Epicor for Automotive

Flexible and Modern System Architecture Solves the Automotive Challenge

The pool of automotive suppliers continues to shrink as only those with the most flexible IT infrastructures can adapt to the increasing demands of their automotive customers. The inspired answer is Epicor for Automotive, our enterprise resource planning (ERP) solution built from the ground up using a 100% service-oriented architecture (SOA) using a 100% Microsoft® technology stack. Other ERP systems install an “XML wrapper” around their systems and call themselves “SOA,” but that adds another layer of abstraction, complicating setup and slowing down transactions. Every business object in Epicor for Automotive is available as a collection of services, to be made easily accessible by your trading partners’ systems without a complicated application programming interface (API).

Functionality
- Global operations
- Traceability and quality
- Cost management
- Supply chain management
- Lean production
- Production monitoring
- Global materials management operations guidelines/logistics evaluation (MMOG/LE)
Flexibility to Support Complex Manufacturing Processes

Epicor was the first in the industry to introduce a 100% SOA-based ERP system and now, we are the only ERP provider who can offer you these deployment choices for the exact same product: on-premise, hosted, or single- or multi-tenant software as a service (SaaS). In fact, you can choose on-premise and use it to set up SaaS for your own enterprise. But that's not the only reason we’re at pole position. With forty years of experience, we have unparalleled experience in working with manufacturers to solve their business challenges. Having successfully implemented more than 10,000 manufacturing customers, we’ve developed a deep understanding of the needs of manufacturers. As a result, Epicor ERP is used in a wide range of manufacturing operations from agile make-to-order applications to repetitive production under long-term supply contracts:

- Metal processing
- Forming and stamping
- Plastic injection molding and extrusion
- Plastic sheet thermoforming and processing
- Electronic assembly and components
- Fastenings and springs

Support for Global MMOG/LE

Many of the Epicor manufacturing customers make complex products, and by the same token, they view themselves as complex businesses that defy categorization. Epicor manufacturers have the tools to effectively serve their customers—public sector or private, domestic or foreign, because they are aided by ERP functions for every area of a manufacturing business, whether they are make-to-stock, configure-to-order, engineer-to-order, kit-to-order, repetitive, or some combination thereof. Nearly all of the Epicor for Automotive ERP modules, including financials, are not integrated, but embedded together in the same code base. The resulting real-time visibility, in addition to the other benefits described in this document, will help your organization achieve a world-class materials planning and logistics system in accordance with the Global MMOG/LE™.

User Friendly Screens Enable Efficiency and Mobility

One of the most important aspects of an ERP system is what your users see and control: screens written in Microsoft® Visual Studio® .NET. They’ll see a state-of-the-art user interface that looks and acts like the newest Microsoft Windows®-based applications they’re used to, with index tabs, F1 help, cut-and-paste with other Windows applications, such as Microsoft Office Excel®, multiple open records, and a scrolling grid with frozen rows. And they can “personalize” these screens too, by changing such things as tab order, grid sort order, menu shortcuts, and hotkeys. The Epicor for Automotive technology platform enables rapid deployment to desktop client, web browser client, mobile devices, manufacturing touch screens, and additional touch screen capability using the latest tiled Windows user interface (UI). In fact, nearly all of the desktop client screens are available via web browser out-of-the-box.
Use Demand Management and Purchase Contracts for Release Accounting

Epicor for Automotive provides an efficient interface and process to manage the volume of data that is possible with long-term Just-in-Time (JIT) contracts. It includes Demand Management, which handles creation, analysis, manipulation, and reconciliation of cumulative records for releases from your automotive customers. The Purchase Contracts module handles cumulative records for releases to your automotive suppliers. Setting up and changing deliveries (i.e., delivery dates and quantities) on purchase orders is automated, so that you can easily make changes to the schedule as your needs change.

Electronic Data Interchange (EDI)

The Epicor ERP system framework readily supports the following listed standard ANSI® X12 and EDIFACT documents:

Inbound Documents
- Purchase order (ORDERS, 850)
- Planning schedule (DELFOR, 830)
- Shipping schedule (DELJIT, 862)
- Change order (ORDCHG, 860)

Outbound Documents
- Purchase Order Acknowledgement (ORDRSP, 855)
- Advanced Ship Notice (DESADV, 856)
- Invoice (INVOIC, 810)
- Purchase Order Change Acknowledgement (865)

Many more are available from the Epicor EDI Solutions Team, who are experienced in making EDI work in various environments and can offer enhanced functionality that is tailored to the EDI needs of your business.

