



**X-Ray Silicon Manufacturer Boosts
Productivity and Cuts Costly Inventory
With Microsoft Dynamics AX**

Technical Case Study



Business Challenge

Customer Profile

dpiX is the world's leading source for high-resolution amorphous silicon (a-Si) sensor arrays with 250 employees. The company's a-Si technology provides the foundation for some of today's most innovative solutions in medical, industrial, military and security X-ray imaging.

Business Situation

dpiX had no ERP system prior to Microsoft Dynamics AX. The company was using Microsoft Excel for planning and QuickBooks for financials. They also spent an inordinate amount of time on manual tracking of the manufacturing quality process. dpiX was committed to keeping Camstar MES and needed an ERP system that was flexible enough to integrate with it.

Software & Services

- Microsoft Dynamics AX
- Camstar MES
- Integration and Customization - Microsoft Partner Armanino Consulting

Benefits

- Greater planning visibility to improve customer service levels
- Improved inventory control and reduced inventory holding costs
- Accurate tracking of production costs and margins, driving better business decisions
- Reduced data entry work of 3+ FTEs through automated data collection

Modules

- Dynamics AX for High Tech Industries - Armanino Consulting
- Supply Chain Interface - Armanino Consulting
- Preventative Maintenance for AX - To-Increase

dpiX is the world's leading source for high-resolution amorphous silicon (a-Si) sensor arrays. Their a-Si technology provides the foundation for some of today's most innovative solutions in medical, industrial, military and security X-ray imaging.

Headquartered in Colorado Springs, dpiX is a high tech manufacturer, operating a Class 1 fabrication facility that employs robotics, automated handlers and automated testers throughout a clean room fab and test facility. To support its complex production environment, dpiX was using an MES (Manufacturing Engineering System) solution from Camstar to drive its highly automated production equipment and quality data collection.

dpiX had no ERP system prior to Microsoft Dynamics AX. The company was using Microsoft Excel for planning and QuickBooks for financials. They also spent an inordinate amount of time on manual tracking of the manufacturing quality process and had no visibility into production costs. dpiX was committed to keeping the Camstar MES and needed an ERP system that was flexible enough to integrate with it.

Business Improvements

Armanino led a successful company-wide Microsoft Dynamics AX implementation and integration of Microsoft Dynamics AX 2009 with Camstar MES to improve the synchronization between shop floor and the administrative team, speeding the information flow between process control and planning systems.

Tighter control of production scheduling: dpiX synchronized its capacity scheduling, production progress, production rework, and impact of MRO maintenance and machine downtime from within Camstar to Dynamics AX. This provides increased visibility into the shop floor operations, giving more accurate information to the planning team. This improved operations through early detection of production disturbances and how they would impact the delivery commitments that had been made to their customers.

Visibility into production costs: Through integrating Microsoft Dynamics AX with their Camstar MES system, dpiX is able to record the financial, inventory, labor, and processing costs associated with the production process. Combined with the High Tech Industries solution from Armanino, they were further able to track complex costing operations associated with lot splits and rework. dpiX now has true visibility into its costs and margins, enabling them to make informed decisions such as the cost benefit of rework scenarios.

Reduced inventory holding costs: dpiX was also able to achieve much improved control over inventory and production scheduling. By implementing MRP in Dynamics AX, the manufacturer gained greater confidence in its ability to respond to market demand and adopt leaner production processes. This allows dpiX to reduce costs associated with high inventory levels and to stop stockpiling supplies. Today, the company keeps inventory levels lower while achieving a higher on-time order fill rate, driving improvements in customer satisfaction.

Increased efficiency through automated data collection and integration: The integration automates would-be manual work requiring three or more fully dedicated staff members. The daily process of managing error logs in the workbench has now become a secondary quality control system. With the productivity cost savings dpiX achieved through the AX/Camstar MES integration, the manufacturer was able to move staff to more value-added positions and focus on strategic activities instead of being caught up in data crunching.

“Armanino helped guide dpiX through the practical integration of Microsoft Dynamics AX 2009 with Camstar MES. All other critical company-wide systems were transferred to Microsoft Dynamics in parallel, facilitating a seamless move of our headquarters from Palo Alto to Colorado Springs. Completion of the project was well within all targets we set up-front,” said Frank Caris, CEO and President of dpiX.

For More Information

For more information about Armanino products and services, call (925) 790-2600 or visit the Web site at amlp.com/microsoft-dynamics.