

Epicor Brochure

Epicor for Rubber and Plastics



Rubber and Plastics continues to be a growing industry

The rubber and plastics sector continues to be a growing industry full of innovation and forward-thinking people. With Industry 4.0 now becoming mainstream, those attributes will be even more important in the coming years. With climate change and resource depletion being hot topics around the world, renewably sourced polymers are starting to look increasingly appealing. The benefits of plastic are undeniable. The material is inexpensive, lightweight, and easy to make. Those qualities have led to a boom in the production of plastics over the past half century, and this trend will carry on as plastic production continues to increase over the next decade. With the nature of the world's global economy, understanding how to get an edge in today's connected world is more important than ever. Efficiency is still a top priority, especially given the global nature of the competitive landscape, customer price sensitivity, and ever-shrinking timelines for new product introduction. If you're serious about tightening up business and operations efficiencies, now is the time to connect your enterprise and examine your processes—from the shop floor, all the way up to the top floor. At Epicor, we understand your business—from the basics of mold

management and high run production, to the mechanics of quality and customer service, and right on up to the nuances of strategy and planning. With Epicor, you can count on us to play a big part in any digital transformation or smart factory plans. We can help you make the most of what you already have, get you ready for the opportunities you face right now, and help you stay ahead of the curve as you change and grow along with your market and customers.

Epicor software for Rubber and Plastics is a connected enterprise software solution including Epicor Kinetic and Epicor Advanced MES designed for make-to-stock and make-to-order businesses that focus on injection molding, blow molding, rotational molding, thermal forming, extrusion, and similar complex manufacturing capabilities. Do your customers have stringent requirements? It doesn't matter if you're supplying to industrial machinery, automotive, aerospace and defense, electronics and electrical, medical device, or the energy industry. If you have high expectations for your business partner and need a solution to help you manage the requirements of your customers, then look to Epicor to support simple-to-complex build plans, make-to-order, make-to-stock, or mixed-mode environments with a single, comprehensive system.



Functionality

- Single plant to global operations
- Traceability and quality
- Cost management
- Mold management
- Supply chain management
- Product life cycle management
- Lean production
- Production and process monitoring
- Internet of Things
- Industry compliance

Improve Operational Visibility

For many manufacturers, taking stock of core business operations is the initial step in improving bottom line revenues through greater visibility of office and shop floor operations. Through integrated ERP/MES technology, your business removes redundant processes and improves accuracy of information to provide better customer service and centralized operational management.

Epicor software for Rubber and Plastics is a completely integrated solution for managing your business. From marketing and sales through production and planning, sourcing, procurement, customer service and finance, Epicor software for Rubber and Plastics offers flexibility in deployment. Your system is built and is designed to help your business grow and change when and how you want it to—helping to meet your business needs now and as you grow into the future.

Epicor Data Analytics (EDA) enables customizable and interactive dashboards to make it easy to

analyze the short-term and long-term data trends—such as Overall Equipment Effectiveness (OEE)—related to your production equipment. The dashboards provide visual graphs, charts, and tables, so you can quickly review important information about your production performance and make informed strategic decisions. The EDA grid is where you conduct most of your analysis, and unlike a spreadsheet, you can “drill down” into the data with a simple click to reveal additional details.

Improve Quality and Increase Customer Satisfaction

Making quality parts is a top goal of any manufacturer in the plastics and rubber industry—it can both reduce costs and improve customer satisfaction. Statistical process control (SPC) and statistical quality control (SQC) with Epicor Advanced MES use real-time, automatic data to help you respond to production conditions before making bad parts. SPC and SQC with factual data enable consistent results without constant oversight. They compare cycle time and process data to control the limits you set—providing rich, instant information to machine operators, quality and reliability engineers, and maintenance professionals.

Any machine that feeds production and process data into your Epicor system can benefit from the SPC and SQC capabilities. It’s capable of receiving any kind of data from machines—cycle time, temperature, pressure, weight, dimensions, or any other kind of measurement. Set and record process parameter control

limits for each attribute and specify sampling criteria. The system automatically administers data samples and alerts for out-of-spec conditions. It applies statistical analysis to process conditions, so operators get an alert—even before things run out-of-spec—that something is trending negatively. Plastics and rubber manufacturers love the Epicor automatic part qualification capabilities. If a part is out of spec, the system can open an output reject chute and eject the out of spec part—preventing it from making it further down the manufacturing process and possibly out the door to the end customer.

