



Case Study: Amsafe

Implementing MFG/PRO at Amsafe Commercial Products

The Client

AmSafe Commercial Products, of Elkhart, Indiana, is the industry leader in restraint systems for applications including child seats, school buses, recreational and construction vehicles, and agricultural equipment. AmSafe Aviation, the leader in passenger Airline seat restraints is a sister company of Commercial Products.

The Opportunity

Amsafe Companies have long been clients of Logan Consulting. Both are restraint manufactures and both have the same ERP platform. These implementations were completed 6 years apart. The focus of this Case study is the Commercial Products business implemented in 2005.

Prior to their implementation of the current ERP platform, Amsafe was running disconnected software systems. They used a rudimentary bill of material and inventory package and a disconnected financial system. There was no integration of systems; therefore, the ability to manage the business with real time information was not achievable. Internal Controls over assets were suspect and the ability to timely report financial and operating results required access to results required many late nights and excess back offices resources.

The business assembles transportation restraints found on child car seats, off road vehicles and such. These restraints are comprised of belts (also referred to as webbing) and buckle assemblies. These assemblies are configured in colors and varying degrees of length or buckle configurations. Because Amsafe provides safety equipment, a major business requirement is lot traceability from supplied parts all the way through the finished assembly. The company has a discrete manufacturing shop to satisfy peak customer demand. Eighty plus percent of the component material required to manufacture in Elkhart is supplied from the Asia Pacific Rim. The company sources most of its finished goods from a sister company on mainland China that essentially acts as a contract manufacture for the Elkhart Customer Distribution operation.

So the greatest challenge for Amsafe is to satisfy its customer orders within three to five business days (in North America) with supply lines in excess of ninety to one hundred and twenty days. Assuming these materials planning issues were resolved, inventory levels were anticipated to stabilize.



The company also anticipated that a modern ERP platform would also provide scalability as the company matured and grew without increase the human resource capital to support the growth. Additionally, it anticipated the opportunity to reduce full time equivalents within a year of the implementation, to assist in the anticipated return on investment.

The Solution

Logan Consulting was engaged to implement QAD's MFG/PRO ERP software. The scope of the project included:

- Greatly enhanced Forecasting tools, leveraging sales history and quantitative methods algorithms to create best fit forecasts out 12 months into the future.
- Increased daily visibility to materials planning using MFG/PRO robust MRP engine integrating forecasts, discrete orders, sources of supply from open purchase orders and productions schedules.
- Implementation and execution of a lean transaction set using discreet work orders to record and analyze results of operations, which included lot control.
- Tightly integrated daily financial results from operations,
- Integrated Physical Inventory and Cycle Count inventory tools, to greatly enhance operations ability to reflect accurate perpetual inventories.
- Improved Visibility Across All Departments with Real Time Information in:
 1. Order Visibility for open customer orders and open purchase orders and status in their supply chain.
 2. Inventory Control Management included rack, row and bin location management.
 3. Production Control and Status
 4. Integrated Real Time Financial Reporting based on a standard costing inventory valuation approach for with greater visibility to material usage and value added costs of production.

The Results

MFG/PRO was successfully implemented in 5 months from the beginning of the project. The project was completed in two phases. General Ledger and Accounts Payable were initially implemented within the first two months to move the company off its legacy financial system and to give the finance department confidence in the new system.

The second phase involved item level forecasting, use of the robust MRP engine that MFG/PRO provides, production planning and control with the a discreet work order , sales order and purchase order environment with lot traceability and a standard costing inventory valuation approach.



OptioSoftware was deployed as the forms management tool for customer facing documents including customer invoices, sales orders and purchase orders. Because of integration, the company now benefits from the tight integration of quote to cash and the procedure to pay cycles.

Within a year of the ERP go-live, the company was able to reduce redundant full time equivalents by four which allowed the company to realize a return on investment (ROI) within 18 months.