

Performance Made Reliable: Proactive Asset Maintenance Creates Competitive Advantage

The Company: Chemistry Makes the Rubber Meet the Road

Flexsys Rubber Chemicals, Ltd (Flexsys) is a leading global manufacturer and supplier of chemicals for rubber processing and related industries. The company's products are used by businesses around the world during the mixing, modeling, and curing processes used to make tires, hoses, seals, and other rubber products. Flexsys employs about 1000 people at over 20 sites throughout the world. Formed in 1995, Flexsys is owned by Solutia and has sales of approximately US \$500 million.

The Challenge: Asset Performance Hampered by Reactive Maintenance Approach

Like many global manufacturers, Flexsys is caught in the squeeze of rising costs, falling prices and tough competition from emerging markets like Asia and Eastern Europe. To maintain customer service levels while keeping costs in line, Flexsys recently changed its planning processes from make-to-stock to make-to-order.

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This shift eliminated the high cost of buffer inventory. But without safety stock to fall back on, the pressure was on the company's manufacturing assets to deliver top performance. That objective was hindered by inconsistent maintenance processes across the company. Plants were either using antiquated software to schedule and track maintenance or a combination of manual processes and spreadsheets.

An audit by an external consultant found that asset management at Flexsys was primarily reactive, rather than preventive, which led to poor equipment reliability. Production output was well below the required efficiency levels.

“Implementing a single enterprise asset management solution and standardizing processes across all our sites were key to driving critical asset management improvements,” says Roger Mason, Operations Manager.

The Solution: Unifying Processes with QAD Enterprise Asset Management (QAD EAM)

“We compared the functionality and reporting capabilities of the leading solutions and decided that QAD EAM was our best option,” says Mason. “The biggest factor in selecting QAD EAM was the interface to our existing QAD logistics and accounting software. This allowed us to very quickly have QAD EAM up and running at all our sites.”

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The Flexsys team identified four essential steps to reduce equipment breakdowns and improve plant reliability: 1) Develop a consistent work order process, 2) Define and track key performance indicators (KPIs) for maintenance, repair and operations (MRO) inventory, 3) Implement root cause analysis (RCA) and, 4) Directly involve the production operators by initiating total productive maintenance (TPM).

The QAD EAM work order system provides the structure required for positive control over the maintenance work order process, supporting a global process that helps improve asset care and reduce breakdowns across all facilities. Flexsys relies on the excellent database contained in QAD EAM to help assess asset performance, and flexible reporting allows the company to define and measure KPIs. The system supports RCA and TPM: This means the company's production operators and maintenance technicians can focus most of their efforts on less costly preventive maintenance and very little on reacting to equipment breakdowns.

“The individual QAD EAM modules — Plant Maintenance, MRO Inventory and MRO Purchasing — were thorough enough for us to measure and achieve our required standards,” says Mason.

The Benefits: World Class Maintenance Generates Business Advantage

“Our plants are more reliable and flexible than they ever have been,” says Mason. Flexsys is taking full advantage of making products to customer order, reaping the savings from reducing its inventories of finished products. With consistent, reliable plant performance, Flexsys can provide superior customer service and meet its revenue targets.

Flexsys now has centralized control of its global asset management systems and processes, and can update all maintenance transactions and expenses to the QAD ERP system in real time. “With QAD EAM we were able to cut administrative costs and reduce our manpower needs. Replacing uploads to our accounting system with live updates gives us additional cost benefits,” says Mason. The reporting capabilities in QAD EAM provide a clear view into maintenance and expense history, as well as production figures for specific equipment.

With QAD EAM, Flexsys practices true preventive maintenance — now, just 11 percent of repairs are

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considered reactive, and total maintenance-related down time is under five percent. Controlled work order and materials management processes, along with better preventive maintenance scheduling, help keep overall equipment maintenance at 88 percent effectiveness. Production scheduling efficiency has improved dramatically as a result. And, the system has helped the company cut its labor costs significantly by reducing the number maintenance hours needed. Overall, Flexsys has reduced its maintenance budget by 12 percent.

The Future: Maintaining High Standards

Recently, independent auditor MCP assessed Flexsys against the Asset Management Information Service (AMIS) protocol, awarding the company the World Class

Highlights

Company

Company Name	Flexsys Rubber Chemicals Ltd.
Industry	Industrial Products; Industrial Inorganic Chemicals
Products	Chemicals for rubber processing and related industries

Solutions

QAD Enterprise Applications	QAD Enterprise Applications (version MFG/PRO eB2) QAD EAM QAD Transportation Management System
Hardware	HP 9000
Environment	Unix
Languages	English, French, German, Italian
Number of Sites	20
Time-to-Benefit	Immediate and ongoing

Results

- Production scheduling efficiency at 95 percent
- Maintenance related down time less than 5 percent
- Maintenance budget reduced 12 percent
- Reactionary repairs reduced from 90 percent to 11 percent
- MRO inventory turns doubled
- Administrative costs cut
- Labor expenses reduced
- Certified World Class Maintenance against AMIS standards

Maintenance certificate — only five percent of AMIS audits achieve this standard.

Mason is already leveraging QAD EAM to find more areas to cut costs and look for new savings. Focusing on MRO inventory, he plans to nearly double current inventory turns, with KPIs for inventory turns to help identify slow-moving parts, by measuring stock-out impact and by using QAD EAM's ability to reserve parts.

“Our company is now more agile and competitive. We have been able to change with our business needs,” says Mason.