

## Global Leader in Automotive Safety Systems Slashes Scheduling Time with QAD Production Scheduler

### The Company: Driving Automotive Safety

TRW Automotive is a recognized world leader in automotive safety. The company designs, develops and produces the most comprehensive array of safety products in the automotive industry, including active safety systems that help drivers avoid collisions, and passive safety systems that help protect vehicle occupants when an accident does occur. More than 4,500 engineers and researchers are involved in the development of these advanced systems.

TRW Automotive supplies all major vehicle manufacturers with chassis and occupant safety systems, and additional products such as body controls, fasteners and engine valves. The company is also a leading provider of automotive service parts, technical support, and diagnostic support to vehicle manufacturers and independent aftermarket customers worldwide. Its aftermarket global service network covers more than 10,000 customers in over 120 countries.

With 2005 sales of \$12.6 billion, TRW Automotive is among the world's ten largest automotive suppliers and one of the top financial performers in the industry. The company is headquartered in Livonia, Michigan, USA, and through its subsidiaries, employs approximately 63,000 people in 25 countries.

### The Challenge: Too Many Spreadsheets, Not Enough Time

Production schedulers must walk a fine line every day: They must consistently find the delicate balance between demand, capacity and supply to ensure that the right products are delivered to the right place, at the right time. To maintain that balance—and keep customers happy—schedulers need tools and applications that provide real-time visibility and quick access to detailed scheduling information.

Without these tools, schedulers must often sort through a multitude of reports and inquiries to create a production schedule, relying on intricate spreadsheet arrangements to consolidate the many pieces of information they need. Production schedulers are forced to spend many hours each week creating and updating their schedules.

These complex manual processes often create incremental inefficiencies throughout the production process. Lacking visibility into real-time information, schedulers can't optimize the use of capacity and materials, so they rely on longer lead times and safety stock to ensure on-time delivery and customer satisfaction.

Material planners and production schedulers at the TRW Automotive (TRW) plant in Woodstock, Ontario, Canada faced these exact issues and the accompanying manual processes. Each week, the material planners would print the customer releases from QAD MFG/PRO, enter the data in an Excel spreadsheet and schedule each part number and production line for the following 26 weeks.

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*Ronnie Campbell, Materials Supervisor, TRW*

The material planners then e-mailed the resulting reports to the manufacturing supervisors so they could plan production and resources for that time period. Material managers then had to sift through the same data yet again in order to compare the month-to-date production plan to actual production output. In addition, the finance department required a sales data report for forecasting. So each day, the material planners entered actual sales on one spreadsheet for the finance department and reported production on another one.

The material planners and manufacturing managers were eager for a solution that would release them from this endless round of spreadsheets, eliminate the need to share data manually, provide real-time visibility and give them the freedom to make the best use of time and resources.

### The Solution: Scheduling Tool Creates Better Processes, Eliminates Waste

TRW Automotive has been a user of QAD MFG/PRO for 12 years. The Woodstock plant currently runs QAD MFG/PRO eB2, and in December of 2005, was the first

to go live on QAD Production Scheduler. The company plans to roll out QAD Production Scheduler to another seven plants in 2006.

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*Ronnie Campbell, Materials Supervisor, TRW*

The planners and schedulers immediately found QAD Production Scheduler a perfect fit. “QAD Production Scheduler was an easier way to do what they were currently doing, so it was not a difficult transition,” says TRW materials supervisor, Ronnie Campbell. The fact that the new tool has a similar look and feel to Microsoft® Excel adds to the comfort level.

“We were pleased at how easy the Woodstock implementation really was. Training was less than one day. Daily conference calls for the first week ensured that the plant had all its questions answered. The QAD reference guide and the QAD support group proved to be valuable tools,” says TRW senior manager of business systems, Sandy Burr.

