Supply chain integration

Since MTO production doesn't start until a customer confirm an order, it's vital to keep inventory low. An ERP solution that can integrate your supply chain lets you quickly procure raw materials when you need them—reducing stock and freeing up capital.

Optimizing low-volume production

To help manage the cost of producing high-quality products in low volumes, choose an ERP solution that provides the visibility you need to:

▶ Quickly identify and fix quality issues during production—avoid extra costs and overruns that shrink profits

▶ Identify opportunities for improvements that lower production costs

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[3] KPMG Global Manufacturing Outlook 2016

The Smart Way Forward for MTO Manufacturers

The most successful MTO manufacturers will harness the trends currently shaping the industry to grow their business.

The power of digital transformation

It's no surprise that digital transformation is one of the key industry trends. MTO manufacturers that don't transform their work processes and methods will struggle to keep up.

Digital transformation helps MTO manufacturers gain visibility and insight. You can optimize the customer experience, increase operational efficiency, and drive profitable growth. It also enables you to build a foundation for the future—positioning you to take advantage of advanced technologies when you're ready, such as:

▶ The Internet of Things (IoT)—opening new windows of visibility into the manufacturing process

▶ Advanced analytics—for better and more informed decision-making

▶ Cloud-based capabilities—enabling real-time visibility, improving information access, and enhancing collaboration

[Epicor ERP is now opening up new possibilities for us. It's set our business free. Now we can innovate, grow, and move our business forwards—and the results are outstanding.]

—Toon Meeuws, Head of Logistics and Application Manager | BUMET

The role of ERP

Investing in the right ERP software will help you drive the long-term success of your digital transformation program.

Epicor ERP is the result of more than 45 years of working with manufacturers. Unlike other generic ERP solutions, we built Epicor ERP to fit the ways manufacturers work. It supports single-site, multisite, and global operations. It also integrates with other solutions to deliver new levels of collaboration, visibility, and results.

Epicor ERP software is cloud-ready. You can use Epicor ERP on a software-as-a-service (SaaS) basis or deploy it as a hosted solution. That means you can start experiencing the benefits of a cloud model now, and migrate when you're ready.

About Epicor

Epicor Software Corporation drives business growth. We provide flexible, industry-specific software designed to fit the precise needs of our manufacturing, distribution, retail, and service industry customers. More than 45 years of experience with our customers' unique business processes and operational requirements are built into every solution—in the cloud or on premises. With this deep understanding of your industry, Epicor solutions dramatically improve performance and profitability while easing complexity so you can focus on growth.

For more information, connect with Epicor or visit www.epicor.com.

EPICOR.

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