With Epicor, statistical analysis is easy and accessible because it's automated and visual. Epicor virtually eliminates the need for a statistician—or even advanced mathematics training—to put SPC and SQC to work for your company. SPC and SQC do the work in the background and serve up visually intuitive graphs and charts that are designed for fast, easy understanding by operators and engineers alike—complete, accurate, and automated.

Enable Mold and Tooling Profitability

Project success is critical to bottom-line profitability, yet many businesses struggle with projects running behind schedule or over budget. The Epicor project management software solution enables intricate, multilevel phases as well as strict project costing and billing. Epicor project management software utilizes detailed estimation, planning, scheduling, costing, and supply chain logistics—offering you complete control and analysis of any project. Epicor Project Management is easily deployed to manage the design, prototype, and manufacture of new mold and other projects. Complete project analysis—including revenue recognition—give long-running projects new visibility.

Once in production, managing production, quality, and schedules can be a real challenge when family molding is involved. Epicor can handle the complex scenarios that come with making several or many parts at the same time using a single mold on a machine. In addition, Epicor offers maintenance capabilities that manage the operational performance of molds to help ensure optimal utilization.

Make Your Customer the Focus of Your Business

Many manufacturers find that partnering with a select group of customers is more profitable. To maintain highly developed relationships, you need strong communication coupled with agility and flexibility. Epicor helps you respond quickly to changes in customer demand and supply value-added services.

Epicor for Rubber and Plastics offers a suite of functionality designed to assist your organization in putting the demands of your customer first. With embedded customer relationship management (CRM) functionality, we help ensure that all customer communication is fluid throughout the organization. This provides complete work flow for each cost-based estimate with customer sign-off as a stage of the initial design or estimate—closing the loop with customer service, which logs each customer inquiry and provides comprehensive escalation work flow when needed.

Maximize Equipment Effectiveness

Epicor Advanced MES empowers plastics and rubber parts and goods manufacturers with real-time performance data and the ability to eliminate inaccurate and time-consuming manual data collection. Producers who extend their Epicor system with automatic production monitoring and process monitoring enable operators to focus on making quality products. They anticipate and help avoid problems, eliminate downtime, and maximize throughput—all from the front lines and long before issues can affect performance or quality. Epicor Advanced MES enables complex capabilities specifically for plastic and rubber products operations—such as active cavity tracking and family molding—to help you run your business more efficiently.

Real-time production and process data provide instant, accurate insight on equipment status, tool effectiveness, and conditions, so you can achieve informed lights out manufacturing. The “production pulse” paves the way for accurate, consistent performance metrics so the entire team can focus on getting better—OEE, run rates, scrap, yield, and much more. It's all delivered in a way that makes sense for everyone—from the shop floor to the top floor—with operator depth and dimension to help you pinpoint



and tackle chronic loss. Better performance with Epicor Advanced MES helps you boost quality, customer service, and competitiveness. Epicor Advanced MES supports digital and analog machine signals directly from machines or sensors or via PLC or OPC-compliant PLC.

Manage Increasingly Complex Product Builds

Products have become increasingly more complex. In part, this is due to the options that consumers are looking for in the marketplace. In addition, a new level of innovation is being leveraged to engineer modern products. Epicor Kinetic offers capabilities for managing complex products. In particular, within a single engineered product, users can not only retain the bill of material (BOM) and bill of operation (BOO), but there are also capabilities to manage multiple levels of assemblies. Doing this within a single engineering structure allows engineers to visually configure all components—both manufactured and purchased. It also allows for accurate scheduling and costing of multilevel assemblies.

Additional features simplify engineering processes. In particular, product configuration offers rules-based configurations where non-engineers such as salespeople can estimate a complex product based on predetermined rules. Once the estimate is accepted, a complete BOM and BOO flow to production to build the product. In addition to product configuration, Epicor offers CAD integration with major CAD systems, and for businesses in need of stronger engineering work ow processes, Epicor PLM can be deployed.

Reduce Cost Without Compromising Quality

Many manufacturers are getting back to basics and looking to reduce waste with stronger cost control and management of key cost elements. Through efficient management of the buying process, today's businesses are using just-in-time (JIT) techniques for procurement of material. Additionally, buyers are looking for new ways to drive down margins with suppliers. Good forecasting and demand requirements provide better buying power. Epicor software for Rubber and Plastics includes inventory control alongside material requirements planning (MRP) and purchase suggestions capabilities to provide time-phased material control and material delivery just in time. Critical to the process are strong indicators of cost and post-production cost analysis. Each production run is analyzed to determine total cost broken out by material cost, material burden cost, labor cost, subcontract cost, and burden cost. Based on profitability and run analysis, production management can then determine if production planning estimates need adjustment for quoting and rerun the next time.