TIE Kinetix® Software—Epicor has partnered with TIE Kinetix for close to 20 years to ensure close collaboration during implementation of EDI solutions. TIE’s Business Integration products, including EDI translation software, support all industry B2B eCommerce standards, and communication and security infrastructures.

EDI implementation options—Epicor takes pride in the freedom of choice we offer our customers for their EDI implementations. Choose the level of assistance you need from the Epicor EDI Solutions Team; such as having them train your team in Demand Management setup and operation and then building and customizing all your EDI maps for you, or simply training them to do it all themselves. If you have made a significant investment in your existing enterprise-class EDI translation software, you can continue to use it with Epicor ERP.

EDI Managed Services—Epicor offers its own value added network (VAN) service that supports millions of transactions daily. In addition to this service offering, TIE Hosted Services are available for the EDI message translations. The benefit of combining these solutions includes significant savings in VAN fees and low up-front setup fees for TIE Kinetix translation software. The Epicor EDI Solutions Team can provide training for your ongoing management of EDI mapping and operations.

Direct Import Demand Workbench—Import standard EDI messages from the VAN and translation software directly into the Epicor ERP system without middleware, and optionally review them for errors in a user-friendly format before committing them to your production environment. In the Demand Workbench, easily correct common errors such as a bad contract ID or trading partner ID before sending on for processing.

Acceptance Status—Automatically track functional acceptance status of EDI documents, including acceptance, rejection, and partial acceptance of outbound documents through receipt of functional acknowledgements from trading partners.

Evaluated Receipt Settlement (ERS) or Pay on Receipt (POR)—Improve cash flow by providing ASN data elements required by trading partners for ERS/POR functionality, enabling your trading partner to send back a Cash Application Advice EDI document (REMADV, 820) to process the cash application.

EDI Capable to Promise—Help prevent your ERP system from making promises to your trading partner that you can’t keep. A very powerful EDI/Demand Management feature is the Capable to Promise function you can turn on for specific trading partners, to first check your available stock and resources against each EDI message that comes in. If not
enough resources are available to make and ship the product by the date requested, then the line is optionally adjusted, preventing an inaccurate purchase order acknowledgement from being sent to the trading partner and the costly fines that go with delayed order fulfillment.

**Automated Order and Forecast Acceptance**—Specify customers for whom you can bypass manual review of incoming EDI documents in favor of automated receipt of un-firm or firm orders and changes based on predefined customer attributes.

**Improve Lead Time and Reduce Waste with Lean Production**

Epicor for Automotive is a real-time solution that was designed to support paperless manufacturing. Through the use of Kanban production, you can produce your fast moving products without setting up work orders, and create queue records for the work that needs to be completed, therefore eliminating the need for paper.

**Support Bidding, Estimating and Prototyping with Project Management and Supplier Connect**

Project tracking is entirely embedded within the ERP system for budgeting, accumulating, rolling up and analyzing costs. You can generate a multi-level project at any time, in “broad brush strokes” in the Quotation module, where established part numbers are not yet required, or later, in the Engineering Workbench. You can link jobs, orders, and quotes to a project ID, which is designed to automatically capture their direct/indirect labor, material issues, and purchase order costs. Project milestones can be set to trigger progress billing. Project management also supports a bi-directional integration with Microsoft Project.

RFQ's can be tied to a project from both the quote and the job. The RFQ requirements entered by the project manager/engineer are immediately visible to the buyer via the Buyer Workbench, where the buyer has a coordinated view of sourcing, procurement, and expedited requirements. The buyer has the option of consolidating purchasing across multiple projects to gain superior economies of scale. In addition to the Buyer Workbench, Epicor for Automotive aids project procurement via the Supplier Connect Web Portal. Supplier Connect enables online, efficient access for your suppliers to bid on RFQ's, receive your PO's, and view scheduling information.

**Monitor Overall Equipment Effectiveness (OEE)**

Epicor Mattec™ Manufacturing Execution System (MES) extends your Epicor system to help get the powerful metrics you need to improve performance—OEE, run rates, scrap, yield, energy consumption, material consumption, and much more. Accurate machine-related data, along with operator depth and dimension helps you pinpoint critical issues, reduce waste, and improve quality and customer service. F MES supports digital and analog machine signals directly from sensors or PLCs, or via OPC-compliant PLCs.

**Customize Products On-the-Fly**

Epicor for Automotive Product Configurator not only allows for easy selection of product features and options, it can perform calculations and present specific choices based on parameters entered by the user, such as dimensions of a door opening. Product Configurator verifies the selections against the rules, and may present additional options based on its calculations against engineering specifications. It rolls up costs and pricing and generates bills and routings. Alternatively, the Product Configurator will accept configurations from incoming EDI messages, priced according to contract. Your customers can also log into the Web Configurator that is part of Epicor for Automotive Commerce Connect and configure their product options.