The materials department at the Woodstock plant now uses QAD Production Scheduler for all materials planning—Excel spreadsheets have been eliminated. Planners no longer need to manually track planned production vs. actual performance in Excel: a custom report created in QAD MFG/PRO automates the process, providing them more time in their day for strategic, priority, value-added activities.

#### **The Benefits: Maximizing Time and Resources**

The planners and schedulers in the Woodstock plant immediately felt the impact of replacing manual processes with QAD Production Scheduler. The first major benefit realized was the elimination of work hours spent on Excel spreadsheets. “I have cut my scheduling time by 65 percent on a weekly basis; I now have time to concentrate on more important things,” says Campbell.

“Before QAD Production Scheduler was in place, the planners would spend four hours every Friday putting together a weekly schedule in Excel, and then have to spend more time updating it each day the following week. Now they simply enter data in QAD Production Scheduler daily and make minor adjustments as needed,” says TRW business analyst specialist, Leslie Beckman.

QAD Production Scheduler not only helps streamline the production scheduling process, but also reduces costs by optimizing capacity planning, reducing inventory and Work-In-Process (WIP), improving supplier relationship management and enhancing customer satisfaction.

The material planners and manufacturing managers are now able to look at live data in real-time—and use one screen to make all the scheduling decisions. Simple navigation and real-time visual indicators enable the plant employees to quickly focus in on the big issues and effectively prioritize demand.

The new tool makes it easy for planners and schedulers to optimize capacity. For example, the plant can now make full use of business and holiday calendars to plan line or plant shutdowns. QAD Production Scheduler also supports what-if scenarios, helping the materials planners and plant managers plan more proactively to anticipate demand, optimize capacity and manage inventory.

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#### **The Future: Lower Inventory Costs, Enhanced Supplier and Customer Relationships**

The implementation of QAD Production Scheduler at the TRW Woodstock plant is only the first step—the company plans to roll out QAD Production Scheduler in seven more plants in 2006.

“We envision dramatic savings in our scheduling departments—we hope to free up resources to concentrate on supplier issues, inventory improvement and customer ratings,” says Beckman.

At the Woodstock plant, the next step is training production supervisors to pull their own reports so they can analyze the performance of their production lines and make improvements when and where needed. In the

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long run, plant management plans to use the system to significantly reduce safety stocks and ensure the complete accuracy of units-per-hour reporting.

Beckman says it best: “Our materials planners have been asking for a better tool to manage their production schedules and save time. After the Woodstock pilot was implemented, the word got out that QAD Production Scheduler was finally available and the other plants have been clamoring for it. We envision more timely and accurate schedules and expect a significant reduction in scheduling time. Woodstock proved that it was possible.”

*Story prepared by QAD in cooperation with TRW Automotive.*

## Benefits

### Key Benefits of QAD Production Scheduler

- Integrates with QAD MFG/PRO
- Optimizes scheduling accuracy
- Real-time visibility of completed production
- Significantly reduces production scheduling effort
- Visual alerts for capacity and item availability
- Enhances customer service

## Highlights

### Company

<b>Company Name</b>	TRW Automotive
<b>Industry</b>	Industrial
<b>Products</b>	The company designs, develops and produces integrated vehicle control and driver assist systems, braking systems, steering systems, suspension systems, occupant safety systems (seat belts and airbags), electronics, engine components, fastening systems and aftermarket replacement parts and services.

### Solutions

<b>QAD Solutions</b>	QAD Production Scheduler, integrated with QAD MFG/PRO eB2
<b>Platform</b>	Red Hat Linux
<b>Languages</b>	English / Latin Spanish
<b>Number of sites</b>	One site implementation complete; seven planned implementations in 2006
<b>Time-to Benefit</b>	Immediate. Reduced scheduling time by at least 65 percent on a weekly basis

### Results

- Reduced scheduling time by as much as 75 percent
- Eliminated need to manage schedules manually
- Improved inventory management
- Significantly reduced lead times
- Enhanced overall production process
- Enabled customer service improvements



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