Complete Product Traceability

Strict requirements for product and material traceability have long been a requirement of highly regulated industries such as aerospace and defense, medical device, and automotive. However, many other industries today are requiring strong process control with lot and serial controlled inventories throughout. Epicor provides a robust offering that

tracks materials as well as tooling, finished, and semi-finished products throughout the entire production process. Package Control in Epicor software operates like the license plate system to register cars—but with vastly more capacity to designate and manage your groups. With Package Control, you define each package and its contents. You input, track, and manipulate pertinent data points such as serial numbers and part codes. Once that's done, the rest is easy. You can move each group wherever and however you like while enjoying full confidence that you have total visibility of the package's contents. With Package Control in Epicor software, your company can move multiple products via container rather than scrambling to track movements on a part-by-part basis. This functionality will save you time and will help increase inventory accuracy and customer satisfaction.

Maintain Supplier Status Through Delivery Performance

Long-term customer relationships are the bread and butter of this industry. Maintaining supplier status is based on measurements of not only cost and quality, but also delivery performance. For many manufacturers, production visibility—particularly the schedule of the plant—has outgrown the traditional whiteboard. It now encompasses more expansive requirements such as “what-if” scenarios, multi-resource constraints, and even capability-based scheduling—whether employee skill set or machine capability. With visual scheduling boards and multi-resource scheduling boards that offer color-coded load, drag-and-drop load capabilities, and drill-down functionality, master schedulers and production managers can accurately manage change and respond to overload constraints proactively. For manufacturers responding to the question, “When can you deliver?” during the sales cycle, Epicor offers true capable-to-promise capability that absorbs the requirements for the sales order into scheduling using appropriate capacity and MRP rules to offer an accurate delivery date. Simple acceptance of the sales order moves the requirement into production and procurement.

Use Lean Methodology and Demand/Pull Systems to Improve Lead Times and Reduce Waste

Innovative manufacturers who deploy lean methodologies business-wide reap huge benefits in terms of customer satisfaction and overall business performance. For manufacturers looking to reduce wasted processes from the office to plant floor, integrated systems can help streamline business processes. Additionally, support for cell-based strategies help boost key customer requirements. Deploying demand/pull systems that are based on replenishment principals further improves JIT material and component efficiencies. Epicor software contains embedded lean activity metrics and Kanban functionality—i.e. signal to manufacture or move product—that offers the functionality required to manage several types of electronic signals for Kanban control.

Internet of Things

The Internet of Things (IoT) allows manufacturers to connect their systems, sensors, machines, and people like never before. Epicor IoT leverages the power of Microsoft® Azure® software IoT Hub with the context and in-depth data of Epicor Kinetic. With Epicor IoT, you get even more intelligent insight into the operations and day-to-day activities of your enterprise.

Monitor equipment, assets, environmental factors, inventory locations, and their corresponding IoT data. Events and data—such as sensor and machine telemetry—flow into the Azure IoT Hub. From there, the data propagates to the IoT module of your Epicor solution. Epicor software IoT has an advanced rule-based engine that can detect patterns and raise alerts and notifications that propagate into Epicor where they can be used to trigger business process changes—like raising a maintenance suggestion when equipment degradation is detected.



Regulatory Compliance

On top of the other challenges facing manufacturers of rubber and plastics products, a new set of governmental and industry-mandated regulations are stressing organizations. These requirements demand tight control of manufacturing process and traceability along with strict business practices. From SOX to IATF/ISO/AS/TS/QS standards, today's manufacturers are faced with challenges that eat at the bottom line of their profits. The Epicor robust infrastructure—coupled with its comprehensive quality suite—offers a comprehensive approach to automating the compliance process.

Reduce Waste in the Supply Chain

More than ever, manufacturers are looking up and down their supply chains to eliminate waste and improve bottom line results. Epicor software for Rubber and Plastics promotes tighter collaboration throughout the supply chain while analyzing the same metrics that you are measured on—including supplier shipping performance or quality ratings. Looking for new efficiencies and measurements of supplier performance? Look to automated processes for requesting RFQs or for sending change orders through electronic queues on supplier portals or more directly through EDI.

