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Notable Achievements

in STAR format (Situation, Task, Action, Result)

Since I was generally working as a contractor, I abbreviated company names for confidentiality; in some cases, I can reveal them in one on one conversation.

Manufacturing Related Notables:

- APM needed to reduce cost and improve producibility of new and existing products. The cost reductions I accomplished came from working with all stakeholders from marketing to principal engineer to vendors to the shop staff. I **Implemented** concurrent and value engineering methods to revise designs of existing and new product machines by providing manufacturing and design methods and the concepts of DFM/A using heuristic metrics and collaborative evaluation techniques. **Results:** Design modifications to the existing APMI product lowered product cost 23% converting a lost leader to yield a 14% gross margin.
- APM wanted to achieve a best of breed manufacturing organization. I **Evaluated** various equipment, processes, and methods to benchmark internal recommendations. Interviewed staff; reviewed, studied and documented existing shop flow, equipment and practices; analyzed and evaluated systems; identified, diagnosed and troubleshot operation problems. To this I Researched and found better solutions to a myriad of manufacturing needs and provided a report of problems, possible solution`s, options and budgets. **Result:** Based on this and their internal criteria, APM opted to build and move into a new plant. The manager to whom I reported said, "It was the most valuable single report I've ever received."
- APM R&D had figured out a new machine design that offered twice the capacity of the old model, but could not hit the cost target. I provided "value engineering" and coordination of shop input to reengineer the machine and meet goals. My effort **Saved** appreciable production costs facilitating client's efforts and assisted with implementation of lean methods for this product line. **Result:** The target machine's cost was right in line at less 45% of R&D's cost projections (and less than ¼ of the prototype's cost). Even at only eight machines per year, production costs came in at 24% of the prototype's cost.
- At EE, we had 12 machines running 24/7, but yielding only 6.5 hours of production per 8-hour shift and consuming \$270,000 of tooling per year. My **Analysis** showed this was predominately a tool longevity and set-up problem. To solve this, I assembled a team of "stakeholders," taught them Design of Experiment theory and used that approach to qualify the problem. We implemented a series of machine and tooling design improvements, as well as setup and process changes without disrupting production. **Result:** Upon project completion, tooling changes were down to one 5-minute exchange per 24-hour period with all setup done offline and production hours / shift increased to 7.75 hours saving \$1.4mm annually.
- BESD had been producing "lost leader" product for its parent. The parent assigned a new GM and tasked him achieve profitability and facilitate the sale of the BESD SBU. He promoted me to Manager of Continuation engineering and assigned me to head a cross-functional management team to evaluate cost reduction opportunities. In that role, I led the redefinition of production strategies to determine a plan of action based on Lean Manufacturing methods in which each manager implemented his or her portion. I **Planned, Scheduled and Coordinated** all the activities to minimize their impact on manufacturing. Bi-directional exchange of information to made these activities happen in a timely manner and empowered direct labor to have significant ownership in the overall project. **Results:** my designs reduced floor-space from 128K sq. ft. to 37K sq. ft. throughput shortened from 57 days to 7 days (>88%), yields improved from 83% to >98%, direct labor reduced from 180 to 83 (importantly without excessive resentment or disruption), and we reduced product cost an average of 37%. The net effect of these changes was to take BESD operations from (\$650K) loss per year to a \$600K profit and improve esprit de corps. We maintained production and delivery schedules and completed the project in the allotted 15-month time frame.