



## Miniature Precision Components, Inc. Shifts into Real Time with IQMS

### ***Driving Top-Tier Quality***

As a leading tier-one supplier for the major automotive manufacturers, Miniature Precision Components, Inc. (MPC) is familiar with high-stakes pressure. Offshore competition, ever-changing customer demands, cost constraints, and government regulations are just a few of the challenges MPC must manage in short order to remain competitive in today's expanding automotive industry.

Founded in 1972, MPC has long operated under the premise that its customers' success is its own. This simple belief has driven MPC to invest in equipment, technology, and human resources, so it can meet and exceed its customers' expectations "the first time, on time, all of the time."

"At MPC, quality is tangible," says Jim Schneberger, the company's director of operations and a key member of MPC's executive team. "MPC provides quality, superior design, reliability, and execution in everything we do, and we've established effective quality disciplines to ensure conformance across our enterprise."

For nearly 30 years, MPC supported its quality promise and enterprise operations with a mid-range enterprise resource planning (ERP) system. Over the years, MPC made many in-house modifications to the system to accommodate the company's specific requirements and add third-party functionality.

Though MPC performed well while using its legacy system the many custom modifications made hindered easy and cost-effective updates. As a result, MPC's system stayed about three years behind the current technology, even as MPC paid for regular system updates.

"We had worked ourselves into a corner with our old system," says Todd Poepping, Information Technology Manager at MPC. "While parts of the system integrated nicely in the beginning, the more modifications we made, the more restrictive the system became. Even with a staff of onsite programmers, we couldn't keep up. We were paying for updates and programmers, but the gap was just getting bigger."

It was for this reason in 2003 that MPC sought to bring its system current so the company could better support its mission of delivering top-tier quality to the major automotive manufacturers.

### ***Shifting into RealTime***

The goal was to get back to a system that required less effort and cost as well as the ability to support the company's unique and established operation requirements. MPC investigated a number of software options, including some packages designed specifically to upgrade its legacy system, which operated on a common set of databases that had never been used for



### ***The Company***

Miniature Precision Components, Inc. (MPC) is a recognized leader in the innovative design and production of world-class, thermoplastic quality parts for the expanding automotive and other commercial industries. Founded with an entrepreneurial spirit in 1972, MPC has consistently maintained its unique ability to provide superior design, efficient manufacturing, reliable quality, and competitive pricing for its customers worldwide. Headquartered in Walworth, Wisconsin, MPC has 1,900 employees and operates manufacturing plants in Wisconsin and Mexico. Dedicated to exceeding its customers' expectations, MPC has obtained double-digit growth for many of the past 10 years.

production scheduling or integration control. A strong production environment, ease-of-use, comprehensive reporting capabilities, and total visibility across the entire enterprise were key components MPC required for its new ERP system. The company found what it was looking for in EnterpriseIQ with RealTime Machine Monitoring from IQMS.

“It was apparent that IQMS has the premier manufacturing software,” says Poepping. “Unique features such as functionality to manage different cavitations with molds told us that IQMS has a higher level of competence in providing the best ERP system for our type of business.”

MPC saw even greater advantage in shifting from batch to real time using the EnterpriseIQ RealTime Machine Monitoring module. Before switching to EnterpriseIQ, MPC’s orders were processed using weekly buckets, and orders were not tied to inventory or individual machines.

“We had nothing to show us what machines were running, and at what level of quality and productivity,” says Rich Simonson, a plant manager at MPC. “Once we saw RealTime in action, it was something we had to have. Information now flows immediately across every layer of our business, and we are able to see specifics we never knew were there before. It’s like going from a black and white television to high-definition.”

With MPC’s old system, the company’s manufacturing and distribution facilities functioned autonomously in a reactive manner using dated information. With RealTime from IQMS in place, MPC’s management team can see progress as it happens, and in turn catch potential trouble before it becomes a costly issue. According to Schneberger, the benefit and efficiencies gained in having real-time data access doesn’t just apply to MPC’s top management.

“The immediacy of RealTime forces a discipline in our plants that did not exist before,” says Schneberger. “RealTime on the shop floor makes our operators think like business owners. Instead of recording production data on paper to be seen in a week or a month’s time, our operators now know what they do on the shop floor will be seen the second it happens. This motivates people to understand the impact of their actions and as a result to work better, smarter, more productively.”