**Effectively Manage Global Growth**

Epicor for Automotive supports enterprise purchasing management and advanced multi-plant management, which enables companies to synchronize their manufacturing operations globally, by deploying and consolidating enterprise information across multiple companies, multiple servers, multiple databases and multiple countries. Epicor for Automotive supports many languages, most notably Traditional and Simplified Chinese. The underlying SOA makes the ERP system inherently “internationalized,” so that it can be adapted to any region and any user easily without modifying
the source code. The ERP system is also localized to address
the various and necessary requirements for doing business in
other countries. As an alternative to maintaining in the base
software code, global engines contain the rules for posting,
multicurrency, rounding, legal, and tax.

Epicor for Automotive Currency Management automates the
process of both buying and selling in foreign currencies. With
tracking of default currencies as well as extensive exchange
rate tables, manual transactions are reduced. Lock transactions
in at a specified rate with automatic gain or loss reporting,
reducing the guesswork from handling foreign transactions.
Throughout the system, the currency symbol is displayed
notifying the user of the currency being used.

Ensure Business Continuity
Epicor offers two additional applications—XSOL InOrder
and Epicor Knowledge Mentor—to help ensure your critical
business functions will continue despite disruptions such as loss
of key employees. XSOL InOrder is a process mapping tool that
simplifies the process of defining, documenting, and visualizing
business processes. XSOL InOrder enables users to visualize
operations across their entire organization, helping them to
identify process complexity, redundancy, and inefficiencies,
which ultimately supports reducing costs. Along with Epicor's
Best Practice models, customers are provided a best practice
platform to capture their unique processes.

Epicor Knowledge Mentor enables users to easily create,
deploy and manage custom role-based computer training.
Knowledge Mentor provides an interactive approach to show
users how to use the system exactly as it will be used in their
own work environment, with their data.

Create AIAG-Compliant Labels
Epicor for Automotive provides the information necessary to
support AIAG-compliant labels tied to ASN, and also the ability
to create RFID labels.

Integrate Seamlessly with
Other Systems
Any of the ERP system’s business objects can be published as
services. As a result, XML data from the outside going into the
ERP system via these services are designed to obey the business
rules of the business objects. In other words, if it’s bad data
that could corrupt your database, the business rules will
help stop it dead in its tracks. Epicor Service Connect is
the preferred business integration platform for ad hoc
connectivity to the ERP system. In it you can set up secure
workflow orchestrations between the ERP system and
external applications or processes. Epicor Service Connect
consists of security, messaging, workflow orchestration,
transformation, scheduling, notification, exception handling,
and service components.

Manage the Entire
Product Lifecycle
Epicor PLM is the product data and document management
system that is designed to supervise the entire process, the
product life history, in conjunction with the ERP system.
Workflow management, scan and plot management, as well
as document viewing in large heterogeneous networks and
over the Internet, complete the range of powerful Epicor PLM
features employed. Key features of the Epicor PLM application
include full integration with more than 12 computer aided
design (CAD) systems and Microsoft Office. Using classification
and indexing substantially reduces the expenditure for
retrieving documents. Drawings, bills of material or product
descriptions can be re-used for similar products and
comparable projects. Push BOM and routing data directly from
within the CAD application to the ERP system.

Manage All Aspects of Quality
From a Single System
Epicor Advanced Quality Management is a suite of applications
that address the mission critical issues impacting automotive
manufacturing profitability. Quality improvement initiatives
reduce scrap and rework, produce fewer nonconformances,
lower production PPM, reduce warranty exposure, and improve
time to market. Complete APQP and PPAP management,
product and process documentation are designed to give you
control over your business processes to streamline product
launches and dramatically reduce warranty exposure. Supplier
performance management creates scorecards for ongoing
supplier performance ratings. The AQM Supplier Portal offers
a web-based quality performance and communication tool
for your suppliers which helps to integrate seamlessly with
the data collected within the AQM system. TS 16949 quality
performance management dramatically reduces the time and
Encompass Solutions Inc. is a dynamic and deeply experienced organization that provides expertise in ERP and business application systems.

Our consultants provide support and leadership to companies world-wide who are looking to analyze and refine their operations, whether through selection and complete implementation of state of the art ERP systems, integration and renovation of existing systems or analyzing and providing solutions to corporate challenges.

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