AMTECH ELECTROCIRCUITS

Aras Enterprise Open Source PLM Resonates with Amtech Electrocircuits

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>
> Jay Patel,
> President,
> Amtech

Growing provider of electronic innovation support and electronics manufacturing services uses the Aras PLM Solution Suite to optimize processes, reduce costs and take their business to the next level.

When the founder of Amtech Electrocircuits arrived in the U.S. from India, he had a few dollars in his pocket and the desire to build his own business. In 1996 he started Amtech, an Electronics Manufacturing Service provider. Still family-owned and led by sons Dev and Jay Patel, today Amtech Electrocircuits is a burgeoning enterprise providing electronic innovation support and electronics manufacturing services to leading companies in automotive, industrial, high technology, medical devices, and aerospace and defense.

Amtech Electronics

- ▶ **PLM**: Aras Innovator Solution Suite
- ▶ **Standards**: ISO 9000, APQP, FMEA
- ▶ **Integrations**: PLM, ERP, MRP
- ▶ **Environment**: Web/Cloud

Amtech's commitment to quality, service and efficiency is reflected in every area of the business. The company appreciates the value their customers place on their supply chain, so customer service, communication and responsiveness are paramount. ISO 9000 certified in 2001, the company demonstrates its dedication to quality with APQP, FMEA and other process optimization initiatives on an ongoing basis. And when it comes to costs – direct and indirect – Amtech is serious about savings.

The company manages indirect costs by maximizing process yield. Careful attention is paid to planning, workload, customer demand and available capacity on the shop floor. To ensure the best possible pricing on direct costs, such as components, materials and other supplies, the company is creating an integrated system that combines the bill of material (BOM) with the individual customer's approved manufacturer list (AML) and sends it out to approved vendors for real-time quoting. It was Amtech's desire to optimize both direct and indirect costs for its customers that

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An Aras Community Case Study

led President Jay Patel to investigate product lifecycle management (PLM) solutions, eventually choosing Aras.

Keeping Costs Low in a Highly Complex, Custom Environment

"We are a high mix, low volume business," explained Patel. "We have a lot of different part numbers that we are constantly setting up and changing over, and we introduce new products on a daily basis. In order to work with our high-reliability customers, we must be able keep to pace, tracking all revisions and managing the individual AMLs as well as the product lifecycle, part and BOM for each product, for each customer. It is a very time consuming and labor intensive process."

And it doesn't end there. Once Patel and his team get the AML, sourcing is another challenge. A product built for two or three or six different customers may require the same resistor, but the AMLs for each customer are not all the same. Amtech's challenge is to manage the requirements of multiple AMLs while maintaining economies of scale and avoiding carrying a lot of costly, excess inventory.

The company started with a custom MRP system, called UnifyMRP, to manage, combine and compare all the requirements of the AMLs. The system provides best-case scenarios for purchasing and helps keep inventory levels low. Then they asked themselves, "Ok, how do we hold the BOM?" "And that's when we started looking at PLM systems," said Patel.

"We needed PLM to hold and manage the BOM. We also needed it to help decrease cycle time and ensure quality," said Patel. "Our PLM had to flexible. It had to be robust. And it had to be Web-based. We are heavily into Web applications at Amtech. Everything runs in the browser, so there are no clients to manage, etc." After considering its options, Amtech chose Aras enterprise open source PLM.

Recognizing the Value of Open, Flexible, Web-based PLM

Amtech chose Aras for its flexibility and openness. "With the other PLM solutions, if we want a feature or we want to customize it we've got to wait to until the

majority of the users want it, then the company puts it on a list and when they get around to developing it and launching it, we finally get it," explained Patel. "Aras allows us to implement our secret sauce and keep it secret because it's on our private cloud or server. We can change it locally very easily without anyone else knowing it. It gives us the agility to improve our processes at such a rate and at such a discrete level that it provides us a competitive advantage over anybody else or any other PLM in the world."

Business Benefits

‣ Optimize Purchasing

‣ Balance Inventory Levels

‣ Maximize Process Yield

‣ Track & Manage Customer Requirements

‣ Improve Compliance

For Patel, Aras offers a robust quality process that's controllable. "With Aras, cycle time for new product introduction goes way down -- from 2-3 weeks to 2-3 days, including creation of all the APQP documentation and control plans, and failure mode analysis time. What's more, internal infrastructure is easy; I don't have to worry about it," said Patel. "Allowing other people in the company to log in is easy too; I don't have to worry about that either. And administration is trivial; Aras is the only PLM solution in the market that is a true Web application."

PLM, ERP & MRP Integration – The 1-2-3 Punch

For Amtech, integration is the name of the game. "We like to do it once and do it right so we don't have to put a lot of labor into things on a daily basis, and changes are much easier to manage from one centralized location," noted Patel. So Amtech took things one step further, integrating Aras PLM and UnifyMRP with their ERP system. Patel calls it his "1-2-3 Punch."

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Patel explains, "Aras is managing all the AMLs, all of our BOMs, all of our engineering changes, and all of our production documentation. The ERP system looks at the Aras BOM and tells us the quantity of the part we need and when it's due. UnifyMRP queries Aras to see who is on the AML, what's available, what can we use, etc., on all our different jobs. And then the MRP provides the best scenario for economy of scale. We send that information out to the vendors and they provide real-time quotes for each part. It takes the process from days and weeks down to about to 15 minutes. And we couldn't do it without Aras."

Amtech is an Aras Open User, which means the company is using Aras PLM without the ongoing support provided by an annual subscription from Aras. "I was looking for a PLM system that is Web-oriented and role based, and Aras provided me both. With Aras, I am the master of my destiny. I can literally change the way I run my business to give me the competitive advantage I need, when I need it," said Patel.

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About Aras

Aras ® provides Aras Innovator ® as an enterprise open source software suite of solutions on the Microsoft platform. The enterprise production-ready software is available for download without cost and provides complete access for unlimited users.

Enterprise software for new product introduction, advanced product quality planning, and enterprise product lifecycle management provide businesses with a process-oriented approach to manage innovation and collaboration from concept through development and launch.

Aras solutions are designed to support Lean in the product development process while addressing product quality, risk management, and compliance in an integrated manner.

For more information on the Aras Innovator software solution suite and to download the software visit www.aras.com.

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