### ***Gaining the Single-Source Advantage***

Because MPC’s legacy system was built from multiple components and had been customized over time to manage tasks such as serialization, tracking, and corrective actions, its systems were disjointed and difficult to reconcile.

“There was a lot of going in and out of different menus,” says Simonson, “If you needed to know something about a specific part, you had to write down the part number on a scrap of paper then jump through a bunch of computer screens to find the answer. Our old system had many parts, but in no way were they fluent with one another.”

MPC liked that EnterpriseIQ operates all within one database, guaranteeing interoperability between modules, and more importantly centralizing the company’s business data and activity in one easy-to-access location. Not only does this make MPC’s enterprise data easier and more cost-effective to manage, but it also increases data reliability and provides better visibility across the entire enterprise.

“While we were able to glean information out of our old system, doing so was expensive and the data often needed verifications; often you had to wait for verbal confirmation from other departments within the organization,” explains Poepping. “With EnterpriseIQ everyone is working from the same data at the same time and we are confident in the data because it’s all been entered into the same database. We can now make informed decisions more quickly without waiting on other areas of the organization to respond.”

### **Outpacing Change**

Before using EnterpriseIQ, MPC did not have the visibility to examine its production processes with an eye for outliers and poor performance, so they had less means to target specific areas for improvement. MPC realizes now that its legacy system's lack of integration limited the company's potential.

"Once you work with an ERP system like EnterpriseIQ, you see the value of having all segments of your business working as a cohesive entity," says Schneberger. "There is a definite requirement to input accurate data, but now that we are all entering data into the same database we've been able to raise everyone's level of attention to performance both good and bad. The sheer visibility of the database whether pre- or post-production elevates our potential to do things right. This would never have been possible with our old system."

Since purchasing EnterpriseIQ, MPC has implemented the IQMS system across five physical plants and eight production groups. MPC has seen significant returns on investment while using EnterpriseIQ, including reduced software maintenance costs, better allocation of labor resources, and immediate visibility to make informed decisions quickly. But Schneberger notes MPC will gain even more benefit as the company continues to rely on its new ERP system.

"As we move from monthly to real-time and activity-based costing using EnterpriseIQ, our real return on investment will come from truly understanding our costs so we can go into the marketplace with a greater competitive advantage," says Schneberger.

Plant manager Simonson agrees: "The automotive industry is accelerating at a rapid pace of change. With EnterpriseIQ, MPC is well equipped for future growth and efficiency, and better able to outpace the automotive industry's many challenges."

### **MPC In Brief**

As a leading tier-one supplier for the major automotive manufacturers, Miniature Precision Components, Inc. (MPC) is familiar with high-stakes pressure. Founded in 1972, MPC has long operated under the premise that its customers' success is its own, and the company dedicates all its resources to exceed quality expectations "the first time, on time, all of the time." For nearly 20 years, MPC supported enterprise operations with a mid-range ERP system that was modified to accommodate specific requirements and add third-party functionality. However, the modifications hindered easy and cost-effective updates, leaving MPC's system about three years behind the current technology, even as MPC paid for regular system updates. By switching to EnterpriseIQ with RealTime Machine Monitoring by IQMS, MPC has realized many benefits, including: reduced software maintenance costs, better allocation of labor resources, and immediate visibility to make informed decisions quickly. MPC's director of operations, Jim Schneberger, notes that moving from monthly to real-time costing with EnterpriseIQ enables the company to truly understand its costs, giving MPC greater competitive advantage in the expanding automotive marketplace.

#### **Return on Investment**

- Gained real time control of production processes
- Increased data accessibility across enterprise
- Improved inventory control
- Achieved more accurate and faster internal communication
- Reduced labor and production costs

#### **Software**

EnterpriseIQ™ ERP software system with RealTime Production Monitoring, Warehouse Management, InterCompany Transactions, Electronic Data Interchange (EDI), Sales and Distribution, Quality, Process Costing, Forecaster, Asset Management, General Ledger, Payroll, Time and Attendance modules, and more.

#### **Hardware**

Oracle database with windows-based PCs