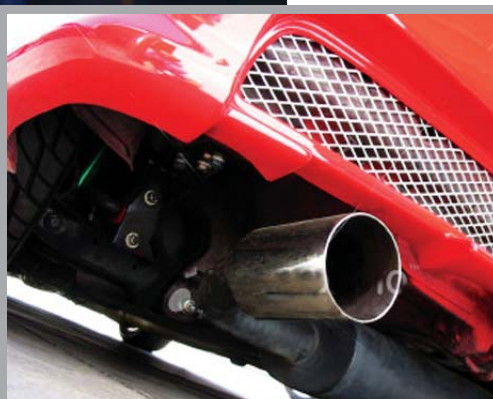


How an automotive supplier was able to jump start its internal Lean initiative.

This Tier 1 supplier to automotive OEMs needed to rightsize and standardize its operations to remain competitive and profitable in the face of a declining market share. It was losing business to foreign competitors as its customers, principally the “big three,” continued to move toward more global sourcing. In an effort to recapture and/or replace lost business, the company needed to reduce costs in North America and fund expansion of its growing European and Asian operations.



Key Metrics

Finished goods inventory reduced 50%
Hourly payroll reduced 7%
Labor cost per part reduced 4%
Maintenance schedule attainment improved 10%
Unplanned maintenance hours reduced 25%

“Our internal Lean initiative had stalled,” explained the VP of manufacturing. “We needed to create a common and standard way of operating that would allow us to not only improve our efficiency, but also reduce costs.” After considerable discussion, the company decided to re-engage USC Consulting Group (USCCG), an operations management consulting firm it had retained some years earlier with good results, to help achieve its new objectives.

The project scope included two downstream operations in North America. These plants take raw castings and machine them into finished parts for delivery to engine plants throughout North America and Mexico. Linking the new project to its ongoing Lean initiative, the client asked USCCG to design and implement the same production and maintenance system across both its machine centers.

The first thing the consultants did was to review the historical data and establish a baseline against which to measure improvement. They then trained client personnel to perform *process task analysis* to create

reasonable expectations (REs) for all indirect labor activities in both plants, and develop resource capacity plans for production and maintenance. Next, a planning and scheduling system was implemented at one facility, and overhauled at the other.

A visual management system was designed, prototyped and implemented and process monitors were used to measure performance on an hourly basis. Historical variation in both customer demand and line performance was analyzed and used to calculate optimal finished goods inventory levels.

The preventive maintenance (PM) program was re-invigorated as a means to improve the reliability of the machine lines. Maintenance-related and performance-related losses were coded and entered into an “opportunity cost log.” Planned work orders were printed each week and posted on a maintenance status board which was used by the maintenance team leader, on a shift-by-shift basis, to assign work to the tradesmen. Completed work orders were entered into the computerized maintenance management system (CMMS) for tracking and later analysis. A maintenance operating report was developed to document MTBF and MTTR, as well as the root causes of any work stoppages.

Working with the client, USCCG also helped to overhaul the company’s shop floor and analysis reporting tools to enhance information flow. KPIs for both production and maintenance were defined and the data required for the calculation was integrated into a visual shop floor control system. At shift end, data is entered into either the CMMS database or a production database, automatically updating key performance metrics and downtime Pareto charts.

“We now have a common and standard way of operating that fits with our overall goal of being a Lean manufacturing organization. This is the template for our plants worldwide, as it makes it possible to easily move team members from site to site,” summarized the managing director of North America following the engagement.

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- Managing Director of North America, Automotive Supplier



First we make it work. Then we make it last.®

For more information contact us at 800-888-8872 or www.usccg.com

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