

Focus on Execution and Waste Reduction Nets Growth and a 250% Improvement in EBIT

Situation:

An aerospace design and manufacturing division of a private equity owned company was losing customers due to poor delivery and quality issues, consistently failed to meet financial commitments and lagged other divisions in margin expansion and the execution of the strategic initiatives of the corporation. At the core of the problem were integration issues stemming from a recent transition of complex fabricated and machined product into the facility. An overburdened leadership team, a lack of a coordinated approach to address execution issues, and a weak continuous improvement culture exacerbated those issues. The business was in dire need of new leadership and a continuous improvement and growth strategy that would generate predictable and improving financial results.

Action Plan:

- Met personally with customers, employees, site and corporate leadership to determine the critical aspects of the businesses transformation. Those meetings set up several priorities: quality improvement, shop floor control, inventory control, lean transformation, concurrent design.
- Based on that evaluation, set up a project based quality improvement program that focused on scrap and rework reduction. Project teams used both simple and complex six sigma tools to eradicate root causes, redesign manufacturing processes and to track improvements to ensure sustainable performance.
- Followed that project based effort with an operator self-inspection program that eliminated in-process inspections by quality personnel thereby reducing headcount, reducing cycle-time and improving first pass yields at discrete operations in the manufacturing cycle.
- Executed a cross training program for trade-skill employees that paid for accumulated skills and enabled manufacturing leadership to increase throughput without adding employees or overtime.
- Launched a customer delivery performance improvement process that utilized rolling time fences to forecast and take action on delivery performance issues. The process started with a 4 week time fence and eventually moved to a 12 week rolling window.
- Rationalized the organization into two autonomous business units and then drove rigorous goal deployment to ensure the effective interplay between product line and functional organizations.
- Upgraded talent across the organization, specifically focusing on material management, quality assurance, design engineering and business development. Installed a full time blackbelt and lean master to hasten the maturity of the burgeoning continuous improvement culture .
- Championed and matured a Sales and Operations Planning (S&OP) process to improve forecasting and sales gap closure items while giving operations time to optimize labor and inventory requirements to meet demand. The S&OP process ran on a rolling 12 months basis.

- Installed inventory management processes such as supplier managed inventory, cycle counting and Kan Ban ordering mechanisms to improve stockroom turns while reducing the impacts of inventory adjustments.
- Initiated a lean manufacturing initiative that transformed 4 of the sites 6 product lines. Typical results were a 50% reduction in WIP inventory, 95% reduction in defects and a 30% improvement in labor productivity.
- Enhanced communications and employee morale by setting up quarterly all employee reviews, monthly skip level meetings, monthly one-on-one with key leaders.

Results:

Sales doubled in this period and sales per employee increased from \$62K to \$215K: EBIT grew by 250% in the same period. Delivery performance improved from <70% to > 95% for all products enabling sales to focus on growth rather than customer service issues. Scrap and rework cost were reduced by over 75% and, when combined with the impact of lean initiatives, dramatically improved labor efficiency and cycle times. Inventory turns also doubled as a result of lower cycle times, scrap reduction and supplier managed inventory programs.

More efficient design and manufacturing processes secured 3 new program wins for the highly engineered heat transfer and fan products. More consistent and lower cost structures and a rational pricing methodology enabled the commodity parts business to take significant share (95% win rate) for its commodity products in Europe. The improved results and a stronger competitive position enabled the parent to divest this business to a competitor and strategic buyer in 2000.