Deployed Your Way

In our increasingly digital world, your ability to survive, compete, and grow depends on how your business leverages the latest best-practice technology. Manual, disconnected processes simply cannot keep pace. Business leaders are increasingly choosing cloud computing for the bulk of their IT operations—including the ERP software they use to manage inventory and product manufacturing. Cloud has become the platform of choice, underpinning a variety of growth initiatives such as mobility, analytics, robotics, eCommerce, digitization, IoT, and more. Worldwide, more companies are leveraging the cloud for ERP deployments to benefit from its compelling economics, liberate IT resources, and more effectively pursue innovative growth strategies. Epicor Kinetic in the cloud is uniquely fit for your industry, value-driven, cost-effective, and powered by the best enterprise-grade, global cloud platform—Microsoft Azure.

We understand that moving to the cloud is not something everyone is ready for, and we are seeing many customers adopt a hybrid strategy by testing the waters with a cloud application that is integrated to their on-premises ERP instance. And for those customers that prefer to stay fully on-premises, we will continue to fully support that choice also.

Support Extended and Global Operations

With competitive pressures driving many manufacturers to expand globally, many manufacturers find themselves suddenly managing multiple sites disparately. Epicor software for Rubber and Plastics has comprehensive multisite capabilities coupled with global presence to help meet your company's requirements for local support. Competing globally and domestically—bridging geographic and strategic diversity and eliminating supply chain inefficiencies—can be accomplished with the technologies to streamline intracompany and intercompany processes and communicate quickly and accurately. Synchronization of complex relationships that determine supply, demand, and fulfillment is the means to reaching new, industry-leading levels of business performance. Epicor software for Rubber and Plastics can help you achieve maximum efficiencies across your globally extended enterprise.

User Experience, Mobility, and Technology Framework

Epicor empowers your workforce with a consistent user experience at their desk or from their mobile device—wherever employees are. Epicor Kinetic UI was designed to offer a modern look and feel and enable developers to create applications that work across any device.

Epicor is uniquely positioned with a complete suite of applications based on 100% services architecture—protecting your investment in software and services well into the future. Outside of all the reasons organizations look to web services for deployment—speed, stability, reusability, and more—for midsize manufacturers, the incentive is imminent to drive electronic collaboration more formally into their supply chain. Web services connection is fast becoming a necessity to doing business.



Supporting your business strategies with applications built on a service oriented architecture (SOA) keeps the door open for rubber and plastics businesses by meeting both the immediate requirement for scalability and supporting an open philosophy in the event your business strategy changes. SOA simplifies the coming together of established infrastructures to make acquisition and merger less painful—which is attractive to companies looking at acquisitions.

Artificial Intelligence

Epicor Virtual Agent (EVA) is intelligence personified for Epicor systems across industries. Users will be empowered by the context-aware natural language processing (NLP) of EVA. With EVA, you interact naturally with your Kinetic system. It's as easy as just talking or typing to a colleague. This makes the breadth and depth of the industry-specific functionality and information available inside the system directly accessible to a larger audience, boosting productivity and efficiency, and giving your company an improved return on your ERP investment. But that is just one aspect of EVA – more than just a chat, EVA returns richly formatted information cards with buttons for suggested next actions. As a result, your employees can have the answers right when they have the question regardless of location or device, you can get more done with the employees you have, and you can attract the next generation of employees with modern technology.

Developed using AI services from Microsoft Azure, EVA can be added to all sizes and types of Epicor® ERP implementations—on premises as well as in the cloud. This helps ensure customers of any size, including small and medium-sized companies, can take advantage of innovative technologies that will help them grow their businesses.

Industry-Leading Service and Support

Epicor has more than 45 years of experience delivering industry-focused, world-class solutions and ongoing customer care and service to more than 20,000 customer installations. We are a true global solutions partner with support of services all over the world. The key vehicle that transforms Epicor software for Rubber and Plastics into a successful business solution is our Signature Implementation Methodology. Epicor delivers among the most cost effective and efficient techniques to plan, design, validate, and deploy your Epicor solution. Staffed with direct employees around the globe who are properly trained and equipped with world-class implementation tools, Epicor follows our proven stage Signature Methodology designed specially around Epicor software and our customers. The end result is designed to be an on-time, on-budget implementation of your Epicor solution that allows your company to quickly begin using Epicor for Rubber and Plastics in day-to-day operations—helping you time and money by providing broad functionality at a lower total cost of ownership.



EPICOR

We're here for the hard-working businesses that keep the world turning. They're the companies who make, deliver, and sell the things we all need. They trust Epicor to help them do business better. Their industries are our industries, and we understand them better than anyone. By working hand-in-hand with our customers, we get to know their business almost as well as they do. Our innovative solution sets are carefully curated to fit their needs, and built to respond flexibly to their fast-changing reality. We accelerate every customer's ambitions, whether to grow and transform, or simply become more productive and effective. That's what makes us the essential partners for the world's most essential businesses.

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