Supply Chain Improvements

JIT and Vendor Consolidation

Challenge: Electronics Component Company needed to cut inventory by 35% to improve cash flow. Company was make-to-order business using material purchased from more than 200 vendors, with a price penalty for less than minimum purchase order quantity.

Action:

1) Identified three vendors for components and PCBs as desirable suppliers.
2) Selected one vendor for each category and finalized contracts with each vendor for all business to be renegotiated annually.
3) Component vendor contract was consigned vendor-managed inventory, and PCB contract was for consigned inventory with three-day delivery requirement on all boards to cover demand spikes.
4) Negotiated JIT programs for all plastic and metal components.

Result: Decreased inventory by 80% and added considerable cash flow to company.

International Sourcing

Challenge: Downward pricing pressures were causing company to become non-cost-competitive quickly. Company purchased products through middlemen that applied high-margin markups within the United States and any overseas.

Action:

1) Convinced management that sourcing directly from international manufacturers, eliminating the need for distributors and middle men.
2) Managed the search and contracts with manufacturing representations in each country for a nominal % of the sale.

Results:

1) Within 18 months, sourced four major product lines from different Chinese manufacturers, as well as all components for company's products made in United States.
2) Eliminated all middlemen.

Kanban System

Challenge: The Conlon Group was brought in to evaluate and minimize unscheduled line change overs. Final furniture assembly was experiencing schedule changes due to insufficient or incorrect inventory. There was had plenty of inventory, just not the correct inventory

Unscheduled changeovers were recorded for a month and determined that 90 percent of the changes were due to incorrect WIP

Action:

1) Team determined that current procedures as well as the home-grown software was inadequate for our needs
2) Implemented to kanban system between departments – less than 100 active part numbers per department. A modified 2 bin system was implemented. Kanban squares varied by part number
3) Instituted ABC cycle counting

Results: Eliminated change overs due to incorrect WIP; Improved inventory turns to 52, Cost savings of $470,000

Unscheduled Changeover Reduction

Challenge : The Conlon Group was brought in to improve the production line uptime for a sandwich manufacturer. One of the main issues for downtime was not having the correct material when it was needed it

Action:

1) A team was formed to determine what the causes for material shortages were. The data showed that packing material was 85% of the cause for the unplanned changeovers due to material shortages. We then brainstormed the causes of the shortages – lack of cycle counting, poor counting and allocation in the system were the 3 main causes

2) The company was utilizing bar coding for the food products but not for the packaging materials (wrappers, labels, inner and outer packs)

3) All the vendors were invited to our facility and discussed our requirement for barcoded components, barcoded pallet tags and the specifications for each

4) All vendors agreed to have the appropriate barcoding on all products within a month

5) The process was mapped out highlighting points in the process where the material would be recorded

6) The barcoding allowed for the implementation of scanning for all material movements in, out and within the process

7) Standardized procedures were developed, and all operators trained . System changes were made and tested

8) When material was returned from production, the inventory was validated at that time

Result: Along with a robust cycle counting procedure, we were able to reduce line changeovers from 30 to 3 unplanned changeovers/month within a few months

Vendor Quality Improvement

Challenge: Our client is a therapeutic table manufacturer that uses high end polyurethane fabric for our upholstery. Historically - the business practice was to charge back for upholstery that did not meet the criteria – 5%-10%. The main defect was tiny pinholes in the fabric. They suddenly experienced an increase in pinhole defects. The Chinese vendor claimed that nothing had changed, and they were becoming more critical

Action:

1) We went to China to meet with the vendor bringing along defective samples, test results and a piece of the qualifying sample fabric. During the meeting we all agreed there was a growing quality issue

2) The stretch results of the fabric showed that the fabric was within specification, yet mean stretch was larger. The vendor analyzed the backing and thought that may be the cause

3) The Chinese vendor invited his vendor to the meeting and their vendor admitted to changing the base material. Our vendor also thought the backing was causing the pinholes

4) We reviewed the processes and their quality control practices. They monitored the process but did not utilize control charts for speed, thickness and the number of allowable pinhole measurements. We set those in place and defined the practice for their utilization

5) The Chinese vendor had a few rolls of the original backing and we validated the original material and process

6) We brainstormed how to remove all pinholes from the fabric with our vendor, along with his vendor. They suggested a slightly denser backing that was within our stretch criteria

7) The vendor trialed the new backing, reset their process, set up new charts, sampling plan and submitted samples

Results: The results were exceptional. We went back to monitor the next production run and approved the process. Our client accepted every roll they sent, with no charge backs, from that point on