

Delivering Results

Case Study: Client B

Situation:

This client is a division within a company that designs, manufactures, installs, and services a broad range of elevators, escalators and moving walks. Although it was replacing one product line with another, for various reasons it couldn't completely discontinue the production of the old line.

Objectives:

- Freedom to concentrate on the control features of the new line by outsourcing responsibility for the sheet metal fabrication for the new line while maintaining fabrication for the old line
- Create a replenishment system that required minimal management intervention
- Develop reusable containers to support lean manufacturing concept for new line as well as to act as a tracking tool for parts and a trigger for the Kan-Ban system
- Ensure 100% on-time part availability for maximum productivity
- Supplier reduction to reduce administrative work and assure single-source accountability
- Inventory reduction of at least 50%



Challenges:

- Initially, parts were required and delivered on a sporadic basis from multiple suppliers
- Drawings were extremely sketchy and often did not reflect "as built" condition of actual parts
- Quality control was a concern since previous shipping methods had resulted in late deliveries as well as damaged products

Strategies and Solutions:

- KMI designed and produced – and retained ownership of – reusable shipping carts to support point of consumption deliveries and significant material handling savings for both KMI and the client
- Established a weekly delivery schedule by a KMI representative to retrieve carts and bins, replenish parts, and consolidate dwindling supplies
- Instituted an electronic accounting management system that was Internet capable
- Debugged drawings; corrected geometry; and first-articled every part
- KanBan agreements were developed and controlled by KMI
- Visual Controls were implemented to reduce administrative work
- Assembly cells were designed to take advantage of the Point2Point Cart's ability to make point of use inventory a reality



Delivering Results

Case Study: Client B continued

ROI:

- Consumption drives delivery of parts. Reduced inventory by 50%, freeing capital to pursue other revenue streams
- Blanket orders with releases triggered by the return of bins or carts resulted in 2-3 hours per week of administrative work savings for both KMI and the client
- Space consumption was also reduced 50%, allowing the client to increase total production output from within the existing building
- Lead Time was essentially 0.00 days for all parts included in the system
- 100% on-time delivery of parts. Eliminated problems of late and/or damaged deliveries that had cost the client weeks of lost production time per year
- Electronic accounting management system totally eliminated the need to print and mail invoices, collect files, and match invoices to purchase orders saving approximately 4 hours per week for accounting personnel
- Client avoided design, production and maintenance cost of reusable bin/cart systems – an initial saving of nearly \$50,000 and \$9500 in yearly container maintenance
- Cost of packaging material and labor was eliminated for both supplier and client. Packing, unpacking and disposal costs were saved on both ends of the supply chain allowing for lower part pricing and lower total cost for the client
- KMI Part prices were the lowest available partially because of the benefit provided from the use of the carts throughout the manufacturing operation
- Consignment inventory provided significant cash flow improvements (cash was near positive for some fast movers)
- Non-value added movement within the assembly cell was reduced 50% on sheet metal parts since the cell was designed with the carts as a key component of cell layout
- Internal material handling time was reduced by 25% since no forklift or other equipment was required to move the carts
- Downtime that was the result of part damage was all but eliminated both in transit and in process
- This damage elimination improved on time customer deliveries and production efficiencies